XIV. Kongres Društva nastavnika opće/obiteljske medicine (DNOOM)

Knjiga sažetaka / Book of Abstracts

Biblioteka
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Redak

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Izazovi obiteljske medicine sadašnjosti

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Susrećemo se s nezadovoljstvom ljudi i liječnika. Nemamo dovoljno liječnika obiteljske medicine, a uz to ti liječnici odlaze na rad u inozemstvo. Ugled medicine je pao, nalazimo se u krizi.

Ako želimo naći odgovore na ta pitanja, onda trebamo najprije pogledati povijest medicinskog profesionalizma. Medicinski je profesionalizam prošao kroz dva različita razdoblja: razdoblje autonomije i razdoblje odgovornosti. Razdoblje odgovornosti, u kojem se sada nalazimo, zbog svojih je nuspojava isto tako u krizi. I zbog toga se predlaže treće razdoblje: razdoblje morala. Liječnici i pacijenti opet bi trebali preuzeti kontrolu nad sustavom zdravstvene zaštite i sačuvati odnos između liječnika i pacijenta.

Da bismo došli do toga, potrebno je donijeti političke odluke utemeljene na struci i podatcima. Potrebno je ponovno uspostaviti suradnju u sustavu zdravstvene zaštite i dati do znanja da medicina u svojoj biti nije biznis, nego socijalna kategorija. Za ekonomiju zemlje bolje je da se liječnici brinu o tome kako se mogu najbolje brinuti za svoje pacijente, a ne o tome koliko košta njihov rad. Potrebno je smanjiti administraciju i prikupljati samo one podatke koji se analiziraju i od kojih dobivamo povratnu informaciju. U medicini, a obiteljskoj medicini posebno, nije sve moguće propisivati kompleksnim ugovorima. Potrebno je prihvatiti transparentnost i slušati pacijente. Ponovno trebamo postati zaštitnici zdravlja i braniti zdravlje kao pravo svakoga, bez obzira na status i novac. Za ovakav rad imamo pravo tražiti poštenu naknadu, bez potreba za povlasticama, zaštititi moralne vrijednosti liječničke profesije i osuditi one koji ih se ne drže.

Pitanje je samo usudimo li se ići tim putem.

Challenges of family medicine today

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We are faced with the dissatisfaction of people and of doctors. There are not enough family physicians, and in addition, these doctors often emigrate. The reputation of medicine has fallen and there is obviously a crisis happening.

If we want to find answers to these questions, then we should first look at the history of medical professionalism. Medical professionalism has gone through two different periods: the period of autonomy and the period of responsibility. The period of responsibility, in which we now find ourselves, is also in crisis due to its side effects. For this reason a third period is proposed: the period of morality in which doctors and patients should once again take control of the health care system and preserve the doctor-patient relationship.

In order to achieve this, it is necessary to make sound political decisions based on expertise and data. It is necessary to re-establish cooperation in the health care system and make it clear that medicine in its essence is not a business, but a social category. It is better for the country's economy that doctors worry about how they can best care for their patients, and not how much their work costs. It is necessary to reduce the administration and collect only those data that are analyzed and from which we receive feedback. In medicine, and family medicine in particular, it is not possible to prescribe everything with complex contracts. It is necessary to accept transparency and listen to patients. We need to become protectors of health again and defend health as the right of everyone, regardless of their status and money. For this kind of work, we have the right to ask for fair compensation, without the need for privileges: We need to protect the moral values of the medical profession and condemn those who do not adhere to them.

The only question is whether we dare to go that way

Asocijacija doktora opće/obiteljske medicine jugoistočne Europe – dvadeset godina postojanja

Ljubin Sukriev[1]

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Ključne riječi: nesanica, liječenje nesanice, liječnik obiteljske medicine
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Uvod s ciljem: Moć i utjecaj međunarodne organizacije znatno su veći od snage i utjecaja nacionalnih udruga – sekcija, što je temelj za formiranje i rad međunarodnih organizacija. S obzirom na promjene na razini opće/obiteljske medicine i s obzirom na njezino mjesto i značenje u području jugoistočne Europe cilj Asocijacije doktora opće/obiteljske medicine jugoistočne Europe jest jačanje suradnje između zemalja članica Asocijacije te promicanje opće/obiteljske medicine i poboljšanje statusa obiteljskih liječnika u regiji.

Rasprava: Ideja o osnivanju Asocijacije doktora opće/obiteljske medicine jugoistočne Europe rodila se na Trećem kongresu liječnika opće medicine u tadašnjoj Jugoslaviji u Vrnjačkoj Banji 2002. godine, a Asocijacija je osnovana 2003. godine na 16. kongresu makedonskih liječnika u lipnju u Ohridu. Djelovanje Asocijacije temelji se na ciljevima koji su postavljeni na početku njezina osnivanja, a to su proučavanje i unaprjeđenje medicinske znanosti i misli medicine utemeljene na dokazima, edukacija članstva i unaprjeđenje stručnog znanja, proučavanje i promicanje najviših standarda naobrazbe, određivanje uloga liječnika opće/obiteljske medicine, proučavanje etičkih, znanstvenih, profesionalnih, društvenih i gospodarskih interesa, razvijanje interesa za stručnim znanjima, suradnja s europskim i međunarodnim organizacijama, održavanje kongresa, konferencija, simpozija i stručnih skupova, razvijanje izdavačke djelatnosti i tiskanje medicinskih revija, publikacija, časopisa i priopćenja te potpora realizaciji studija i projekata u određenom području medicine za zemlje jugoistočne Europe. Za ovih dvadeset godina postojanja Asocijacija je organizirala četiri kongresa i osam konferencija u svrhu kontinuirane medicinske edukacije (KME) i stalnoga stručnog usavršavanja (CPR) liječnika. Djelokrug rada obuhvaća i brojna istraživanja koja se provode na razini Asocijacije te organizaciju brojnih radionica, predavanja, sastanaka i okruglih stolova na kojima se raspravljalo o bitnim temama opće/obiteljske medicine i onima od interesa za liječnike opće/obiteljske medicine. Članice Asocijacije su Albanija, Bosna i Hercegovina s Federacijom Bosne i Hercegovine i Republikom Srpskom, Bugarska, Crna Gora, Hrvatska, Makedonija, Rumunjska, Slovenija, Srbija i Turska.

Zaključak: Nakon dvadeset godina postojanja Asocijacije postavlja se pitanje kako gledamo na to razdoblje i jesmo li zadovoljni dosadašnjim radom. Da, zadovoljni smo, međutim to ne znači da sada trebamo smanjiti rad i svoje aktivnosti. Naprotiv, trebamo prihvatiti činjenicu da imamo još puno posla. Uvjeren sam da ćemo u godinama koje slijede poduzimati još više aktivnosti. Najvažnije je međutim da su se liječnici u regiji zbližili, intenzivirala se suradnja između zemalja članica Asocijacije, razmjenjuju se iskustva i mišljenja, intenzivira se suradnja s odjelima obiteljske medicine te ona na području edukacije. Pred nama je puno izazova i puno posla. Brojna su područja i puno je pitanja o kojima trebamo razgovarati unutar zemalja članica Asocijacije. No, mnogo toga ovisi o aktivnostima države i njezinih institucija čija je zadaća uvidjeti i razumjeti važnost opće/obiteljske medicine i njezinu nadležnost.

Association of Doctors of General/Family Medicine of Southeast Europe −twenty years of existence

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Keywords: Association, family medicine, activity, development
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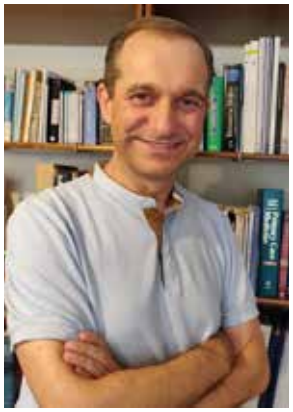
Introduction and aim: The power and influence of an international organization is significantly greater than the power and influence of national associations − sections, which is the reason for the formation and work of international organizations. With regard to the changes at the level of General/Family medicine and its place and importance in the region of Southeast Europe, the aim of the Association is strengthening cooperation between the member countries, as well as the promotion of general/family medicine and the improvement of the status of family physicians in the region.

Discussion: The idea of establishing the Association of General Practitioners/Family Medicine of Southeast Europe was born at the Third Congress of General Practitioners from the former Yugoslavia in Vrnjacka Banja in 2002 and was founded in June 2003 at the 16th Congress of Macedonian Physicians in Ohrid. The activities of the Association are based on the goals that were set at the beginning of its foundation. They are: study and improvement of medical science and evidence-based thinking, members' education and the improvement of professional knowledge, the study and promotion of the highest standards of training, delineation of the roles of general/family physicians, the study of ethical, scientific, professional, social and economic interests, developing interest in professional knowledge, cooperation with European and international organizations, holding conferences, congresses, symposiums and expert meetings, developing publishing activities by printing medical reviews publications, magazines, press releases, and support for the implementation of studies and projects in certain areas of medicine in the countries of Southeast Europe. For these twenty years of existence, the Association has organized 4 congresses and 8 conferences for the purpose of continuing medical education(CME) and continuous professional training(CPD) of physicians, meetings and round tables to discuss topics important and of interest to general/ family medicine physicians. The members of the Association are: Albania, The Federation of Bosnia and Herzegovina and Republic of Srpska, Bulgaria, Croatia, Macedonia, Montenegro, Romania, Slovenia, Serbia and Turkey.

Conclusion: After twenty years of the Association's existence, the question arises as to how we look at that period and whether we are satisfied with the work done so far. We are. However, that does not mean that we should now slow down our work and our activities; on the contrary, we should accept that we still have a lot to do. I want to do even more activities in the following years. Besides that, it is of utmost importance that physicians in the region have become chooser, cooperation between the member countries of the Association has intensified, experiences and opinions are being exchanged, cooperation with departments of family medicine and cooperation in the field of education are intensifying. There are many challenges ahead of us and a lot of work. There are many areas and many issues that we need to discuss within the member countries of the Association. Still, a lot depends on governments and theirs institutions, whose task is to see and understand the importance of general/family physicians and their competence.

Prevention in everyday practice – choosing wisely



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Abstract

Background

Recently, the European Union (EU) adopted a new approach to cancer screening suggesting the age expansion in breast cancer screening. And for lung, prostate, and gastric cancer screening, EU Member States are invited to consider these screenings on the basis of further research to explore the feasibility and effectiveness. The balance between benefits and harms is unclear, and these decisions are arguable.

Objectives

- To discuss the balance between the benefits and harms of the cancer screenings proposed by the EU
- The role of quaternary prevention
- Tools to navigate this sea of uncertainty

The Perspectives of European General Practice / Family Medicine

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General Practice / Family Medicine is of crucial importance for the populations in European countries. The discipline is in different conditions in these countries. During the past years, the discipline and healthcare providers encountered challenges, for example, demographic changes in most of the European countries, economic restraints, such as debt crisis, inflation and, compared to earlier years, a reduced ability of the population to accumulate wealth.

Furthermore, healthcare is shifting towards outpatient settings. The lack of human resources and, especially, the shortage of General Practitioners, is a very common phenomenon. Despite this, the medical state of the art, or what it is presumed to be, is rapidly changing. These changes, in some cases, are not followed by changes in the organisation of General Practice / Family Medicine. Our discipline is often not able to provide answers to arising questions since we are lacking the relevant (research) data. Clinical research in General Practice is scarce, even in countries and circumstances where General Practice is rather well-established in universities.

My presentation will address these questions and will highlight the activities which may help in coping with the existing and forthcoming challenges. It will especially focus on the use of data from primary care practice, on how to consequently shift to outpatient care and how to enhance the working capacity in General Practice / Family Medicine, which will also require the engagement of WONCA Europe and its networks.

Profesionalni izazovi internacionalnog liječnika obiteljske medicine u Ujedinjenom Kraljevstvu

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Ključne riječi: liječnik opće medicine, Nacionalni zdravstveni sustav, Opće medicinsko vijeće, relicenciranje, Komisija za provođenje zaštite
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Uvod: Izuzetan profesionalni izazov svakomu internacionalnom liječniku obiteljske medicine (LOM) u Ujedinjenom Kraljevstvu (UK) jest postići profesionalnu integraciju u Nacionalnu zdravstvenu službu (engl. *National Health Service* – NHS) te upoznati i usvojiti nova, specifična znanja i vještine karakteristične za rad svih liječnika u UK-u, a temeljene na profesionalnim standardima i etici određenoj od Općega medicinskog vijeća (engl. *General Medical Council* – GMC) i Kraljevskog udruženja liječnika opće prakse (*Royal College of General Practitioner* – RCGP).

Cilj ovoga rada bio je prikazati neke profesionalne izazove i iskustva rada u UK-u za liječnika obiteljske medicine koji je primarnu kvalifikaciju stekao u Hrvatskoj.

Rasprava: Pored brojnih sličnosti u organizaciji i pružanju osobi usmjerene skrbi u općoj medicini u zdravstvenim sustavima obiju država, LOM iz Hrvatske, radeći u UK-u, bio je suočen s nekoliko ključnih razlika koje je bilo važno naučiti i usvojiti kako bi zadovoljio kriterije GMC-a. Te razlike uključuju: naglasak na zadovoljstvu pacijenta i kvaliteti komunikacije, kontrolu kvalitete u svakodnevnom radu, postojanje brojnih mogućnosti rada u struci, specifičnu organizaciju dnevnog rada, izbor organizacije za zastupanje u slučaju medicinsko-pravnih i etičkih problema, integraciju šireg spektra profesionalnih kompetencija i strategija u dijagnostici i liječenju, kvalitetu upisa podataka u zdravstvenu dokumentaciju, uključujući kolaborativnu komunikaciju unutar multidisciplinarnog tima i zdravstvenog sustava, te kontinuiranu procjenu i nadzor nad edukacijom i radom LOM-a.

LOM u UK-u može izabrati različite oblike rada. Glavni su oblici: LOM partner u grupnoj praksi (engl. *GP partner*), stalno uposlen LOM (engl. *salaried GP*) i LOM na zamjeni (engl. *locum GP*). Druge mogućnosti zaposlenja za LOM-a u različitim aranžmanima i prema stečenim kompetencijama jesu: LOM sa specijalnim interesima, rad u edukaciji, LOM s vodećom ulogom u povjerenstvima u zajednici i povjerenstvima za mentalno zdravlje, rad LOM-a u službi izvan radnog vremena (engl. *GP Out of Hours* – OOH) te u hitnoj službi i to u punom radnom vremenu ili dijelom radnog vremena. Bez obzira na mjesto rada liječnik je dužan slijediti preporuke i smjernice Nacionalnog instituta za izvrsnost zdravstvene zaštite (engl. *National Institute for Health Care Excellence* – NICE), ali prioritet se daje smjernicama Grupe za organizaciju i provedbu zdravstvene zaštite (engl. *Care Commissioning Group* – CCG). CCG smjernice mogu se razlikovati od NICE smjernica ovisno o regiji gdje LOM radi. CCG je organizacija koja kontinuirano surađuje sa svakom GP praksom u jednoj regiji te sukladno lokalnim prilikama podržava optimizaciju u medicini i provođenje isplativog i visokokvalitetnog propisivanja lijekova. Nadalje, inspekcija Komisije za kvalitetu skrbi (engl. *Care Quality Commission*) brine se o osiguranju provođenja i postizanja svih pokazatelja kvalitete zdravstvene skrbi.

LOM mora trajno unaprjeđivati znanje i vještine cjeloživotnim učenjem. To uključuje pripremu portfolija (uključujući profesionalni plan razvoja za svaku godinu (engl. *Professional Development Plan* – PDP), upitnik o zadovoljstvu pacijenata, kolega i članova tima pruženom skrbi LOM-a, aktivnosti za unaprjeđenje kvalitete rada, evaluaciju značajnog događaja u praksi (engl. *Significant event evaluation*), kontinuiran profesionalni razvoj (engl. *Continuing professional development* – CPD)), potom obveznih 40 tečajeva godišnje (za sigurnost rada u timu i praksi), godišnji trening naprednog održavanja života i anafilaksije te edukaciju za očuvanje sigurnosti vulnerabilnih skupina u populaciji. To su nužni preduvjeti za strukturiranu raspravu i procjenu (engl. *Appraisal*) sa zdravstvenim profesionalcem svake godine te za proces relicenciranja u petogodišnjim razdobljima.

Zaključak: Potpuna integracija u svakodnevni život i rad liječnika u zdravstvenom sustavu i kulturnom prostoru može pružiti liječniku takvo razumijevanje sustava i profesionalno iskustvo koje niti jedno studijsko putovanje, opservacija ili istraživanje „izvana“ ne može niti dijelom približiti. U ovom članku autor je nastojao objektivno prikazati nekoliko ključnih značajka rada u NHS sustavu i kontrole kvalitete rada s kojima se suočio LOM koji je došao raditi iz druge države u UK.-

Professional challenges of an international doctor of family medicine in the United Kingdom

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Introduction and Aim: It is a tremendous challenge for every international general practitioner (GP) in The United Kingdom (UK) to achieve professional integration in the National Health Service (NHS) and to apprehend and endorse new, specific knowledge and skills characteristic for all doctors working in the UK, based on the professional standards and ethic proposed by General Medical Council (GMC).

Aim: This paper aims to illustrate professional challenges of an international GP working in the UK, who achieved primary qualification in Croatia.

Discussion: Despite numerous similarities in organisation and delivering patient-centred care in family medicine in both Croatia and the UK, a Croatian GP working in the NHS is nevertheless confronted with a few key differences which are essential to meet the criteria of GMC. These differences include: emphasizing patient satisfaction and quality communication, quality control in everyday work, diverse spectrum of career options, a specific organisation of daily work, choosing an organisation for defence in case of medico-legal and ethical problems, an integration of broader spectrum of professional competencies and diagnostic management strategies, a quality assurance of clinical data recording including collaborative communication within the multidisciplinary team and health care system, and a continuous GPs supervised assessment and education.

GPs in the UK can choose different forms of work. The main options are: GP partner in a group practice, salaried GP and GP locum. Other opportunities for GPs to work in different arrangements and according to their acquired competences are: GP with special interest), work in education, GP leadership roles in community trusts and mental health trusts, working in out of hours GP services and in Accidental and Emergency care as a part time or full time job. Wherever the place of work, the GP should follow the guidelines of the National Institute for Health Care Excellence (NICE), but priority must be given to the guidelines of Clinical Commissioning Group (CCG). The CCG guidelines may differ from NICE guidelines depending on the region where the GP works. CCG continuously collaborates with each GP surgery team in the area and depending on local conditions, encourages medicines optimisation, a cost-effective and high-quality prescribing. Care Quality Commission (CQC) inspection ensures high-quality health care provision and achievement of all quality indicators.

Family physicians must continuously improve their knowledge and skills following a life-long learning process. That includes preparing a portfolio (including professional development plan, patient feedback and survey, colleague feedback and survey, quality improvement activity, significant events evaluation, continuing professional development) and mandatory training (including 40 occupational health and safety courses, yearly advance life support training and anaphylaxis, and education for safeguarding of vulnerable population groups. Those are the essential prerequisites for a structured discussion and appraisal with health professionals every year and for the revalidation process every five years.

Conclusion: Full immersion and integration in an everyday life and work of a physician in a different health care system and culture setting gives an understanding and personal experience that no study visit, observation, or research "from the outside" can even start to reveal. In this paper I tried to objectively demonstrate a few key working characteristics of an international doctor in the UK and NHS quality control system.

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2. Muči vas nesanica – pitajte vašeg obiteljskog liječnika

Doktore, ne mogu spavati, dajte mi nešto

Karmela Bonassin[1, 2]

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Ključne riječi: nesanica, obiteljska medicina, kognitivno-bihevioralna terapija
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Uvod s ciljem: Kronična nesanica najčešći je poremećaj spavanja, a njezina učestalost varira ovisno o kriterijima po kojima se nesanica klasificira u istraživanju i iznosi od 6 % do 76,3 %. Procjenjuje se da u Hrvatskoj od nesanice pati 26 % populacije, 15 % od lakšeg, a 11 % od težeg oblika. Jedna od najčešće upotrebljavanih klasifikacija jest Međunarodna klasifikacija poremećaja spavanja (engl. *International Classification of Sleep Disorders* – ICDS). Prema toj klasifikaciji kronična nesanica ima prisutne simptome najmanje tri puta tjedno tijekom triju ili više mjeseci koji nisu povezani s nezadovoljavajućim uvjetima za spavanje ili s nekim drugim poremećajem spavanja. Simptomi nesanice često su praćeni problemima koji ugrožavaju svakodnevno funkcioniranje osobe, kao što su umor, slabija koncentracija, poremećaj raspoloženja, pospanost, smanjena snaga i motivacija, povećan broj pogrešaka i nesreća, te sve veća zabrinutost zbog problema spavanja. Prema smjernicama za liječenje nesanice prvi je izbor kognitivno-bihevioralna terapija te drugi oblici psihoterapije, a od farmakoterapije, u slučaju nedostupnosti ili neuspjeha psihoterapije, preporučuju se benzodiazepini i nebenzodiazepinski hipnotici, ali isključivo kratkoročno (do mjesec dana) zbog mogućih nuspojava i nedovoljnih dokaza o njihovoj koristi u dugotrajnom liječenju. Cilj je rada istaknuti potrebu iscrpne anamneze te objasniti mehanizam nastanka i održavanja nesanice, što je ključno za intervencije temeljene na kognitivno-bihevioralnoj terapiji (KBT).

Rasprava: Učestalost kronične nesanice varira u općoj populaciji ovisno o tome koji se dijagnostički kriteriji koriste za dijagnozu, međutim, poznato je da je nesanica učestalija kod osoba koje boluju od komorbidnih stanja kao što je hipertenzija, srčane bolesti i plućne bolesti, a u toj populaciji pacijenata javlja se u oko 44 % ispitanih. U prijašnjim klasifikacijama nesanica se u navedenim komorbidnim stanjima smatrala sekundarnom te se vjerovalo da će se liječenjem komorbidne bolesti riješiti i problem nesanice, međutim, pokazalo se da to nije tako. Nesanica se održava zbog ponašanja, uvjerenja i asocijacija koje usvaja pacijent dok se pokušava nositi s problemom spavanja, npr. povećanjem kofeinskih napitaka zbog pospanosti tijekom dana utječe na održavanje nesanice kao i time što provodi previše vremena u krevetu ne spavajući u pokušaju usnivanja. KBT se pokazao učinkovitim, a nema niti nuspojava koje sa sobom nosi farmakoterapija nesanice. Vođenje razgovora s pacijentom koji se žali na nesanicu kompleksno je, a prije svega zahtijeva vrijeme. Radi dobivanja cjelovite slike o problemu kronične nesanice bilo bi poželjno da provedemo detaljniju analizu korištenjem nekih od dostupnih alata kao što su dnevnik spavanja ili neki od upitnika za procjenu težine nesanice. Nesanica je klinička dijagnoza i dnevnik spavanja je najčešće jedino dijagnostičko pomagalo koje je potrebno za potvrđivanje ili isključivanje dijagnoze. Psihoterapija kod psihoterapeuta nije lako dostupna i postoji potreba kratkih intervencija temeljenih na KBT-u koje pružaju educirani medicinski djelatnici. U nekim istraživanjima to su bile medicinske sestre ili se KBT provodio preko interneta.

Zaključak: Liječnik obiteljske medicine (LOM) idealno je pozicioniran za pravodobno prepoznavanje, evaluaciju i liječenje nesanice, a to podrazumijeva posebno znanje, vještine i vrijeme. LOM se tijekom specijalizacije educira o metodama površinske psihoterapije, no zdravstvene potrebe populacije nameću potrebu da LOM bude bolje educiran za intervencije temeljene na KBT-u.

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Doctor, I can’t sleep, give me something

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Introduction with aim. Chronic insomnia is the most common sleep disorder and its frequency varies depending on the criteria by which insomnia is classified in the research. It amounts from 6% to 76.3%. It is estimated that 26% of the population in Croatia suffers from insomnia, 15% from the mild, and 11% from the severe form. One of the most commonly used classifications is the International Classification of Sleep Disorders (ICDS). According to this classification, chronic insomnia has symptoms unrelated to unsatisfactory sleeping conditions or any another sleep disorders present at least three times a week for three or more monthse. Insomnia symptoms are often accompanied by problems that threaten a person’s daily functioning, such as fatigue, poorer concentration, mood disorders, sleepiness, reduced strength and motivation, increased number of mistakes and accidents, and increasing concern about sleep problems. According to the guidelines for the treatment of insomnia, the first choice is cognitive behavioral therapy and other forms of psychotherapy, and, in case of unavailability or failure of psychotherapy, pharmacotherapy. Benzodiazepines and non-benzodiazepine hypnotics are recommended, but only in the short term (up to a month) due to possible side effects and insufficient evidence of their benefits in long-term treatments.

The aim of the paper is to emphasize the need for a thorough medical history and to explain the mechanism of the occurence and persistence of insomnia, which is crucial for interventions based on cognitive behavioral therapy (CBT).

Discussion. The frequency of chronic insomnia varies in the general population depending on which diagnostic criteria are used for the diagnosis. However, it is known that insomnia is more frequent in people suffering from comorbid conditions such as hypertension, heart disease, lung disease and in this patient population it occurs in about 44% of the examined. In previous classifications, insomnia in these comorbid conditions was considered secondary, and it was believed that treatment of the comorbid disease would solve the problem of insomnia. However, it turned out that this was not the case. Insomnia persists due to the behavior, beliefs and associations adopted by the patient while trying to cope with the sleep problem, for example, increasing caffeine drinks due to sleepiness during the day affects the maintenance of insomnia, as well as spending too much time in bed not sleeping in an attempt to fall asleep. CBT has proven to be effective, and there are no side effects that come with the pharmacotherapy of insomnia. Conducting a conversation with a patient who complains of insomnia is complex, and above all, it takes time. In order to obtain a complete picture of the problem of chronic insomnia, it would be desirable to conduct a more detailed analysis using some of the available tools such as a sleep diary or some of the questionnaires to assess the severity of insomnia. Insomnia is a clinical diagnosis and a sleep diary is often the only diagnostic aid needed to confirm or exclude the diagnosis. Psychotherapy with psychotherapists is not readily available and there is a need for brief interventions based on CBT provided by trained medical professionals. In some studies, these were nurses, or CBT was conducted via the Internet.

Conclusion. The family medicine physician (FMP) is ideally positioned for the timely recognition, evaluation and treatment of insomnia, which implies special knowledge, skills and time. FMP is educated on surface psychotherapy methods during specialization, however the health needs of the population impose that FMP should be better educated for interventions based on CBT.

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Nesanica i kako ju liječimo?

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Uvod s ciljem: Neorganska nesanica je česta dijagnoza u ordinacijama obiteljske medicine (OM). Dijagnosticiranje i liječenje nesanice u najvećem dijelu pripada liječnicima obiteljske medicine (LOM), stoga je važno da svi liječnici obiteljske medicine budu upoznati s osnovnim dijagnostičkim i terapijskim mogućnostima. Cilj ovog istraživanja bio je ispitati učestalost nesanice te poznavanje osnovnih pojmova i terapijskih mogućnosti liječenja nesanice u ordinaciji LOM-a.

Ispitanici i metode: Istraživanje je provedeno na prigodnom uzorku od 99 liječnika obiteljske medicine koji su dobrovoljno ispunili *online* anketu upućenu na službene e-adrese udruga liječnika obiteljske medicine u Hrvatskoj (Hrvatsko društvo obiteljskih doktora, Društvo nastavnika opće/obiteljske medicine, Koordinacija hrvatske obiteljske medicine) u razdoblju od 12. prosinca 2022. do 15. siječnja 2023.

Rezultati: U uzorku je bilo 74 (74,7 %) žena i 25 (25,3 %) muškaraca, 67 (67,7 %) specijalista OM-a, 31 (31,3 %) u životnoj dobi od 50 do 59 godina, a 3 (3 %) starijih od 65 godina. Više od 30 godina rada u OM-u imalo je 33 (33,3 %) ispitanika. Unatrag godine dana 39 (39,4 %) liječnika obiteljske medicine imalo je više od 40 bolesnika s problemom spavanja, a konzultacija je najčešće trajala pet do deset minuta. Većina ispitanika, njih 95 (96 %), zna da se u dijagnostici nesanice služimo anamnezom i fizikalnim pregledom, njih 84 (84,8 %) upoznato je s dnevnikom spavanja, a njih 86 (86,9 %) s upitnicima o kvaliteti spavanja. Ispitanici su u farmakološkom liječenju nesanice upotrebljavali benzodiazepine, nebenzodiazepinske hipnotike, antidepresive i melatonin, no samo 19 (19,2 %) ispitanika provodi kratke intervencije zasnovane na kognitivno-bihevioralnoj terapiji (KBT). Iako bi liječenje benzodiazepinima i „Z-lijekovima“ trebalo trajati do mjesec dana, 88 (88,9 %) ispitanika u ordinaciji ima bolesnike koji navedenu terapiju uzimaju duže. Ispitanici smatraju da bi im u svakodnevnom radu, ne samo u zbrinjavanju nesanice, pomogao manji broj bolesnika u skrbi, dodatna medicinska sestra ili administrator u ordinaciji te dodatna edukacija općenito, ali i edukacija vezana za psihoterapiju.

Zaključak: Nesanica je čest problem s kojim se bolesnici javljaju LOM-u, što su pokazali i rezultati ankete. S obzirom na nedostatak vremena za konzultaciju pri prvom pregledu, liječnici bi tada trebali postavljati osnovna anamnestička pitanja i učiniti fizikalni pregled. Pritom je važno dogovoriti kontrolni pregled na kojem će se učiniti detaljna analiza korištenjem dostupnih alata. Boljem zbrinjavanju nesanice svakako bi pomogla dodatna edukacija iz KBT-a, ali i uređeniji sustav primarne zdravstvene zaštite.

Insomnia and how do we treat it?

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IIntroduction and aim: Non-organic insomnia is a frequent diagnosis in family medicine (FM) offices. The diagnosing and treatment of insomnia are mostly managed by family physicians (FPs). Therefore, it is important that all FPs are familiar with the basic diagnostic and therapeutic options.

The aim of this research was to examine the frequency of insomnia, knowledge of basic terms and options for treating insomnia in FM offices.

Participants and methods: This research was conducted on a sample of 99 FPs who filled out an online survey sent to the official email addresses of associations of FPs in Croatia *(Croatian Society of Family Doctors, Association of Teachers of General/Family Medicine, Coordination of Croatian Family Medicine)* in the period from December 12, 2022 to January 15, 2023.

Results: The sample included 74 (74.7%) women and 25 (25.3%) men, out of which 67 (67.7%) were FM specialists, 31 (31.3%) 50 to 59 years old, and 3 (3%) over 65 years old. Thirty-three (33.3%) physicians had over 30 years of experience in FM. In the past year 39 (39.4%) physicians had more than 40 patients who came in for sleep problems and the consultation usually lasted 5 to 10 minutes. Almost all participants, 95 (96%) FPs know that we use medical history and physical examination to diagnose insomnia, 84 (84.8%) of them are familiar with sleep diaries and 86 (86.9%) with sleep quality questionnaires. In the pharmacological treatment of insomnia, participants used benzodiazepines, non-benzodiazepine hypnotics, antidepressants and melatonin, but only 19 (19.2%) of them implemented short interventions based on cognitive-behavioral therapy (CBT). Although the treatment with benzodiazepines and "Z-drugs" should only last up to one month, 88 (88.9%) participants had patients in their office who were taking the above-mentioned therapy for longer than one month. Participants believe that in their daily work, not only in treating insomnia, a smaller number of patients in care, an additional nurse or administrator in the office and additional education in general, but also education related to psychotherapy, would help them.

Conclusion: As shown by the results of the survey, insomnia is a common problem with which patients come to FPs. Given the lack of time for consultation at the first examination, physicians should ask basic medical history questions and perform a physical examination. At the same time, it is important to agree on a control examination where a detailed analysis will be done using the available tools. Better treatment of insomnia would certainly be aided by additional education in CBT, as well as a more organized system of primary health care.

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Kamo s nesanicom? Stavovi o dijagnostici i liječenju u primarnoj zdravstvenoj zaštiti

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Uvod: Nesanica pogađa oko 10 do 15 % populacije. Neliječeni poremećaji spavanja mogu povećati rizik od srčanih bolesti, prometnih nesreća, problema s pamćenjem, depresije i poremećaja funkcioniranja.

Cilj je rada iznijeti stavove liječnika o epidemiološkim podatcima, pristupu, dijagnozi i liječenju nesanice.

Metoda: Provedeno je opservacijsko presječno istraživanje u razdoblju od tri dana u siječnju 2023. godine. Kao metoda korišten je unificiran klinički upitnik preko platforme Google forms. Upitnik se sastoji od 21 pitanja kojim su obuhvaćene osobne karakteristike liječnika, epidemiološke karakteristike i etiološki razlozi morbiditeta nesanice, dijagnostički pristup i liječenje (s mogućnošću višestrukih odgovora) te stavovi liječnika za olakšavanje rada općenito i za bolje zbrinjavanje bolesnika s nesanicom. Provedena je deskriptivna kvantitativna statistička analiza.

Rezultati: Prigodni uzorak ovog istraživanja činilo je 108 liječnika koji su ispunili upitnik, od kojih je 74,1 % bilo žena, 37 % ispitanika bilo je u dobi od 40 do 49 godina, a njih 65 (60,2 %) bili su specijalisti opće/obiteljske medicine. U posljednjoj godini 49 % ispitanika imalo je manje od 19 pacijenata koji su se javili s problemima spavanja (Dg. F51.0, G47.0). Konzultacije u prosjeku traju 5 – 10 minuta (za 45,4 % sudionika), zatim 11 – 15 minuta (za njih 32,4 %). Liječnici traže uzrok nesanice kada pacijenti kažu da nisu spavali posljednje tri noći, tjedan ili najmanje mjesec dana ili tri mjeseca, ovisno o korištenoj klasifikaciji (49,1 %). Oni koji imaju nesanicu najčešće konzumiraju preparate s kofeinom (89,8 %) ili pate od depresije (84,3 %). Od dijagnostičkih postupaka ispitanici se najčešće koriste anamnezom i fizikalnim pregledom (93,5 %) te dnevnikom spavanja (72,2 %), a za terapiju pacijente najčešće upućuju na kognitivno-bihevioralnu terapiju i propisuju diazepam. Benzodiazepine ili antagoniste benzodiazepinskih receptora dulje od mjesec dana uzima 84,3 % pacijenata s nesanicom koji su u skrbi ispitanika. Dodatnu edukaciju treba 49 sudionika.

Zaključak: U dijagnostici nesanice ispitanici se najčešće koriste anamnezom, fizikalnim pregledom i dnevnikom spavanja. U ordinacijama 63,9 % ispitanika ne provodi se kognitivno-bihevioralna terapija. Nesanica je samostalan klinički poremećaj koji treba liječiti usporedno s drugim psihičkim poremećajima ili komorbiditetima. Prevladava kod pacijenata koji konzumiraju kofein ili su depresivni. Ispitanici navode da najviše trebaju dodatnu edukaciju u vođenju pacijenata koji boluju od nesanice.

How can we deal with insomnia? Attitudes towards diagnosis and treatment in PHC

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Introduction and aim: Insomnia affects about 10%-15% of the population. Untreated sleep disorders can increase the risk of heart disease, car accidents, memory problems, depression and of impaired functioning. **The aim** of this paper is to present doctors' views on epidemiological data, the approach to diagnosing and treatment if insomnia.

Method: An observational cross-sectional survey was conducted over a period of three days in January 2023. As a method, a unified clinical questionnaire conducted through the Google forms platform was used, which consists of 21 questions related to: personal characteristics of doctors; the epidemiological characteristics and etiological causes of insomnia morbidity; the diagnostic approach and treatment with the possibility of multiple answers; doctors' views on facilitating work in general, as well as on a better management of patients with insomnia. A descriptive quantitative statistical analysis was conducted.

Results: The convenience sample of this research was 108 doctors who filled out the questionnaire. Out of these subjects, 74.1% were women, 37% aged 40-49 and 65 (60.2%) of the respondents were specialists in general/family medicine. In the last year 49% of respondents had less than 19 patients who reported suffering from sleep problems (Dg.F51.0,G47.0). The consultation lasted 5-10 minutes on average (for 45.4% of participants), followed by 11-15 minutes (for 32.4%). Doctors looked for the cause of insomnia when patients said that they had not slept for three nights a week for at least a month or three months depending on the classification used (49.1%). Those who had insomnia, most often consumed caffeine (89.8%) or suffered from depression (84.3%). For diagnostic procedures respondents mostly used patients' personal anamnesis and conducted a physical examination (93.5%), followed by a sleep diary (72.2%). For therapy, patients were most often referred to cognitive-behavioral therapy, and prescribed diazepam. Benzodiazepines or benzodiazepine receptor antagonists were consumed by 84.3% of patients with insomnia who were under the care of the respondents for more than a month. Forty-nine participants needed additional education.

Conclusion. In the diagnosis of insomnia, respondents most often use patient's anamnesis, physical examination and sleep diary. Cognitive-bihavioral therapy is not performed in 63.9% of the physicians' offices respondents visit. Insomnia is an independent clinical disorder that should be treated parallel with other mental disorders or comorbidities. It predominates in patients who consume caffeine or suffer from depression. Respondents state that most of all, they need additional education for patients suffering from insomnia.

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eHEALTH IMPLEMENTATION IN PRIMARY HEALTHCARE

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IIntroduction and aim: Primary healthcare experiences an increase of the workload as a consequence of the rise in life expectancy and morbidities of the population. To overcome this growing demand for primary care services, it is essential to produce a more efficient organisation of primary care, in order to maintain the high quality, accessibility and cost effectiveness of the services. The implementation of novel and advanced procedures of work, including those integrating eHealth, is decisive for future health care providers. The aim of this paper is to discuss different aspects to be considered in the implementation of eHealth in primary care, the strategies to be regarded and knowledge to be acquired of potential obstacles and facilitators that may support family medicine doctors in their eHealth application.

Discussion: eHealth is defined as health services and information delivered or improved through the *Internet* and associated technologies and implies not only a technological advance, but also an attitude towards global thinking, intended to enhance healthcare through information and communication technology. The successful application of eHealth should consider several aspects, such as, a knowledge of evidence-based eHealth applications, digital skills of providers and patients, as well as consideration for ethical implications. Implementation strategies should contemplate potential barriers, for instance, cost, privacy, security problems and a lack of standards for eHealth applications, in addition to considering facilitators to eHealth appliance, such as the engagement of key stakeholders, planification of the implementation and the availability of training and support.

Conclusion: The implementation of eHealth applications in primary care is a challenge. Increasing the knowledge of obstacles and facilitators that influence the implementation of eHealth applications is crucial to endorse successful acquisition and maintenance of these applications.

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3. Za ostale kronične bolesti javite se svom obiteljskom liječniku

Perimenopauza i kardiovaskularno zdravlje

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Uvod s ciljem: Kardiovaskularne (KV) bolesti vodeći su uzrok smrti kod žena, a rizik za njih značajno raste nakon menopauze. Longitudinalna istraživanja provedena u proteklim dvama desetljećima o perimenopauzalnom razdoblju žena značajno su pridonijela našem razumijevanju povezanosti ovog razdoblja i KV zdravlja. S ciljem povećanja svjesnosti o ovim promjenama i povezanosti s KV zdravljem žena u prosincu 2020. godine Američka asocijacija za srce (engl. *American Heart Association*, AHA), a u siječnju 2021. godine Europsko kardiološko društvo (engl. *European Society of Cardiology*, ESC) dali su svoje izjave, odnosno smjernice o KV zdravlju i perimenopauzi. Cilj je rada prikazati kardiometaboličke promjene koje prate ovo razdolje u životu žene te preporuke o čemu je važno misliti i kako postupiti u skrbi za žene tijekom ovog razdoblja.

Rasprava: KV rizici kod žena vrlo su često nedovoljno prepoznati, proučavani, dijagnosticirani i adekvatno liječeni. Jedan od spolno specifičnih KV rizika koji u različitim odnosima pridonosi i pojačanju nekih drugih poznatih čimbenika rizika jest prijevremena menopauza. Endotelna disfunkcija počinje u ranoj menopauzi čak i prije subkliničkih znakova ateroskleroze i pretpostavlja se da je dio patofiziološkog objašnjenja „neodređene boli u prsima i dispneje" koja se često nazove „stres" ili samo „menopauza". Ove žene imaju dva puta veći rizik razvoja ishemijske bolesti srca u sljedećih pet do sedam godina. S promjenom hormonskog sustava događaju se i promjene sastava tijela te dolazi do porasta masnog tkiva dominantno centralno i visceralno zbog porasta lučenja upalnih citokina, a uz pad mišićne mase dolazi do inzulinske rezistencije. U postmenopauzi dva do tri puta veća je prevalencija metaboličkog sindroma u usporedbi sa ženama iste dobi u premenopauzi, češći je proaterogeni lipidni profil te se javlja strmi porast arterijskog tlaka. Hipertenzija je kritično loše regulirana, posebno u ranim godinama postmenopauze, a početak hipertenzije karakteriziran je palpitacijama, napadajima crvenila, boli u prsima ili između lopatica, umorom, poremećajima spavanja, odnosno simptomima uglavnom pripisivanima menopauzi. U perimenopauzi dolazi i do povećanja osjetljivosti za Na i intermitentne retencije tekućine s edemima nogu, ruku, donjih kapaka. Upalni komorbiditeti povećavaju KV rizik u perimenopauzi. Tijekom perimenopauze važno je odrediti lipidni profil i izmjeriti arterijski tlak. Zdrave životne navike, prehrana i redovita tjelesna aktivnost bitni su za optimalno menopauzalno zdravlje. Hormonska terapija (HT) olakšava simptome menopauze, a prije propisivanja potrebno je procijeniti KV rizik. HT nije indiciran uz visok KV rizik ili nakon KV događaja niti kod asimptomatskih žena.

Zaključak: Promjene hormona koje se događaju tijekom života mogu utjecati na KV zdravlje žena. Rana menopauza nosi viši rizik za šećernu bolest i za kardiovaskularne bolesti. Menopauza je povezana s centralnim adipozitetom, inzulinskom rezistencijom i proaterogenim lipidnim profilom. Perimenopauza je optimalno vrijeme za edukaciju, prevenciju, procjenu KV rizika i rane specifične intervencije i u domeni je specijalista obiteljske medicine.

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Perimenopause and cardiovascular health

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IIntroduction with aim: Cardiovascular (CVD) diseases are the leading cause of death in women, and their risk increases significantly after menopause. Longitudinal research conducted over the past two decades among the women in perimenopause have significantly contributed to our understanding of the relationship between perimenopause and cardiovascular (CV) health. With the aim of increasing the awareness of these changes and the connection with women's CV health, in December 2020, the American Heart Association, and in January 2021, the European Society of Cardiology issued their statements or guidelines on CV health and perimenopause. The aim of this paper is to present the cardiometabolic changes accompanying this period in a woman's life, as well as to present the recommendations on what is important to consider and how to provide health care to women during this period of their lives.

Discussion: CV risks in women are very often insufficiently recognized, studied, diagnosed and adequately treated. One of the sex-specific CV risks tin various ways contributing to the strengthening of some other known risk factors is premature menopause. Endothelial dysfunction begins in early menopause even before the subclinical signs of atherosclerosis and is assumed to be part of the pathophysiological explanation for "undefined chest pain and dyspnea" often referred to as "stress" or just "menopause". These women have twice the risk of developing ischemic heart disease in the next five to seven years. With a change in the hormonal system, changes in the composition of the body occur and there is an increase in adipose tissue, dominantly centrally and viscerally, due to an increase in the secretion of inflammatory cytokines, and with a decrease in muscle mass, insulin resistance occurs. In postmenopause, the prevalence of metabolic syndrome is two to three times higher compared to women of the same age in premenopause, a proatherogenic lipid profile is more common, and a steep rise in arterial pressure occurs. Hypertension is critically poorly regulated, especially in the early years of postmenopause, and the onset of hypertension is characterized by palpitations, flushing attacks, pain in the prism or between the shoulder blades, fatigue, sleep disorders, or symptoms mainly attributed to menopause. In perimenopause, there is an increase in sensitivity to Na and intermittent fluid retention with edema of the legs, arms, and lower eyelids. Inflammatory comorbidities increase CV risk in perimenopause. During perimenopause, it is important to determine the lipid profile and measure arterial pressure. Healthy lifestyle habits, diet and regular physical activity are essential for optimal menopausal health. Hormone therapy (HT) relieves menopausal symptoms, and CV risk should be assessed before prescribing. HT is not indicated in case of high CV risk, after a CV event, or in asymptomatic women.

Conclusion: Hormonal changes that occur throughout life can affect women's CV health. Early menopause carries a higher risk for diabetes and cardiovascular disease. Menopause is associated with central adiposity, insulin resistance and a proatherogenic lipid profile. Perimenopause is the optimal time for education, prevention, risk assessment and early specific interventions and is in the domain of family medicine specialists.

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Suvremeni pristup perifernoj arterijskoj bolesti

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Uvod s ciljem: Periferna arterijska bolest (PAB), iako često neprepoznata, predstavlja značajan udio kardiovaskularnog morbiditeta i mortaliteta, s više od 200 milijuna oboljelih u svijetu. Obuhvaća aterosklerotske promjene arterija gornjih i donjih ekstremiteta, ekstrakranijalnih arterija cerebrovaskularnog sustava te visceralnih arterija (uz iznimku aorte i koronarnih arterija). U svakodnevnom medicinskom rječniku PAB se često krivo poistovjećuje samo s aterosklerotskom bolesti arterija donjih ekstremiteta (ABADE) (engl. *lower extremity artery diseases*, LEAD), koja čini posebnu podskupinu bolesnika s PAB-om, s jasno definiranim metodama dijagnostike i terapije. Cilj je ovoga rada ukratko prikazati trenutačno važeće spoznaje o PAB-u.

Rasprava: Zbog dijelom asimptomatskog oblika bolesti danas još uvijek ne postoji preporuka za rutinski probir opće populacije na PAB. Sumnju na bolest mora pobuditi ako skrbimo za bolesnike sa simptomima cerebrovaskularnog događaja, s bolovima u ruci sa simptomima vrtoglavice ili bez njih, s abdominalnim bolovima povezanima s jelom i gubitkom na tjelesnoj težini. Na ABADE posumnjat ćemo ako bolesnici javljaju bolove u mišićima donjih ekstremiteta prilikom opterećenja (klaudikacije) ili mirovanja, bljedilo i hladnoću stopala, neproporcionalnu (ili asimetričnu) atrofiju muskulature, pojavu kroničnih ulkusa koji otežano cijele te pojavu gangrenoznih areala. Bolovi u glutealnoj regiji i erektilna difunkcija mogu upućivati na zdjeličnu aterosklerotsku bolest. Dijagnozi pomaže auskultacija vratne, periumbilikalne i femoralne regije, a uredan nalaz perifernih pulsova s visokom sigurnošću isključuje značajnu aterosklerotsku bolest ekstremiteta. Bolovi koji su lokalizirani u jednoj točki ili se šire pravocrtno duž cijelog ekstremiteta te bolovi koji su lokalizirani u zglobovima ne upućuju na ishemijsko porijeklo. Dalja dijagnostička obrada podrazumijeva laboratorijsku obradu (lipidogram i glikemiju), mjerenje arterijskog tlaka na obje ruke, mjerenje pedobrahijalnih indeksa (PBI) (engl. *Ankle-Brachial Index*, ABI), doplerski pregled perifernih arterija te, ako je to potrebno, kompjutoriziranu tomografiju ili magnetsku rezonanciju. Međutim, i kod asimptomatskih bolesnika, PBI valja učiniti ako je kod bolesnika poznata koronarna bolest, aneurizma abdominalne aorte, kronična bubrežna bolest ili zatajenje srca, a patološke vrijednosti nisu samo dijagnostički alat već i neovisni čimbenik kardiovaskularnog rizika. Sve bolesnike valja poticati na usvajanje zdravih životnih navika i prestanak pušenja. Potrebno je inzistirati na postizanju unaprijed određenih ciljnih vrijednosti arterijskog tlaka, glikemije i LDL-kolesterola, a komorbiditete treba liječiti modernim i potentnim lijekovima te redovito pratiti suradljivosti bolesnika. Antiagregacijska terapija indicirana je za sekundarnu prevenciju kardiovaskularnih događaja u bolesnika sa simptomatskim PAB-om, izuzev stenoze karotidne arterije kada je monoterapija indicirana i kod asimptomatskih signifikantnih stenoza. Kada bolesnik razvije klaudikacije, u terapiju se uključuju vježbe hoda (idealno u kontroliranim uvjetima), a pri značajnom skraćenju hodne pruge (manje od 100 metara) i remećenju kvalitete života bolesnika pristupa se jednoj od revaskularizacijskih metoda. Pojava bolova u mirovanju, hiperemičnog stopala bolnog na dodir ili gangrene ekstremiteta u bolesnika s kroničnom ishemijom upućuje na potrebu promptne revaskularizacije, a nakon otpusta iz bolnice potreban im je redoviti nadzor obiteljskog liječnika.

Zaključak: Periferna arterijska bolest relativno je slabo prepoznata u općoj populaciji zbog čega je od izuzetne važnosti da liječnik obiteljske medicine kao osoba prvog kontakta bude upoznata sa suvremenim načinom dijagnostike i liječenja.

The contemporary approach to peripheral artery diseases

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Introduction and aim: Peripheral arterial disease (PAD), although often unrecognized, represents a significant proportion of cardiovascular morbidity and mortality estimated at more than 200 million worldwide. It includes atherosclerotic changes in the arteries of the upper and lower extremities, extracranial arteries of the cerebrovascular system, and visceral arteries (except the aorta and coronary arteries). In everyday medical vocabulary, PAD is often equated with lower extremity artery disease (LEAD), which constitutes a special subgroup of patients with PAD with clearly defined diagnostic and therapeutic methods. The aim of this paper is to briefly present the currently valid knowledge about PAD.

Discussion: Due to the partially asymptomatic form of PAD, there are still no recommendations for the general population routine screening. Suspicion must be aroused if we care for the patient with a cerebrovascular event, pain in the arm with or without dizziness, abdominal pain associated with eating and weight loss. LEAD need to be suspected if the patient experiences pain in their muscles during exercise (claudication) or at rest, paleness and coldness of their feet, disproportionate (or asymmetric) atrophy of their muscles, chronic ulcers that are difficult to heal, or the appearance of gangrenous areas. Pain in their gluteal region and erectile dysfunction can indicate pelvic atherosclerotic disease. The diagnosis is aided by an auscultation of their neck, periumbilical, femoral regions, and a regular finding of peripheral pulses excludes significant atherosclerotic disease of extremities. Pain localized in one point or spread in a straight line along their entire limb, and pain localized in their joints do not indicate ischemic genesis. Further diagnostic procedures are laboratory findings, both arms blood pressure measurement, measurement of their ankle-brachial index (ABI), a Doppler examination of peripheral arteries, and, if necessary, computed tomography or magnetic resonance. However, even in asymptomatic patients, ABI should be performed if the patient has known coronary disease, abdominal aortic aneurysm, chronic kidney disease, or heart failure, and pathological values of the ABI are not only a diagnostic tool but also an independent factor of cardiovascular risk. All patients should be encouraged to adopt healthy lifestyle habits and stop smoking. It is necessary to insist on achieving predetermined target values of arterial pressure, glycaemia, and LDL-cholesterol. Comorbidities should be treated with modern and potent drugs, with a frequent monitoring of patients adherence. Antiplatelet therapy is indicated for the secondary prevention of cardiovascular events in patients with symptomatic PAD, except for carotid artery stenosis, when monotherapy is also indicated for asymptomatic significant stenoses. When the patient develops claudication, walking exercises (ideally under controlled conditions) are included in the therapy, and in case of significant shortening of walking distance (less than 100 meters) and disruption of the patient's quality of life one of the revascularization methods are used. The occurrence of pain at rest, a hyperemic foot that is painful to the touch or gangrene of the extremity in patients with chronic ischemia indicates the need for prompt revascularization, and after discharge, the patient needs regular supervision by the family physician.

Conclusion: Peripheral arterial disease is relatively poorly recognized in the general population, which is why it is important that family physicians, as first contact persons, be familiar with modern methods of diagnosis and treatment.

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Poremećaji spavanja kao česti komorbiditeti

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Uvod s ciljem: Spavanje je esencijalna ljudska potreba i nezamjenjiva sastavnica u ljudskom zdravlju. Budnost i spavanje složeni su fiziološki procesi koji uključuju mnogobrojne neurotransmitere, neuromodulatore i neuronske puteve koji utječu na gotovo sve fiziološke funkcije mozga i tijela. Fiziologija cjelokupnog organizma mijenja se tijekom spavanja u usporedbi s budnim stanjem, a poremećaji spavanja i budnosti česti su u bolesnika koji boluju od raznih bolesti. Cilja je rada predstaviti najnovije spoznaje iz područja medicine spavanja – somnologije, uz prikaz najčešćih poremećaja spavanja i budnosti.

Rasprava: Istraživanje poremećaja spavanja i budnosti relativno je mlada disciplina koja je značajno napredovala u posljednjih 40-ak godina. Od uspostave prvog centra za poremećaje spavanja i budnosti 1970. godine kliničko je prepoznavanje poremećaja spavanja poraslo, ali je još uvijek nedovoljno prepoznato da su poremećaji iz ove skupine među najčešćim kroničnim zdravstvenim stanjima. Danas znamo da poremećaji spavanja mogu biti povezani, često i bidirekcijski, s brojnim kroničnim bolestima i stanjima kao što su arterijska hipertenzija, plućna hipertenzija, srčane aritmije (posebno fibrilacija atrija), koronarna bolest, moždani udar, demencije, šećerna bolest, bolesti štitnjače, psihičke bolesti, KOPB, astma, kronični bolni sindromi te pridonose ukupnom porastu obolijevanja i smrtnosti. Zabrinjavajući je i podatak da neliječeni bolesnici imaju smanjenu učinkovitost na radnom mjestu zbog čega češće mogu imati i nesreću na radu, ali i do nekoliko puta veći rizik za prometnu nesreću. Napretkom medicine spavanja do danas smo spoznali više od 80 poremećaja spavanja i budnosti. Prva velika klasifikacija poremećaja spavanja, Dijagnostička klasifikacija poremećaja spavanja i budnosti, objavljena 1979. godine, razvrstala je poremećaje spavanja u simptomatske kategorije te je stvorila temelj današnjih sustava klasifikacije. Od svih poremećaja spavanja najčešća je nesanica jer tijekom života svaka osoba doživi takav poremećaj spavanja. Kronična nesanica vrlo je česta i pogađa oko 30 % opće populacije. Nesanica se pojavljuje i kao komorbiditet uz mnoge druge bolesti, somatske i psihijatrijske. U skupinu poremećaja spavanja spadaju i poremećaji disanja u spavanju od kojih je najčešća opstruktivna apneja u spavanju, tzv. OSA (engl. *obstructive sleep apnea*). OSA je ujedno i najčešći medicinski uzrok prekomjerne dnevne pospanosti, pa je u algoritmu obrade navedenog simptoma obvezna obrada za apneju. Kod bolesnika s rezistentnom arterijskom hipertenzijom prevalencija OSA-e je i do 90 %, a kod bolesnika koji imaju šećernu bolest tipa II i do 50 %. OSA je čest komorbiditet i uz inzulinsku rezistenciju, plućnu hipertenziju, KOPB, astmu, hipotireozu i GERB. Prevalencija OSA-e raste, a njezin porast u direktnoj je vezi s globalnim porastom pretilosti, glavnim čimbenikom rizika za OSA-u, ali i s većim udjelom starijeg stanovništva. Danas se smatra da je u svijetu gotovo milijarda ljudi zahvaćena s ovim problemom, pogađajući 24 % muškaraca i 9 % žena u općoj populaciji. Nažalost, čak je 80 % bolesnika neprepoznato, a time i neliječeno. Stoga je u nastojanju da se OSA, ali i drugi poremećaji spavanja i budnosti adekvatno liječe, nužno na njih obratiti pravodobnu pozornost.

Zaključak: Prema najnovijim spoznajama poremećaji spavanja i budnosti s razlogom se svrstavaju u jedan od najvažnijih svjetskih javnozdravstvenih problema, a uz somnologe značajnu ulogu u njihovu zbrinjavanju imaju i liječnici obiteljske medicine.

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Sleep disorders as common comorbidities

Keywords: sleep medicine, somnology, insomnia, obstructive sleep apnea, OSA
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Introduction and aim: Sleep is an essential human need and an irreplaceable component of human health. Wakefulness and sleep are complex physiological processes that involve many neurotransmitters, neuromodulators and neural pathways that affect almost all physiological functions of the brain and body. The physiology of the entire organism changes during sleep compared to the awake state, and both sleep and wakefulness disorders are common in patients who suffer from various diseases. The aim of this lecture is to present the latest knowledge in the field of sleep medicine − somnology with a presentation of the most common sleep and wakefulness disorders.

Discussion: Research on sleep-wake disorders is a relatively new discipline that has developed significantly in the last 40 years. Since the establishment of the first center for sleep and wakefulness disorders in the 1970s, the clinical recognition of sleep disorders has increased, but it is still insufficiently recognized that disorders from this group are among the most common chronic health conditions. Today we know that sleep disorders can be related, often bidirectionally, with numerous chronic diseases and conditions such as arterial hypertension, pulmonary hypertension, cardiac arrhythmias (especially atrial fibrillations), coronary disease, stroke, dementia, diabetes, thyroid disease, mental illness, COPD, asthma, chronic pain syndromes. They contribute to the overall increase in morbidity and mortality. What is worrying is the fact that untreated patients not only have reduced efficiency at work, but also more work accidents, as well as several times higher risk of traffic accidents. With the progress of sleep medicine, we have got to know more than 80 sleep and wakefulness disorders. The first major classification of sleep disorders, Diagnostic classification of sleep and wakefulness disorders published in 1979 organized sleep disorders into symptomatic categories and created the basis of today's classification systems. Of all sleep disorders, insomnia is the most common because everyone experiences this type of sleep disorder during their lifetime. Chronic insomnia is very common and affects about 30% of general population. Insomnia also occurs as a comorbidity with many other somatic and psychiatric diseases. The group of sleep disorders also includes sleep-related breathing disorders, the most common being OSA (obstructive sleep apnea). OSA is also the most common medical cause of excessive daytime sleepiness, so in the diagnostic algorithm of the above symptom tests to detect apnea are mandatory. In patients with resistant arterial hypertension, the prevalence of OSA is up to 90%, and in patients who have type II diabetes even up to 50%. OSA is a common comorbidity, along with insulin resistance and lung disease hypertension, COPD, asthma, hypothyroidism and GERD. The prevalence of OSA is increasing, and its increase is directly related to the global increase in obesity, the major risk factor for OSA, but also a larger share of the elderly population. Today, it is thought that there are almost a billion people in the world suffering from this problem, which affects 24% of men and 9% of women in the general population. Unfortunately, as many as 80% of patients are unknown and untreated. Therefore, in an effort for OSA and other sleep and wakefulness disorders to be adequately treated, it is necessary to set a timely diagnosis.

Conclusion: According to recent findings, sleep and wakefulness disorders are rightfully classified as one of the world's most important public health problems, and along with somnologists, family physicians also play a significant role in their treatment.

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Psihosocijalno zdravlje oboljelih od šećerne bolesti

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Ključne riječi: dijabetes melitus, psihosocijalna skrb, liječnik obiteljske medicine
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Uvod: Bolesniku usmjerena skrb u liječenju bolesnika sa šećernom bolešću podrazumijeva individualiziranje skrbi za svakog bolesnika posebno kako bi se spriječile komplikacije i omogućila dobra kvaliteta života oboljelih. Psihosocijalna skrb integrirana je u ovakav pristup i trebala bi biti dostupna svim osobama s dijabetesom. Često se zanemaruje utjecaj psiholoških i socijalnih problema na emocionalno stanje bolesnika te njihov utjecaj na razvoj, liječenje i ishod šećerne bolesti. Liječnik obiteljske medicine ima mogućnost brzo i učinkovito procijeniti psihosocijalno stanje pacijenta te ga po potrebi uputiti kolegama konzultantima različitih specijalnosti. **Cilj** je ovoga rada prikazati preporuke za procjenu psihosocijalnog zdravlja oboljelih od dijabetesa i naglasiti važnost njihove primjene u svakodnevnom radu obiteljskog liječnika.

Rasprava: Utjecaj psihosocijalnih čimbenika na zdravlje bolesnika sa šećernom bolesti predmet je istraživanja koja procjenjuju kvalitetu života, samostalnost u brizi za vlastito zdravlje, stavove i uvjerenja bolesnika, socijalnu podršku i skrb za ove bolesnike. Rezultati pokazuju značajnu uznemirenost (engl. *diabetes distress*) kod 44,6 % ispitanika, depresiju kod njih 13,8 %, kvaliteta života ocijenjena je kao loša ili vrlo loša kod 12,2 % ispitanika, dok je negativan utjecaj na odnose s obitelji i prijateljima prijavilo njih 20,5 %, a kod 62,2 % utvrđen je negativan utjecaj na tjelesno zdravlje. Manje od polovine (48,8 %) pacijenata sudjelovalo je u programima edukacije o liječenju bolesti, a skrb i podrška kroničnim bolesnicima ocijenjeni su nisko. Godine 2016. Američka asocijacija za šećernu bolest (engl. *American Diabetes Association*) objavila je smjernice utemeljene na dokazima za psihosocijalnu procjenu i skrb za osobe sa šećernom bolesti i njihove obitelji. Psihološki probir preporučuje se započeti kod postavljanja dijagnoze, pri kontrolnim posjetima liječniku, u slučaju hospitalizacije, pojave nove komplikacije, kod otkrivanja novog problema s glukoregulacijom ili promjene u kvaliteti života. Psihološki probir započinje neformalnim razgovorom u kojem će se uočiti promjena u raspoloženju pacijenta od posljednjeg posjeta liječniku obiteljske medicine, pitanjima o novim situacijama u životu, razini stresa i sl. Psihološki probir i praćenje uključuju procjenu stavova bolesnika o bolesti, očekivanja u vezi s medicinskim liječenjem i ishodom bolesti, utjecaja bolesti na raspoloženje, opću i zdravstvenu kvalitetu života, financijska, socijalna i emocionalna pitanja te pacijentovu psihijatrijsku povijest. Preporučeno je provoditi redovitu procjenu simptoma uznemirenosti, depresije, anksioznosti, problema s prehranom i kognitivnog kapaciteta pacijenta korištenjem standardiziranih upitnika. Probir depresije i kognitivnih problema preporučuje se u svih bolesnika s dijabetesom starijih od 65 godina. Također se preporučuje da se u psihološku procjenu uključe i članovi obitelji.

Zaključak: Dijabetes uzrokuje psihosocijalne probleme koji utječu na postizanje odgovarajuće kontrole glikemije i samozbrinjavanje bolesti. Obiteljski liječnik ima priliku i u idealnoj je poziciji procijeniti psihosocijalno stanje pacijenta. Primjenom kliničkih preporuka za procjenu psihosocijalnog statusa i pravovremenom intervencijom može se poboljšati kvaliteta života i smanjiti rizik od komplikacija.

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Psychosocial health of patients with diabetes

Key words: diabetes mellitus, psychosocial care, family physician.
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Introduction: Patient-centered care in the treatment of patients with diabetes implies individualizing care for each patient specifically in order to prevent complications and enable good quality of life for patients. Psychosocial care is integrated into this approach and should be available to all people with diabetes. The impact of psychological and social problems on the patient's emotional state and their impact on the development, treatment and outcome of diabetes is often overlooked. A family physician has the ability to quickly and effectively assess the patient's psychosocial condition and, if necessary, refer them to fellow consultants of various specialties. The aim of this paper is to present recommendations for assessing the psychosocial health of patients with diabetes, as well as to emphasize the importance of their implementation in family physicians' daily work.

Discussion: The impact of psychosocial factors on the health of patients with diabetes is the subject of research that assesses quality of life, independence in taking care of one's own health, patients' attitudes and beliefs, social support and care for these patients. Results show significant distress in 44.6% of respondents, depression in 13.8%, quality of life was rated as bad or very bad by 12.2% of respondents, while the negative impact on relationships with family and friends was reported by 20.5% of them, and 62.2% were found to have experienced negative effects on their physical health. Less than a half (48.8%) of patients participate in education programs on disease treatment, and care and support for chronic patients were rated low.

In 2016, the American Diabetes Association published evidence-based guidelines for psychosocial care of the people suffering from diabetes and their families. Psychological screening is recommended after the diagnosis is made, during check-up visits, in case of hospitalization, a new complication, when a new problem with glucoregulation or a change in the quality of life is discovered. The psychological screening begins with an informal conversation in which the physician can identify changes in the patient's mood since their last visit. It is followed by questions about new situations in life, stress level, etc. Psychological screening and follow-up include an assessment of patients' attitudes towards the disease, their expectations regarding the treatment and outcome of the disease, its impact on their mood, general and health-related quality of life, financial, social and emotional issues and patients' psychiatric history. It is recommended to carry out a regular assessment of the symptoms of agitation, depression, anxiety, eating problems as well as patients' cognitive capacity using standardized questionnaires. Screening for depression and cognitive problems is recommended for all patients with diabetes over the age of 65. It is also recommended that family members be included in the psychological assessment.

Conclusion: Diabetes causes psychosocial problems that affect the achievement of adequate glycemic control and self-care of the disease. The family physician has the opportunity and is in an ideal position to assess patients' psychosocial condition. Implementing clinical recommendations for the assessment of psychosocial status as well as timely interventions, the family physician can improve the quality of life and reduce the risk of complication

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Sezonska varijacija vrijednosti međunarodnoga normaliziranog omjera među pacijentima na antikoagulacijskoj terapiji

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Ključne riječi: INR, sezonske varijacije, acenocoumarol
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Uvod i cilj: Učinkovitost i sigurnost oralne antikoagulacijske terapije acenocoumarolom ovisi o održavanju vrijednosti međunarodnoga normaliziranog omjera (INR) u terapijskom rasponu. Postoje neke studije koje izvještavaju o sezonskim varijacijama u vrijednostima INR-a, najniže ljeti i najviše ujesen. **Cilj:** Određivanje sezonske varijacije INR-a, otkrivanje uzroka neadekvatne antikoagulacije i djelovanje prema njima (pridržavanje terapije, interakcija s hranom i lijekovima).

Metoda: Retrospektivna presječna studija za razdoblje od 2020. do 2022. godine, statistička analiza rezultata INR-a iz elektroničke medicinske evidencije pacijenata izrađenih u Institutu za transfuzijsku medicinu RS Makedonije. Srednji broj INR mjera po sezoni za svakog pacijenta bio je 5. Svaki INR rezultat dodali smo sezoni: zimski prosinac – veljača; proljetni ožujak – svibanj; ljetni lipanj – kolovoz; jesenski rujan – studeni. Izračunali smo srednju vrijednost INR-a i postotak vrijednosti INR-a u rasponu od 2 do 3, < 2 i > 3 za svaku sezonu.

Rezultati: Provedeno je 1890 INR rezultata od 90 bolesnika s atrijskom fibrilacijom stavljenih na acenocoumarol, 65 % ženskih i 35 % muških, prosječne dobi 76 godina i s prosječnim vremenom praćenja od 1026 dana. Srednje vrijeme u terapijskom rasponu (TTR) kao postotak INR vrijednosti u rasponu od 2 do 3 bilo je 42 %. Srednje INR vrijednosti dobivene po sezoni, niže u proljeće (2,05) i ljeto (2,03) u odnosu na jesen (2,3) i zimu (2,25). Najviše vrijednosti INR-a < 2 zabilježene su ljeti (54 %) i u proljeće (53 %), u usporedbi s ostalim sezonama u kojima je postotak bio < 45. Većina vrijednosti INR-a > 3 zabilježena je u jesen (13 %) i zimi (12 %), u usporedbi s ostalim sezonama u kojima smo zabilježili 8 %.

Zaključci: Potvrdili smo pojavu sezonskih varijacija INR vrijednosti pod srednjom INR vrijednošću i postotkom INR vrijednosti, najnižom ljeti i u proljeće te najvišom u jesen i zimu, vjerojatno zbog mnogih različitih čimbenika kao što su pridržavanje terapije, varijacije u prehrani, hidratacija, tjelesna aktivnost i neka akutna medicinska stanja. Iako je mehanizam i dalje nepoznat, naši nalazi upućuju na to da za optimalno upravljanje antikoagulacijom treba uzeti u obzir sezonske varijacije INR-a i dobru edukaciju pacijenata.

Seasonal variation of International Normalized Ratio values among patients on anticoagulant therapy

Key words: INR, seasonal variations, acenocoumarol
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IIntroduction and aim: The effectiveness and safety of oral anticoagulant therapy with acenocoumarol depends on maintaining the International Normalized Ratio (INR) values in the therapeutic range. There are some studies reporting seasonal variation in INR values, lowest in summer and highest in autumn. Aim: Determining the seasonal variation of INR, detection of the causes of inadequate anticoagulation and acting towards them (adherence to therapy, interaction with food and medicines)

Method Retrospective, cross sectional study for the period 2020-2022, statistical analysis of INR results from patients' electronic medical record made in the Institute for Transfusion Medicine of R. of N. Macedonia. The mean number of INR measurements per season for every patient was 5. We add each INR result to a season: winter December - February; spring March - May; summer June - August; autumn September – November. We calculate mean INR value and percent of INR values in range 2-3, <2 and >3 for every season.

Results We proceeded 1.890 INR results from 90 patients with atrial fibrillation placed on acenocoumarol, 65% female and 35% male, with average mean age of 76 years and average follow up time of 1026 days. Mean time in therapeutic range (TTR) as a percent of INR values in range 2-3 was 42%. We received mean INR values by season, lower in spring 2.05 and summer 2.03, compared to autumn 2.3 and winter 2.25. Most numbers of INR values < 2 were noted in summer 54% and spring 53%, compared to other seasons where the percent was < 45. Most INR values >3 were noted in autumn 13% and winter 12%, compared to other seasons where we noted 8%.

Conclusions: We confirmed the occurrence of seasonal variation of INR values by mean INR value and percent of INR values, lowest in summer and spring and highest in autumn and winter, possibly due to many different factors such as adherence to therapy, variation in diet, hydration, physical activity and some acute medical conditions. Although the mechanism remains unknown, our findings indicate that for optimal anticoagulation management seasonal variation of INR and good patient education should be considered.

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4. Zaduha

Bolesnik sa zaduhom – pristup obiteljskog liječnika

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Uvod i cilj: Bolesnik sa zaduhom predstavlja profesionalni izazov za liječnika obiteljske medicine (LOM) jer se zaduha pojavljuju u više dijagnostičkih kategorija, a ponekad ozbiljnih i potencijalno opasnih stanja koja ugrožavaju život. Zaduha se definira kao subjektivni doživljaj nelagode disanja različitog karaktera i intenziteta. Pravilna dijagnostička procjena i trijaža od izuzetnog su značaja u ranom pristupu bolesniku sa zaduhom. Cilj je ovog rada prikazati pregled dijagnostičkih kategorija koje se prezentiraju simptomom zaduhe te preporučene postupke na razini obiteljske medicine (OM) koji se mogu koristiti u svakodnevnoj praksi kao standardizirani, stručno utemeljeni postupci.

Rasprava: U oko dvije trećine bolesnika s akutnom ili kroničnom zaduhom temeljni uzrok je kardiopulmonalna bolest. U 85 % slučajeva bolesnika s glavnim simptomom zaduhe uzroci obuhvaćaju astmu, kongestivno zatajenja srca, kroničnu opstruktivnu plućnu bolest, upalu pluća, srčanu ishemiju, intersticijsku bolest pluća i psihogene čimbenike. Anamneza i klinički pregled početak su svake kliničke procjene. Prvenstveno je nužno utvrditi je li stanje akutno ili kronično, a posebno je važno prepoznati nestabilnog bolesnika koji treba hitnu intervenciju za razliku od stabilnoga kod kojega detaljnom kliničkom procjenom utvrđujemo dijagnozu i donosimo odluku o terapijskom postupku i zbrinjavanju. Inicijalne dijagnostičke pretrage koje slijede anamnezu i fizikalni pregled jesu krvna slika i biokemijske pretrage, elektrokardiogram, pulsna oksimetrija, spirometrija i radiogram prsnih organa.

Zaključak: U svrhu što boljeg zbrinjavanja bolesnika sa zaduhom nužno je slijediti specifične algoritme i preporuke za obiteljsku medicinu, a inicijalna dijagnostička obrada i osnovno liječenje u domeni su LOM-a.

A patient with dyspnea - the approach of the family physician

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Introduction with aim: A patient with dyspnea represents a professional challenge for a family physician (FP) because shortness of breath appears in several diagnostic categories, and sometimes in serious and potentially life-threatening conditions. Dyspnea is defined as a subjective experience of breathing discomfort of different character and intensity. Proper diagnostic assessment and triage are extremely important in the early approach to a patient with shortness of breath. *The aim* of this paper is to present an overview of the diagnostic categories presented by the symptom of dyspnea and the recommended procedures in family medicine (FM) that can be used in everyday practice as standardized, expertly based procedures.

Discussion: In about two thirds of patients with acute or chronic dyspnea, the underlying cause is cardiopulmonary disease. In 85% of cases of patients with the main symptom of dyspnea, the causes include asthma, congestive heart failure, chronic obstructive pulmonary disease, pneumonia, cardiac ischemia, interstitial lung disease and psychogenic factors. History and clinical examination are the beginning of any clinical assessment. First of all, it is necessary to determine whether the condition is acute or chronic, and it is especially important to recognize an unstable patient who needs immediate intervention, as opposed to a stable patient, in whom a detailed, clinical assessment determines the diagnosis and guides the decision on the therapeutic procedure and patient care. Initial diagnostic tests that follow the anamnesis and physical examination are blood count, biochemical tests, electrocardiogram, pulse oximetry, spirometry and radiogram of chest organs.

Conclusion: In order to provide the best care for patients with dyspnea, it is necessary to follow specific algorithms and recommendations for family medicine, and the initial diagnostic work-up and basic treatment are in the domain of FP.

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Bolesnik sa zaduhom – duboka venska tromboza i plućna embolija

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Uvod s ciljem: Zaduha je subjektivni osjećaj nedostatka zraka. Pažljivo uzeta anamneza i klinički pregled obično su u većini slučajeva najkorisniji alati u razumijevanju etiologije zaduhe. Akutna se zaduha javlja iznenada, najčešće tijekom nekoliko minuta, i akutni je simptom teških i potencijalno fatalnih bolesti kao što su akutna plućna embolija, infarkt miokarda, akutna valvularna insuficijencija, plućni edem i slično. Cilj je prikazati zaduhu u bolesnika s dubokom venskom trombozom (DVT) i plućnom embolijom (PE).

Rasprava: Klinički znakovi i simptomi plućne embolije mogu biti nespecifični; osim zaduhe, to su bolovi u prsima, presinkopa ili sinkopa i hemoptiza. Zaduha je u bolesnika s centralnom plućnom embolijom akutna i jaka, pogoršava se tijekom napora i s protokom vremena. Kod embolije malih, perifernih arterija zaduha je obično umjerena i prolazna. U bolesnika koji imaju istodobno srčanu kongestivnu bolest ili plućnu bolest pogoršanje zaduhe može biti jedini simptom plućne embolije. Bolovi u prsima često su izazvani iritacijom pleure zbog distalnih embolusa koji izazivaju plućni infarkt. Kod centralne plućne embolije bol je nalik anginoznoj te se treba diferencirati od akutnog koronarnog sindroma ili disekcije aorte. Zaduha udružena s krizama svijesti ili osjećajem palpitacija često se uočava u bolesnika s plućnom embolijom. U riziku za PE je 30 – 40 % bolesnika s DVT-om noge i zdjelice i 10 % bolesnika s DVT-om ruke. U većem su riziku za PE bolesnici s proksimalnom dubokom venskom trombozom, npr. ileofemoralnom, zatim femoropoplitealnom i poplitealnom u odnosu na distalnu, s DVT-om mišićnih ili vena pratilica potkoljenice. Oko 25 % bolesnika s trombozom površinskih vena s ekstenzijom tromba u duboki venski sustav ima i PE. Najčešći čimbenici rizika za DVT su maligna oboljenja, akutna bolest, kirurški zahvat, trauma, mirovanje duže od tri dana, debljina, upalne i infektivne bolesti, hormonalna terapija estrogenima, trudnoća, dugotrajna putovanja, antifosfolipidni sindrom, hospitalizacija i dugotrajno sjedenje. Rizik DVT-a u bolesnika s varikoznim površinskim venama je mali. Osnovni patofiziološki mehanizam nastanka jest venska staza, ozljeda stijenke i hiperkoagulabilna stanja, a vremenski to su prva tri dana po nastajanju tromboze. Simptomi i znakovi bolesti su edem, eritem, bol i napetost u zahvaćenom dijelu, a intenzitet je ovisan o anatomskoj distribuciji trombotskog procesa. Bolesnik s trombozom ileofemoralnog područja uz edem cijele noge imat će izraženije simptome, a bolesnici s distalnijom trombozom mogu imati manje izražene simptome koji se ponekad od strane bolesnika, ali i od zdravstvenih profesionalaca zanemare. Simptomi nisu specifični pa se i druga stanja i bolesti mogu prezentirati simptomima sličnima DVT-u poput celulitisa, rupture Bakerove ciste, limfedema ili kod koštano-mišićnih bolesti. Pri sumnji na DVT i/ili PE u praksi se u procjeni vjerojatnosti dijagnoze koriste Wellsovi klinički modeli procjene, a za PE i revidirani Ženevski kriteriji.

Zaključak: Pravovremena dijagnoza i prepoznavanje DVT-a i PE-a temeljem anamneze, kliničkog pregleda i dostupnih mjerenja (mjerenje opsega noge, saturacije kisikom, EKG) osnova je rada obiteljskog liječnika. Korištenje kliničkih modela procjene vjerojatnosti dijagnoze može pomoći liječniku obiteljske medicine u odabiru dijagnostičko-terapijskog i vremenskog okvira za bolesnika sa sumnjom na DVT i/ili PE. Posljedice neprepoznate duboke venske tromboze i plućne embolije te odgođenog liječenja mogu biti brojne, od životno ugrožavajućih do dugotrajnih uz doživotno liječenje, uz znatno umanjenu kvalitetu života bolesnika.

Patient with Dyspnoea – Deep Vein Thrombosis and Pulmonary Embolism

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Introduction and aim: Shortness of breath - dyspnoea is a subjective feeling of lack of air. A careful history and clinical examination are usually the most useful tools in understanding the etiology of dyspnoea in most cases. Dyspnoea occurs suddenly, usually within a few minutes, and is an acute symptom of serious and potentially fatal diseases such as acute pulmonary embolism, myocardial infarction, acute valvular insufficiency, pulmonary edema, and the like. **The aim** of this paper is to present dyspnoea in patients with deep vein thrombosis (DVT) and pulmonary embolism (PE).

Discussion: Clinical signs and symptoms of PE may be nonspecific, except for dyspnoea. They include chest pain, presyncope or syncope, and hemoptysis. Dyspnoea in patients with central PE is acute and severe, worsens during exertion and over time. In case of embolism of small, peripheral arteries, it is usually moderate and transient. In patients with concomitant congestive heart disease or pulmonary disease, worsening dyspnoea may be the only symptom of PE. Chest pain is often caused by pleural irritation due to distal emboli causing pulmonary infarction. In central PE, chest pain may have a typical angina character, possibly reflecting ischaemia, and requiring differential diagnosis from an acute coronary syndrome or aortic dissection. Dyspnea associated with crises of consciousness, or a feeling of palpitations is often observed in patients with PE. Between 30 and 40% of patients with DVT of the leg and pelvis and 10% of those with DVT of the arm are at risk for PE. Patients with proximal DVT, e.g. ileofemoral, then femoropopliteal and popliteal, are at greater risk for PE compared to distal, DVT of the muscles or accompanying veins of the lower leg. About 25% of patients with superficial vein thrombosis with extension of the thrombus into the deep venous system also have PE. The most common risk factors for DVT are malignant diseases, acute illness, surgery, trauma, rest for more than 3 days, obesity, inflammatory and infectious diseases, hormonal therapy with estrogens, pregnancy, long-term travel, antiphospholipid syndrome, hospitalization, as well as prolonged sitting. The risk of DVT in patients with superficial varicose veins is low. The basic pathophysiological mechanism of formation is venous stasis, wall injury and hypercoagulable conditions, and in terms of time, these are the first 3 days after the formation of thrombus. Symptoms and signs of the disease are edema, erythema, pain and tension in the affected part, and the intensity depends on the anatomical distribution of the thrombotic process. A patient with thrombosis of the ileofemoral region with edema of the entire leg will have more pronounced symptoms, and those with more distal thrombosis may have less pronounced symptoms that are sometimes ignored by both the patients and health professionals. The symptoms are not specific, so other conditions and diseases can also present with symptoms like DVT, such as cellulitis, Baker's cyst rupture, lymphedema or musculoskeletal diseases. In case of suspected DVT and/or PE, Wells' clinical assessment models are used in practice to assess the probability of diagnosis, and the revised Geneva clinical prediction rule is used for PE.

Conclusion: Timely diagnosis and recognition of DVT and PE based on history, clinical examination, and available measurements (measurement of leg circumference, oxygen saturation, ECG) is the basis of the family physician's work. The use of clinical models to estimate the probability of diagnosis can help the family physician in choosing a diagnostic-therapeutic procedures and time frame for a patient with suspected DVT and/or PE. The consequences of unrecognized DVT and PE and delayed treatment can be numerous, from the life-threatening to the long-term consequences with lifelong treatment, significantly reducing the patient's quality of life.

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Pristup bolesniku s kardijalnom dispnejom u ordinaciji liječnika obiteljske medicine

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Uvod s ciljem: Dispneja je čest simptom u ordinacijama liječnika obiteljske medicine, a dijagnoza nije uvijek jednostavna. Pet najčešćih stanja koja uzrokuju dispneju jesu astma, KOPB, disfunkcija miokarda, bolesti plućnog intersticija i pretilost/manjak fizičke kondicije.

Cilj je rada prikazati pristup bolesniku s dispnejom kardijalnog porijekla u ordinaciji liječnika obiteljske medicine.

Metode: Pretražene su medicinske baze podataka uz pomoć ključnih riječi „dispneja“, „kardijalna dispneja“ i „obiteljska medicina“ te je pregledano 11 sažetaka i cjelovitih radova u razdoblju od 2015. do 2022. godine. Pritom su izdvojena dva rada koja su cjelovito obrađivala pristup bolesniku s dispnejom primjenjiv u obiteljskoj medicini i jedan rad o ehokardiografiji.

Rezultati: Akutna dispneja razvija se unutar nekoliko sati ili dana, a kronična u razdoblju od četiri do osam tjedana. Uzroci se mogu podijeliti na respiratorne i kardiovaskularne.

Akutna kardijalna dispneja uzrokovana je akutnom ishemijom miokarda, srčanim zatajivanjem i tamponadom, a kronična aritmijama, konstruktivnim perikarditisom i perikardijalnim izljevom, srčanim zatajivanjem, kroničnom koronarnom bolesti, restriktivnom kardiomiopatijom, intrakardijalnim šantovima i valvularnim bolestima.

Dispneja u naporu, pozicijska i paroksizmalna noćna dispneja te ortopneja kardijalnog su porijekla. Pogoršanje dispneje naginjanjem naprijed tipično je za dekompenzirano srčano zatajivanje. Bol u prsištu, omaglica, sinkopa, palpitacije, slabost ili umor pridruženi su simptomi koji mogu upućivati na kardijalni uzrok. Brzina razvoja dispneje izazvane fizičkim naporom kod srčanog zatajivanja je veća, a težina napora koja je dispneju izazvala manja nego primjerice kod astme.

U statusu se mogu naći srčani šumovi, tahikardija, aritmija, galopni ritam, inspiratorne krepitacije, periferni edemi, ascites, hepatomegalija. Znaci akutne dispneje koji zahtijevaju žurnu obradu jesu srčana frekvencija > 120/min, broj respiracija > 30/min, saturacija kisikom < 90 %, uporaba pomoćne respiratorne muskulature, otežan govor, cijanoza, stridor, difuzne inspiratorne krepitacije i znaci pleuralnog izljeva.

U obradi kronične dispneje važni su kompletna krvna slika, urea kreatinin, elektroliti, glukoza, tireotropin, NT-pro BNP, elektrokardiogram, pulsna oksimetrija i radiogram prsnih organa. Ehokardiogram daje važne podatke o strukturnim i funkcionalnim promjenama miokarda, perikarda, srčanih zalistaka i velikih krvnih žila.

Dispneja je simptom, a njegovo otklanjanje podrazumijeva liječenje stanja koje ga je izazvalo.

Zaključak: Akutna dispneja zahtijeva žurno prepoznavanje i inicijalnu skrb. U obradi kronične dispneje važno je uzeti u obzir i velik broj bolesnika s multimorbiditetom kod kojih može doći do preklapanja uzroka i simptoma dispneje.

Approach to the patient with cardiac dyspnea in a family physician's office

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Introduction and aim: Dyspnea is a common symptom in family physicians' offices and diagnosing is not always simple. Five most common conditions that cause dyspnea are: asthma, COPD, myocardial dysfunction, interstitial lung disease and obesity/deconditioning.

The aim of this paper is to present family medicine approach to the patient with dyspnea of cardiovascular origin.

Methods: Bibliographic databases for keywords "dyspnea", "cardiovascular system dyspnea", "family medicine" were searched, abstracts and complete papers published from 2015. to 2022. reviewed and we focused on 2 papers with comprehensive approach to the topic that is applicable in family medicine and 1 on echocardiography.

Results: Dyspnea is considered to be acute when it develops over hours to days and chronic when it occurs for more than 4 to 8 weeks. Acute cardiac dyspnea is caused by acute myocardial ischemia, acute heart failure and cardiac tamponade, and chornic by arrhytmias, constrictive pericarditis and pericardial effusion, heart failure, chronic coronary disease, restrictive cardiomyopathy, intracardiac shunts and valvular disease. Exertional, positional and paroxysmal nocturnal dyspnea, and a rapid development of dyspnea during mild exercise are typicaly cardiac. Orthopnea and bendopnea are associated with heart failure. Chest pain, dizziness, syncope, palpitations and fatigue are associated symptoms of dyspnea that may indicate a cardiac cause. Heart murmurs, tachycardia, arrhytmia, gallop rhythm, inspiratory crackles, peripheral edema, ascites and hepatomegaly may be found in physical examination. Signs of acute dyspnea that require urgent treatment are heart rate >120 beats/minute, respiratory rate >30 breaths/minute, pulse oxygen saturation <90 percent, use of accessory respiratory muscles, difficulty speaking, stridor, diffuse crackles, and cyanosis. Diagnostic tools required in the evaluation of chronic dyspnea are: a complete blood count, the values of glucose, urea, creatinie, electrolytes, thyrotropin, NT-pro BNP, pulse oximetry, chest radiograph and electrocardiogram. Echocardiogram will give important information about structural and functional changes of the myocardium, pericardium, heart valves and large blood vessels. Dyspnea is treated by addressing the underlying disease or condition.

Conclusion: Acute dyspnea requires urgent initial care. In the treatment of chronic dyspnea it is important to recognize patients with multimorbidity in whom the causes and symptoms of dyspnea may overlap.

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Zaduha u bolesnika s upalom pluća

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Ključne riječi: zaduha, upala pluća, post-COVID sindrom, respiratorna fizikalna terapija
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Uvod s ciljem: Zaduha (*dyspnea*), osjećaj otežanog ili nedostatnog disanja, čest je simptom u bolesnika koji posjećuju obiteljskog liječnika. Zaduha je često jedan od simptoma koji prijavljuju bolesnici s upalom pluća. Cilj je rada upozoriti na važnost pravovremenog prepoznavanja uzroka zaduhe u bolesnika s upalom pluća, procjenjivanja njezine jačine ljestvicom, uzročnog liječenja i rane rehabilitacije.

Rasprava: O patofiziologiji zaduhe sada se dosta zna, ali nedovoljno da bi se ona značajno mogla izbjeći ili uspješno tretirati. U bolesnika s upalom pluća stečenom u zajednici koji se liječe u ambulanti obiteljske medicine, bolest se prezentira s više nespecifičnih simptoma (kašalj, febrilnost, groznica, zaduha, malaksalost, mialgija, bol u prsima) i znakova (rigor, kratak dah, perkutorna muklina i asimetrija, krepitacije). Različita je i njezina etiologija (bakterijska, atipična, virusna). Radna dijagnoza, postavljena anamnezom i kliničkim pregledom, potvrđuje se RTG snimkom kao zlatnim standardom i parametrima upale iz uzorka krvi. U procjeni kliničke slike i važnoj odluci o potrebi hospitalizacije koristimo se ljestvicama PSI (*Pneumonia Severity Index*) i CURB-65 (engl. *confusion*, *urea*, *respiratory rate*, *blood pressure*, *65 yrs*). Pojavom pandemije COVID-19 opisan je poseban oblik virusne upale pluća koja je drukčija po kliničkoj slici (česta pojava zaduhe), tipičnom RTG nalazu (polja zamagljena poput mliječnog stakla) i duljini trajanja. Drukčiji je i produženi tijek oporavka bolesnika uz tzv. post-COVID sindrom, koji karakterizira i značajno duže trajanje zaduhe.

Zaključak: U terapijskom pristupu potrebno je prvo djelovati na uzrok zaduhe kao simptoma, a tek onda na njezino smirivanje. Zaduha koja se javlja u tijeku upale pluća, osobito u okviru COVID-19 infekcije ili u post-COVID sindromu, zahtijeva rano prepoznavanje, evaluiranje, liječenje i rano započinjanje respiratorne fizikalne terapije.

Dyspnea in patients with pneumonia

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IIntroduction and aim: Dyspnea, a feeling of difficult or insufficient breathing, is a common symptom in patients who visit the family physician. There is a wide range of its causes, from harmless to life-threatening. Shortness of breath is often one of the symptoms reported by patients with pneumonia. The aim of this paper is to point out the importance of recognizing the causes of dyspnea in patients with pneumonia, to assess its level by scale, and to introduce causal treatment and early rehabilitation.

Discussion: Although we have recently learned a lot about the pathophysiology of dyspnea, it is not enough to significantly avoid or successfully treat it. In community-acquired pneumonia, in patients treated in the family medicine practice, this disease is presented with several nonspecific symptoms (cough, high temperature, fever, dyspnea, malaise, myalgia, chest pain) and signs (rigor, shortness of breath, percussive silence and asymmetry, crepitation). Its etiology (bacterial, atypical, viral) is also different. The working diagnosis, based on medical history and clinical examination, is confirmed by X-ray as the gold standard and parameters of inflammation from a blood sample. In the assessment of the clinical presentation and in making the important decision on the need for hospitalization, we use the scales PSI (Pneumonia Severity Index) and CURB-65 (confusion, urea, respiratory rate, blood pressure, 65 yrs). With the Covid-19 pandemic, a special form of viral pneumonia has been described, with a different clinical presentation (a frequent occurrence of dyspnea), typical X-ray finding (fields blurred like milk glass) and duration. There is a different and prolonged course of recovery in patients with the so-called post-Covid syndrome, characterized by a significantly longer duration of dyspnea.

Conclusion: In the therapeutic approach, it is necessary to deal with the cause of dyspnea first, and then with treating the symptom. Dyspnea occurring during pneumonia, especially within the framework of Covid-19 or in post-Covid syndrome, requires early recognition, evaluation, treatment and early respiratory physical therapy.

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Pregled hitnih stanja koja mogu biti uzrok dispneje uz određivanje koraka u njihovu zbrinjavanju

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Uvod s ciljem: Dispneja ili zaduha je subjektivni osjećaj nedostatka zraka ili otežanog disanja. Razvoju zaduhe može prethoditi više čimbenika te mogu biti prisutni mnogi komorbiditeti. Hitnim stanjima smatramo ona stanja kod kojih bi zbog nepružanja liječničke pomoći mogle nastati trajne štetne posljedice za zdravlje (invalidnost) ili za život bolesnika. Zaduha zbog česte pojavnosti i mogućih podležećih uzroka zbog kojih pacijent brzo može postati nestabilan zahtijeva definirane smjernice za liječenje. Cilj je ovog rada uputiti na važnost i učinkovitost anamneze i fizikalnog statusa, pridruženih simptoma i dijagnostičkih postupaka u brzom razgraničenju akutnih i kroničnih stanja te postavljanju dijagnoze. Cilj rada također je definiranje značaja i redoslijeda postupaka koji uključuju zbrinjavanje pacijenta.

Rasprava: Zaduha može biti simptom i dijagnoza. Karakteristična je za kronične bolesti poput KOPB-a, srčane insuficijencije, kardiomiopatije, anemije i drugih. Akutni je simptom u raznim hitnim stanjima kao što su anafilaksija, pneumonija, plućna embolija, status *asthmaticus*, srčana dekompenzacija, egzacerbacija kronične opstruktivne plućne bolesti (KOPB-a), ali i u paničnom napadaju. Ako se ne liječi, dispneja može progredirati do akutnoga respiratornog zatajenja s hipoksijom ili hiperkapnijom, što dalje može dovesti do za život opasnog kardiorespiratornog zastoja. Pri prvom kontaktu s dispnoičnim pacijentom važno je diferenciranje znakova novonastalog stanja odnosno egzacerbacije kronične bolesti te pravovremeno zbrinjavanje pacijenta. U tome su korisni jasni i sažeti algoritmi postupanja, dok prijašnje poznavanje pacijenta uvelike olakšava procjenu obiteljskom liječniku. Za sva hitna stanja praktično je slijediti ABCDE pristup, uvijek izmjeriti vitalne parametre: frekvencija disanja, pulsna oksimetrija (spO2 i frekvencija pulsa), krvni tlak, kapilarno punjenje, tjelesna temperatura, glukoza u krvi. Slijedi primjena oksigenoterapije, inspekcija znakova cirkulacijskog sustava koji upućuju na kongestivno srčano popuštanje te auskultacija pluća. Elektrokardiogram je nužan prije primjene ostalih lijekova kako bi se isključio akutni koronarni sindrom. Osim anamneze i fizikalnog statusa, važna je primjerice inhalacija kortikosteroida, nadoknada tekućine te primjena specifičnih lijekova. Važna je dostupnost i drugih dijagnostičkih pretraga, primjerice hitna laboratorijska i radiološka dijagnostika. Kada se iscrpi dostupna dijagnostika bez potvrde dijagnoze, potrebno je pacijenta uputiti na hitan prijam u najbližu ustanovu, a u slučaju nestabilnog pacijenta ili potvrđene bilo koje dijagnoze koja zahtijeva bolničko zbrinjavanje unutar tzv. zlatnog sata, odmah pozvati hitnu medicinsku pomoć (HMP). Do predaje timu HMP-a liječnik dokumentira pregled i stanje pacijenta prije primijenjene terapije i nakon nje. Jesu li postojeće smjernice za hitna stanja prikladne za postupanje s dispnoičnim pacijentom u ordinaciji obiteljske medicine?

Zaključak: Dispneja je najčešći uzrok široke palete hitnih stanja, dok je u obiteljskoj medicini čest simptom kroničnih bolesti. Obiteljski liječnik u svojem sveobuhvatnom pristupu, koji dobro poznaje svojeg pacijenta, može adekvatno procijeniti kada je u podlozi njegovih tegoba životno ugrožavajuće stanje. Hitni pacijent sa zaduhom zahtijeva brzo reagiranje i upućivanje u nadležnu kliniku ili na hitan prijam, primjenu oksigenoterapije, intravenskih lijekova, uz postupanje po ABCDE pristupu, i konciznu medicinsku dokumentaciju. Vođenje medicinske dokumentacije i terapijsko postupanje u toj često užurbanoj situaciji treba biti definirano stručnim smjernicama na razini primarne zdravstvene zaštite.

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Overview of emergency conditions that can be the cause of dyspnea determining the steps to manage them.

Keywords: dyspnea, emergency, family medicine
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Introduction with aim: Dyspnea or shortness of breath is a subjective feeling of lack of air or difficulty breathing. The development of shortness of breath can be preceded by several factors and many comorbidities can be present. We consider emergency conditions to be those conditions in which, due to non-provision of medical assistance, permanent adverse consequences for the health (disability) or life of the patient could arise. Dyspnea due to its frequent occurrence and possible underlying causes that can quickly make the patient unstable requires defined guidelines for treatment. The aim of this paper is to point out the importance and effectiveness of medical history and physical status, associated symptoms and diagnostic procedures in quickly distinguishing between acute and chronic conditions as well as establishing a diagnosis. It also aims to define the importance and sequence of procedures that include patient care.

Discussion: Shortness of breath can be a symptom and a diagnosis. It is characteristic of chronic diseases such as COPD, heart failure, cardiomyopathy, anemia and others. It is an acute symptom in various emergency situations such as anaphylaxis, pneumonia, pulmonary embolism, status asthmaticus, cardiac decompensation, exacerbation of chronic obstructive pulmonary disease (COPD), but also in panic attacks. If left untreated, dyspnea can progress to acute respiratory failure with hypoxia or hypercapnia, which can further lead to life-threatening cardiorespiratory arrest. During the first contact with a dyspnoic patient, it is important to differentiate the signs of a new condition or exacerbation of a chronic disease and to treat the patient in a timely manner. To achieve this, clear and concise treatment algorithms are useful, while previous knowledge of the patient greatly facilitates the family physician's assessment. For all emergencies, it is practical to follow the ABCDE approach, always measure vital parameters: breathing rate, pulse oximetry (spO2 and pulse frequency), blood pressure, capillary filling, body temperature, blood glucose. This is followed by the application of oxygen therapy, inspection of signs of the circulatory system that indicate congestive heart failure, and auscultation of the lungs. An electrocardiogram is necessary before the administration of other drugs in order to rule out acute coronary syndrome. In addition to medical history and physical status, it is important, e.g., to inhale corticosteroids, replace fluids and use specific medications. The availability of other diagnostic tests, such as emergency laboratory and radiological diagnostics, is also important. When the available diagnostics are exhausted without confirming the diagnosis, it is necessary to refer the patient to the nearest institution for urgent admission, in the case of an unstable patient or any confirmed diagnosis that requires hospital treatment within the golden hour, call the emergency medical service (EMT) immediately. Before handing over to the EMT team, the physician documents the patient's examination and condition before and after the applied therapy. Are existing emergency guidelines adequate for managing the dyspnoic patient in a family practice?

Conclusion: Dyspnea is the most common cause of a wide variety of emergency conditions, while in family medicine it is a common symptom of chronic diseases. Family physicians who know their patients well can adequately distinguish when the underlying cause of the patient's complaints is a life-threatening condition. An emergency patient with shortness of breath requires a quick response and referral to a clinic or emergency room, the use of oxygen therapy, intravenous drugs, with the ABCDE approach and concise medical documentation. Management of medical documentation as well as therapeutic treatment in this often bustling situation should be defined by professional guidelines at the level of primary health care.

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5. Vrijeme post-covida i obiteljska medicina

Dolazi li vrijeme renesanse obiteljske medicine?

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Uvod: Temeljne vrijednosti i načela struke duboko su usađeni u svijest profesionalca, bitni su i vrijedni u svakoj profesiji, pomažu u teškim vremenima kada se malo toga čini sigurnim. Na 27. Konferenciji Svjetskog udruženja liječnika obiteljske medicine, regija Europa (engl. *World Organization of Family Doctors, Region Europe* – WONCA Europe) ažurirane su temeljne vrijednosti i načela u obiteljskoj medicini te je naglašena njihova važnost.

U dvije najteže godine pandemije bolesti COVID-19 mnogo se toga promijenilo u načinu svakodnevnog rada liječnika obiteljske medicine (LOM). Koliko je to utjecalo na temeljne vrijednosti struke? Kojim su temeljnim vrijednostima liječnici obiteljske medicine bili vođeni u pandemiji?

Cilj: Prikazati kako su se liječnici obiteljske medicine u Republici Hrvatskoj nosili s pandemijom te koje ih temeljne vrijednosti nakon pandemije vode u svakodnevnom radu.

Metode: Od 26. siječnja 2023. do 2. veljače 2023. provedena je *online* anketa među 226 liječnika obiteljske medicine u RH, 61,5 % specijalista obiteljske medicine, 12,8 % specijalizanata, 25,7 % liječnika bez specijalizacije, šarolika iskustva u radu. Ispitanici su odgovorili na šest pitanja o temeljnim vrijednostima struke kojih su se pridržavali za vrijeme pandemije i nakon pandemije.

Rezultati: U vrijeme pandemije u radu LOM-a promijenio se broj konzultacija, način rada i način edukacije te se povećao broj digitalnih konzultacija nauštrb pregleda i kućnih posjeta. Temeljne vrijednosti kojima su se ispitanici najlakše vodili za vrijeme pandemije bile su profesionalnost (57 %), skrb usmjerena pacijentu (75 %) i pravičnost skrbi (46 %), a najteže su njegovali znanstveni pristup (40 %) i suradnju s drugim kolegama (29,2 %). Mišljenja su podijeljena u pogledu kontinuiteta skrbi i okrenutosti prema zajednici.

Zaključak: Teškoće u svakodnevnom radu LOM-a za vrijeme pandemije, velik broj umrlih od bolesti COVID-19 u RH, loša procijepljenost, slaba kontrola kroničnih bolesnika za vrijeme pandemije povod su za introspekciju i preispitivanje posvećenosti LOM-a temeljnim vrijednostima struke. Pandemija je naglasila loše strane zdravstvenog sustava, ali i dala mogućnost za unaprjeđenje onih dobrih, pokazala je da postoji velik potencijal za rast, možda i za renesansu obiteljske medicine.

Is the renaissance of family medicine approaching?

Keywords: FP, fundamental values of family medicine, the COVID 19 pandemic, renaissance
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Introduction: Core values are principles deeply embedded in the mind of a professional. They shape what is important and valuable in every profession, and they help in difficult times when little seems certain. At the 27th Wonca Europe, the basic values and principles in family medicine were updated and their importance was emphasized. In the two most difficult years of the Covid 19 pandemic, much has changed in the daily work of a FP (famila physician). How much has this affected the fundamental values of our profession? What fundamental values were we guided by during the pandemic?

Aim: To show how FPs in Croatia managed during the pandemic, and which core values guide us in our daily work after the pandemic.

Methods: From the 26th of January 2023 until the 2nd of February 2023, a survey was conducted among 226 FPs in Croatia, out of which 61.5% were family medicine specialists, 12.8% were residents and 25.7% were doctors without specialization, all of them with varied work experience. Colleagues answered 6 questions about the fundamental values of the profession that they adhered to during and after the pandemic.

Results: During the pandemic, the number of consultations in the work of the FP changed the way of working, digital consultations taking over in person examinations and home visits. The core values that the respondents were most easily guided by during the pandemic were professionalism (57%), patient-oriented care (75%) and equity of care (46%), while the most difficult to cultivate was the scientific approach (40%) and cooperation with other colleagues (29.2%). Opinions were divided regarding the continuity of care and the community-oriented approach.

Conclusion: Difficulties in the daily work of FPs during the pandemic, a large number of deaths from Covid in Croatia, poor vaccination, poor control of chronic patients during the pandemic, all are a good motive for introspection and re-examination of our commitment to the core values of our profession. The pandemic emphasized the bad sides of the health system, but also gave the opportunity for the growth of the good ones. It showed that there is a great potential for growth, perhaps even for the renaissance of family medicine.

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Konzultacija u vremenu postcovida – što se promijenilo?

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Uvod: Pandemija SARS-CoV-2 virusa promijenila je način rada liječnika obiteljske medicine i svratila pozornost na značaj konzultacije i njezinih sastavnica. Premda su liječnici obiteljske medicine imali ključnu ulogu u borbi protiv pandemije, izvorni podatci iz ustanova obiteljske medicine nedostaju. Koje je značenje konzultacije za pacijenta, a koje za liječnika i jesu li nastale promjene trajne; hoće li one utjecati na obiteljsku medicinu kao akademsku disciplinu, neka su od pitanja na koja i dalje tražimo odgovore. Cilj je istražiti značajke konzultacije u obiteljskoj medicini u vremenu postcovida.

Rasprava: Konzultacije u obiteljskoj medicini promijenile su se s oko 70 % licem u lice i 30 % putem telefona, videa ili interneta prije pandemije, na oko 30 % licem u lice i 70 % na daljinu na vrhuncu pandemije. Trenutačno se oko polovice konzultacija u obiteljskoj medicini obavlja licem u lice. U konzultacijama na daljinu nedostajao je fizički kontakt s pacijentom. Kontakt uživo važan je i autentičan doživljaj za pacijenta i za liječnika jer uz verbalnu uključuje i neverbalnu komunikaciju. Omogućuje stvaranje odnosa povjerenja. Pacijentu, s jedne strane, pruža sigurnost da je liječnik „iz prve ruke“ čuo i doživio njegov problem i napravio mu fizikalni pregled (za pacijenta je to, osim profesionalne usluge i ritualni, „mitski“, duhovni čin dodira s iscjeliteljem). S druge strane, nakon razgovora i doživljaja pacijentovih tegoba, za liječnika je fizikalni pregled profesionalna vještina za koju je obučen i objektivna potvrda radne dijagnoze. Za neke liječnike to je i način da pokažu znanje i autoritet, akt koji donosi smirenost i samopouzdanje, preko kojeg se ostvaruje zadovoljstvo povezanosti s ljudima. Liječnik sluša, koristi se vještinama kritičkog mišljenja i nudi svoje znanje i iskustvo, što su značajke koje gube uporište u današnjem virtualnom svijetu.

Stalni rad na daljinu otežava hvatanje „mekših” znakova bolesti, što može biti od pomoći pri postavljanju dijagnoze. Isto tako, uznemiruje, iscrpljuje, stvara nesigurnost i dira bazični identitet obiteljskog liječnika, u usporedbi s načinom rada na koji je naviknut i za koji je educiran. Iako štiti od infekcije, rad na daljinu smanjuje zadovoljstvo poslom i takve konzultacije jako formaliziraju – birokratiziraju rad obiteljskog liječnika. Vrlo često postavlja se i pitanje zaštite podataka pacijenata. Tako je pandemija COVID-19 dovela u pitanje sigurnost i dobrobit liječnika.

Iako postoje istraživanja koja pokazuju da virtualne konzultacije štite vrijeme pacijenata, mogu promicati pristup skrbi, posebno za neke teško dostupne skupine pacijenata, i štite pacijente od infekcije, malo se zna o preprekama i olakšicama ove vrste konzultacija za osobe iz ranjivih skupina u primarnoj zdravstvenoj zaštiti.

Zaključak: Konzultacija uživo važna je značajka prakse obiteljske medicine jer liječniku omogućuje stvaranje posebnog odnosa s pacijentom. Uzimajući u obzir prednosti i nedostatke konzultacije na daljinu, ona ostaje kao mogućnost ostvariva prema individualnim potrebama pacijenta te prema dogovoru liječnika i pacijenta. Dugoročne učinke konzultacije na daljinu još ne možemo sagledati. Za sada je potrebno održati pacijentu usmjeren pristup, pravovremen i ravnopravan, a istovremeno podržati medicinsko osoblje da radi sigurno i učinkovito.

Consultation in the post-covid era, what has changed?

Key words: Covid-19 pandemic, family medicine, consultation, physician-patient relationship, consultation quality, remote consultation.
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Introduction with aim. Covid-19 pandemic has drawn attention to the importance of the consultation and its components. Although family physicians played a key role fighting against the pandemic, the original data from family medicine institutions is missing. What is the meaning of the consultation for the patient and what for the physician; are the resulting changes permanent; will family medicine be affected as an academic discipline are some of the questions to which we are still seeking answers. The aim is to investigate the features of consultation in family medicine in the post-covid era.

Discussion. Consultations in family medicine changed from about 70% face-to-face and 30% remotely before the pandemic, to about 30% face-to-face and 70% remotely at the height of the pandemic. Currently, about half of consultations in family medicine are done face-to-face. Physical contact with the patient is missing in remote consultations. Live contact is important and authentic experience for both the patient and the physician because it includes non-verbal communication and it enables establishing a relationship of trust. On the one hand, it provides the patient with the assurance that the physician has "in vivo" heard and experienced their problem and performed a physical examination (for the patient, it is also a spiritual act of contact with the healer). On the other hand, for the physician, the physical examination is a professional skill for which they are trained and an objective confirmation of the working diagnosis. For some physicians, it is also a way to show knowledge and authority, through which the satisfaction of connecting with people is achieved. Physicians listen, use critical thinking skills and offer their knowledge and experience, which are the characteristics losing ground in today's virtual world. Constant remote work makes it difficult to recognize the "softer" signs of the disease. It creates insecurity and affects the basic identity of the family physician, compared to how they are accustomed to work and for which they are educated. Although it protects against infection, remote work reduces job satisfaction and such consultations greatly bureaucratize the work of the family physician. The question of patient data protection is also very often raised. Likewise, the Covid-19 pandemic has called into question the safety and well-being of physicians. Although there is research showing that virtual consultations save patients' time, can promote access to care, especially for some hard-to-reach patient groups, and protect patients from infection, little is known about the barriers and facilitators of this type of consultation for the people from vulnerable groups in primary care.

Conclusion. Live consultation allows the physician to create a special relationship with the patient. Remote consultation remains an option that can be achieved according to the individual needs of the patient and the agreement between the physician and the patient. We are not yet able to assess the long-term effects of remote consultation. For now, it is necessary to maintain a patient-centered, timely and equitable approach, supporting the medical staff to work safely and efficiently at the same time.

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Upućivanje, propisivanje, timski rad, kako bi trebali izgledati u budućnosti?

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Uvod s ciljem: Medicina je već nekoliko desetljeća preširoka znanost, da bi samo jedan pojedinac imao potpuno znanje o cijelom području. Za pružanje kvalitetne skrbi usmjerene na pacijenta nužna je suradnja specijalista različitih struka, počevši od specijalista opće/obiteljske medicine. Tradicionalno se smatralo da je postupak upućivanja jednosmjerna ulica: pružatelji usluga primarne zdravstvene zaštite (PZZ) upućuju ljude raznim specijalistima na testove, postupke i preglede. Malo je naglaska stavljeno na drugu stranu onoga što bi trebalo biti zatvoreni krug: na komunikaciju kliničkih specijalista u odnosu na pružatelje primarne zdravstvene zaštite (njezin sadržaj, ažurnost, primjerenost, jasnoću i profesionalnost). Cilj je ovog rada istražiti kako trenutačno izgleda suradnja liječnika PZZ-a i drugih specijalista te kako bi suvremene tehnologije mogle utjecati na nju u budućnosti.

Rasprava: Postoji konsenzus o tome što trebaju sadržavati uputnice liječnika PZZ-a, obično u obliku strukturiranih uputnica. S druge strane, nadzor nad radom kliničkih specijalista obično je mnogo manje rigorozan. Primjer dobre prakse i profesionalizma (ako ne samo profesionalne uljudnosti) jest kada medicinski stručnjaci na svim razinama zdravstvenog sustava rade svoj dio najbolje što mogu, s dobrobiti pacijenta kao glavnim fokusom. Na suprotnoj strani spektra oni su koji rade svoj minimum (zbog osobnih, financijskih, sistemskih ili drugih razloga) i upućuju svoje pacijente drugim specijalistima, obično natrag u PZZ.

Razvoj suvremenih tehnologija otvorio je golem potencijal za jednostavne i dostupne komunikacijske kanale među zdravstvenim djelatnicima. Neke su zemlje usvojile e-konzultaciju kao dio svojega zdravstvenog sustava. Ona se obično održava između liječnika i pacijenta, no ista tehnologija omogućuje konzultacije i između samih zdravstvenih radnika. One sežu od kratkih, brzih konzultacija o zajedničkim pacijentima do dugih i detaljnih konzilija, koji mogu uključiti stručnjake iz cijelog svijeta (u obliku multidisciplinarnog tima) za kompliciranija pitanja. Softver usklađen s Općom uredbom o zaštiti podataka (engl. *General Data Protection Regulation* – GDPR) omogućuje zdravstvenim radnicima i pacijentima dijeljenje elektroničkih i osobnih zdravstvenih zapisa, iako kompatibilnost različitih programa može predstavljati problem.

Zaključak: Suradnja stručnjaka iz različitih profesija bitan je dio skrbi usmjerene na pacijenta. Dok bi uputnice liječnika opće/obiteljske medicine trebale biti strukturirane i sadržavati unaprijed određene podatke, to bi trebalo vrijediti i za izvješća drugih stručnjaka. Suvremene tehnologije otvorile su nove i (u trenutku pisanja) uglavnom neiskorištene komunikacijske kanale među zdravstvenim radnicima.

Referring, prescribing, teamwork, what should it look like in the future?

Keywords: referring, patient-centered care, cooperation, modern technologies
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Introduction and aim: It has been clear for decades that medicine is far too broad a field for a single individual to claim exhaustive knowledge of it. To provide quality patient-centered care, cooperation among specialists from a range of professions is essential, starting with the family medicine specialist and branching outward. Traditionally, the referral process has been thought to be a one-way street: primary care providers (PCP) refer people to various specialists for tests, procedures, and examinations. Little emphasis has been put on the other side of what is supposed to be a loop: the communication of clinical specialists in relation to the PCP (its content, promptness, appropriateness, clarity, and professionalism). The aim of this paper is to explore what the cooperation between PCP and other specialists looks like now and how modern technologies could affect it in the future.

Discussion: There is a common consensus about what the referral notes from PCP should contain, usually in the form of structured referral sheets. The supervision of clinical specialists' work, on the other hand, is usually much less rigorous. An example of good practice and professionalism (if not just professional courtesy) is when medical professionals at all levels of a healthcare system do their part to the best of their abilities, with the patient's wellbeing as their main focus. On the opposite side of the spectrum are people who do the bare minimum (because of personal, financial, systemic, or other reasons) and refer their patients to other specialists, usually back to the PCP.

The development of modern technologies introduced an enormous potential for simple and accessible communication channels among healthcare professionals. Some countries have adopted e-consulting as part of their healthcare system. These are usually held between the doctor and the patient, but the same technology enables consultations among healthcare professionals themselves. These range from short, quick consultations about shared patients to long and detailed panels that can involve experts from all over the world (in the form of a multidisciplinary team) for more complicated issues. GDPR-compliant (General Data Protection Regulation) software makes it possible for healthcare professionals and patients to share access to electronic and personal health records, although the compatibility of different programs may impose an issue.

Conclusion: Cooperation among various specialized experts is an essential part of patient-centered care. While referrals from PCPs are supposed to be structured and contain certain predetermined data, the same should be true for reports issued by other specialists. Modern technologies have opened up new and (as of writing this) largely unutilized communication channels among healthcare professionals.

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Zdravstvena pismenost – razumijemo li se?

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Uvod s ciljem: Zdravstvena pismenost (ZP) stupanj je osobnih, kognitivnih i socijalnih vještina koje određuju sposobnost pojedinca da dobije pristup informacijama za promicanje i održavanje zdravlja, da ih razumije i njima se koristi. Kauzalni odnos s početkom u pristupu odgovarajućim informacijama te sposobnosti pojedinca da ih razumije, ocijeni kao bitne ili nebitne te ih primijeni na sebi ili prenese informaciju drugima čini koncept ZP-a. Na tom se konceptu temelji zdravstvena skrb, prevencija bolesti i promocija zdravlja koje za sobom povlače niz socioepidemioloških i zdravstvenih rezultata. Cilj ovog rada jest prikazati rezultate malobrojnih istraživanja provedenih o temi zdravstvene pismenosti u Hrvatskoj i svijetu te istaknuti primjere nerazumijevanja iz svakodnevne prakse.

Rasprava: Iako se ZP može podijeliti na tri neoštro odijeljene razine (funkcionalna, interaktivna i kritička) vrlo je teško odrediti na kojoj se razini pojedinac nalazi jer za određena medicinska znanja može biti na kritičkoj razini, a za druga na funkcionalnoj ili interaktivnoj. Zbog opsega znanja potrebnoga za rad postavlja se pitanje na kojoj se razini ZP-a nalaze obiteljski liječnici. Odgovor za sada imaju Mor-Anavy i suradnici u čijem je istraživanju 52 % izraelskih obiteljskih liječnika imalo odličan ZP, a njih 25 % problematičan i neadekvatan. Potrebno je istražiti i ZP ostalih dionika zdravstvenog sustava koji svakodnevno dijele savjete bolesnicima.

U Republici Hrvatskoj jedno od rijetkih istraživanja ZP-a u općoj populaciji (N = 602) starijoj od 18 godina telefonski je provela novinska kuća Telegram, pri čemu je samo 6 % hrvatskih državljana imalo odličan ZP, njih 26 % dovoljan, a problematičan i neadekvatan čak 69 % ispitanika. Informacije o mentalnom zdravlju, primjerice, teško nalazi čak 40 % ispitanika, dok njih 5 % uopće ne zna gdje bi ih tražilo.

COVID-19 pandemija donijela je brojne probleme, a ZP je bio presudan u razvoju kritičkog mišljenja u svezi s novim virusom, prevencijom zaraze i liječenjem. Nažalost, istraživanje Eurobarometra (2021.) pokazuje da čak 50 % hrvatskih državljana (28 % građana EU-a) vjeruje da su virusi proizvedeni u vladinim laboratorijima kako bi se kontroliralo ljudsku slobodu, a njih 47 % vjeruje da antibiotici ubijaju i viruse i bakterije (32 % građana EU-a).

Rezultati istraživanja na građanima ostalih država EU-a (Sveučilište Harvard 2012.) već tada su bili nekoliko puta boljih od hrvatskih 2019. (16,5 % njih imalo je odličnu pismenost, 36 % zadovoljavajuću, 35,2 % problematičnu, a 12,4 % bilo je zdravstveno nepismeno). Osobe s niskom razinom ZP-a češće neispravno uzimaju lijekove (obično na svoju ruku) te posjećuju liječnika (rijetko se drže propisanih uputa), a rijetko odlaze na preventivne preglede (ignoriraju mjere prevencije).

Interaktivna komunikacija s rečenicama do 15 riječi, izlaganjem samo ključnih i nužnih informacija jednostavnim jezikom, od ključne je važnosti u postizanju bolje suradljivosti i kontrole bolesti, a samo je jedna od metoda poboljšanja ZP-a. Bolesnicima se preporučuje dati i pisane ili videomaterijale. **Zaključak:** ZP u Hrvatskoj trenutačno nije istražen, a manja anketna telefonska istraživanja upućuju na problematičan i nedostatan ZP u više od polovice građana. Zdravstveni odgoj od osnovne škole, javnozdravstvene akcije, edukacija pučanstva putem televizije i medija te ciljana edukacija svakog bolesnika na specifičan način od ključne su važnosti u poboljšanju trenutačnog stupnja ZP-a kako bi se smanjili troškovi u zdravstvu i povećalo ukupno zdravlje populacije.

Health literacy – do we understand each other?

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IIntroduction with aim: Health literacy (HL) is the degree of personal, cognitive, and social skills that determine an individual's ability to access, understand and use the information to promote and maintain health. A causal relationship between access to appropriate information and the individual's ability to understand it, evaluate it as essential or irrelevant and apply it to himself or convey information to others constitutes the concept of HL. Health care, disease prevention and health promotion are based on this concept, which entails a whole series of socio-epidemiological and health results. The aim of this paper is to present the results of a few research conducted about health literacy in Croatia and the world, and to highlight examples of misunderstanding from everyday practice.

Discussion: Although HL can be divided into three vaguely separated levels (functional, interactive, and critical), it is challenging to determine at which level an individual is, because for certain medical knowledge it can be at a critical level, and for others at a functional or interactive level. Due to the scope of knowledge required for work, the question arises at which level of HL are family doctors? The only answer for now is provided by Mor-Anavy et al., in whose research 52% of Israeli family doctors had an excellent HL, and 25% had a problematic and inadequate one. It is also necessary to investigate the HL of other stakeholders of the health system who work with patients every day.

In the Republic of Croatia, one of the rare surveys of HL in the general population (N=602) over the age of 18 was conducted by telephone by the newspaper Telegram, where only 6% of Croatian citizens had excellent HL, 26% had sufficient HL, and as many as 69% had problematic and inadequate HL of the respondents. For example, even 40% of respondents have difficulty finding information about mental health, while 5% do not know where to look for it at all.

The COVID 19 pandemic brought numerous problems, and HL was crucial in the development of critical thinking about the new virus, infection prevention and treatment. Unfortunately, the Eurobarometer survey (2021) shows that as many as 50% of Croatian citizens (28% of EU citizens) believe that viruses are produced in government laboratories to control human freedom, and 47% believe that antibiotics kill both viruses and bacteria (32% of EU citizens).

The results of research on citizens of other EU countries (Harvard University 2012) were already several times better than Croatians in 2019 (16.5% had excellent literacy, 36% satisfactory, 35.2% problematic and 12.4% were health illiterate). People with a low level of HL more often take medicines incorrectly (usually on their own) and visit a doctor (rarely follow prescribed instructions), and rarely go for preventive examinations (ignore preventive measures).

Interactive communication with sentences of up to 15 words, presenting only crucial information in simple language, is of key importance in achieving better compliance and disease control, and is only one of the methods of improving HL. Patients are recommended to be given written or video materials.

Conclusion: HL in Croatia is poorly investigated, and existing telephone surveys indicate problematic and insufficient HL in more than half of the citizens. Health education from elementary school, public health campaigns, education of the population through television and media and targeted education of each patient in a specific way are of key importance in improving the current HL to reduce health costs and increase the overall health of the population

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Liječnik opće medicine u skrbi za pacijente u COVID-ambulanti

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Ključne riječi: COVID-19, komorbiditet, COVID-ambulante, liječnik opće prakse
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Uvod s ciljem: Prvi slučaj bolesti COVID-19 registriran je u Srbiji 6. ožujka 2020. Pacijenti sa sumnjom na ovu bolest javljali su se liječnicima opće medicine u COVID-ambulantama domova zdravlja, gdje su testirani na COVID-19, klinički pregledani, po potrebi upućivani na dodatnu dijagnostiku, propisanu terapiju ili upućivani na bolničko liječenje. Istraživanjem smo ispitali kako su i u kojoj mjeri pacijenti sa sumnjom na COVID-19 zbrinuti u COVID-ambulanti.

Ispitanici i metode: Jedna liječnica u COVID-ambulanti ispunila je upitnik izrađen za ovo istraživanje, za sve pacijente koji su u razdoblju od sedam uzastopnih dana, od 23. 4. do 27. 4. 2022., prijavljeni na ispitivanje. Dobivani su podatci o spolu, dobi, razlozima dolaska na pregled, prisutnim komorbiditetima i cijepnom statusu te se upisivao ishod posjeta. Istraživanje je obuhvatilo 222 pacijenta obaju spolova (137 žena), prosječne dobi 47,88 ± 15,12 godina, a najviše u dobi 31 – 50 godina, od kojih je 24,8 % cijepljeno protiv bolesti COVID-19. Svi podatci statistički su obrađeni programskim paketom SPSS-20.0.

Rezultati: Brzim antigenskim testom testirano je 96,8 % pacijenata, od kojih je 54,5 % bilo pozitivno, a 35,5 % negativno, ali je njihova klinička slika upućivala na prisutnost bolesti COVID-19, te su testirani PCR testom, a nalaz se očekivao sljedeći dan. Prvi pregled učinjen je u njih 63,5 %. Najčešći razlog odlaska liječniku bio je umor i malaksalost (42,3 %), kašalj (41,9 %) i povišena temperatura (40,5 %). Simptomi su se rijetko javljali pojedinačno, uglavnom u različitim kombinacijama. Nakon testiranja i kliničkog pregleda 81,1 % pacijenata dobilo je terapiju i upućeno je na kućno liječenje. Na bolničko liječenje upućeno je 8,6 % pacijenata i to najčešće starijih od 65 godina (p = 0,008), bolesnici s pridruženim bolestima (p = 0,004) te bolesnici s ponovnim posjetima i rezultatima dopunske dijagnostike. Cijepni status nije utjecao na ishod posjeta (p = 0,332).

Zaključak: Liječnici opće medicine u COVID-ambulantama zbrinuli su najveći dio pacijenata oboljelih od bolesti COVID-19, rasteretili sekundarnu i tercijarnu razinu zdravstvene zaštite i time podnijeli najveći teret pandemije.

General practitioner in the care of patients in the COVID-outpatient clinic

Keywords: COVID-19, comorbidity, COVID-outpatient clinics, general practitioner
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Introduction with aim: The first case of the disease COVID-19 was registered in Serbia on March 6, 2020. Patients, suspecting they have contracted the disease, reported to general practitioners at the COVID-outpatient centers in health centers, where they were tested for COVID-19, clinically examined, if necessary, referred for additional diagnostics, prescribed therapy, or referred to hospital treatment. The aim of this research was to examine how and to what extent patients with suspected COVID-19 were cared for in the COVID-outpatient clinic.

Respondents and methods: One doctor in the COVID-outpatient clinic was filling out a Questionnaire created for this research, for all patients who, in the period of seven consecutive days from 04.23.to 04.27.2022. reported for examination. Data were obtained on gender, age, reasons for coming for the examination, comorbidities present, vaccination status, and the outcome of the visit. The research included 222 patients of both sexes (137 women), average age 47.88±15.12 years old, and a maximum of 31 to 50, with 24.8% of them vaccinated against COVID-19. All data were statistically processed with the SPSS-20.0 software package.

Results: Patients (96,8%) were tested with a rapid antigen test. Out of them, 54.5% were positive, and 35.5% negative, but their clinical picture indicated the presence of covid disease, and they were tested with a PCR test, with results expected the next day. The first examination was conducted in 63.5% of patients. The most common reasons for seeing the doctor were: fatigue and weakness (42.3%), cough (41.9%) and fever (40.5%). Symptoms mostly occurred in different combinations, rarely individually. After the testing and clinical examination, 81.1% of patients were prescribed therapy and referred for home treatment, 8.6% were referred for hospital treatment, most often they were older than 65 (p= 0.008), or with comorbidities (p= 0.004) and those visiting subsequently, having received their results of additional diagnostics. Vaccination status did not affect the outcome of the visit (p= 0.332).

Conclusion: General practitioners in the COVID-outpatient clinics cared for the majority of patients with COVID-19, relieving the burden on the secondary and tertiary levels of health care and bearing the brunt of the pandemic.

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6. Imate li problema sa zglobovima-javite se svom doktoru

Najvažniji testovi i znakovi u fizikalnom pregledu kralježnice, kukova i koljena

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Ključne riječi: *fizikalni status, dijagnostički testovi, klinički znakovi*
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Uvod s ciljem: Prevalencija muskulo-skeletnih bolesti u općoj populacija je značajna, povećava se sa životnom dobi, od 3 % u mlađih od 60 godina do više od 50 % u starijih od 75 godina. Ova skupina bolesti česta je kazuistika u ordinacijama obiteljske medicine. Smatra se da je njihov udio u konzultacijama oko 17 %, što znači da se svaki šesti bolesnik javlja upravo zbog poteškoća lokomotornog sustava. Udio privremene radne nesposobnosti zbog ovih bolesti iznimno je visok, čini oko 30 %. Bolesti lokomotornog sustava utječu na opću pokretljivost, sposobnost samozbrinjavanja, pa tako i na opću kvalitetu života pacijenata, drugi su razlog opće invalidnosti, te su značajan medicinski i ekonomski teret. Imajući u vidu činjenicu koliko ova kazuistika znatno opterećuje i sudjeluje u stopi privremene radne nesposobnosti, dodatno je jasno kolika je važnost u izvođenju pravilnog reumatološkog statusa. Zbog svega navedenoga izrazito je važno znati i na razini ordinacija obiteljske medicine napraviti pravilan reumatološki status, kako bismo pravilno usmjeravali svoje pacijente u dalje postupke dijagnostike i liječenja.

Rasprava: Reumatološki status u ordinacijama obiteljske medicine obuhvaća opću, obiteljsku, radnu i socijalnu anamnezu te ciljana pitanja koja se odnose na pojavu boli, njezinu lokalizaciju, karakter, trajanje, intenzitet, propagaciju, olakšavajuće ili otežavajuće položaje te mogućnost ili nemogućnost izvođenja pojedinih kretnja i pokreta ili pojavu zakočenosti. Važno je kratkim i jasnim pitanjima prikupiti podatke o početku tegoba, stanjima koja su prethodila, postojanju mišićne slabosti, pojavi neuroloških senzacija, parestezija, osjeta hladnoće, topline ili čujnih krepitacija u zglobovima. Uz fizikalni pregled važno je i temeljito prikupljane anamnestičkih podataka o radu koji bolesnik obavlja ako je riječ o radno aktivnom bolesniku.

Fizikalni pregled sastoji se od detaljne inspekcije, palpacije, perkusije uz ispitivanja aktivne i pasivne pokretljivosti te izvođenja specifičnih testova i skraćenog ciljanog neurološkog pregleda. U pregledu vratne kralježnice koristimo se specifičnim znakovima poput Spurlingova testa kojim potvrđujemo postojanje radikularne boli, dok izvođenjem Lhermitteova znaka potvrđujemo zahvaćenost leđne moždine ili moždanog debla. U pregledu torakalne kralježnice od specifičnih znakova koristimo se znakom tetive u luku, dok se u pregledu lumbalne kralježnice najčešće služimo Schoberovim, Slump testom i Lasequeovim testom. U pregledu kukova obraćamo pažnju na postojanje Trendelburgova znaka, izvodimo Tomasov ili Faber test. U pregledu koljena služimo se specifičnim testovima koji upućuju na zahvaćenost pojedinih anatomskih struktura toga kompleksnog zgloba. Lachmanovim testom, uz testove prednje i stražnje ladice, koristimo se za procjenu zahvaćenosti prednjeg ili stražnjeg križnog ligamenta. Varus i valgus stres test upotrebljavamo za procjenu funkcije kolateralnih ligamenata, dok McMurrayjev test upućuje na zahvaćenost medijalnog ili lateralnog meniska.

Zaključak: Reumatološki status s korištenjem specifičnih znakova i testova, uz inspekciju, služi nam kako bismo što bolje procijenili promjene u lokomotornom sustavu, odstupanja u izvođenju aktivnih i pasivnih kretnja, i tako mogli što bolje donijeti procjenu o funkcionalnosti lokomotornog sustava. Nadalje, pomaže nam objektivizirati i prisutnost boli, jer je upravo to dominantan simptom s kojim se pacijenti javljaju u ordinacije obiteljske medicine. Pravilno izvođenje reumatološkog statusa jest nezaobilazan alat koji pomaže liječniku obiteljske medicine u donošenju odluka o daljem upućivanju na konzilijarne preglede i u primjeni racionalnih dijagnostičkih postupaka.

The most important tests and signs in the physical examinations of the spine, knees and hips

Keywords: *Physical examination, Diagnostic Techniques and Procedures, Clinical Signs*
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I**Introduction with aim** The prevalence of musculoskeletal diseases in the general population is an emerging problem as it increases with age, with prevalence being about 3% of patients younger than 60 years of age and rising to over 50% of patients over 75. These diseases are often encountered in family medicine practice. It is estimated that they account for 17% of all consultations which means that every sixth patient has musculoskeletal problems. Musculoskeletal diseases prevalence also accounts for a large amount of sickness absence, being about 30% of total absences. Musculoskeletal diseases affect general mobility, capacity for self-care and quality of life in general. They are also the second cause of disability and are thus a major medical and economic burden. Keeping this in mind, it is evident how important it is for physicians to be able to perform a quality rheumatological physical examination in FP offices. Given all this, it is of great interest for a family medicine specialist to perform a satisfactory rheumatology physical examination so they can correctly refer our patients for next diagnostic and treatment steps.

Discussion – Rheumatologic physical examinations in family medicine practice encompasses general, family, work and social history and targeted questions pertaining to pain, localization, character, duration, intensity, pain propagation and relieving positions, the capacity to perform active or passive movements and the presence of stiffness. Precise investigation is an important step to gather data on the onset of symptoms, diseases that might have predated it and the presence of muscle weakness, neurological sensations, paresthesia, burning sensations or chills and audible crepitations in the joints. A detailed professional history is needed if the patient is employed.

Physical examination consists of a detailed inspection, palpation, percussion and specific movement tests, signs and targeted neurological tests. To examine the cervical spine, we use signs like Spurling's test which assesses for the presence of radicular pain while we use the Lhermitte sign to check for brain stem or spinal cord involvement. To examine the thoracic spine we use the tendon arch sign while for the lumbar spine, we use Schober, Lasegue and slump tests. In the hip exam, we look for the Trendelenburg sign and we do the Tomas or Faber test. To examine the knee joint we use specific tests due to the anatomic complexity of this joint. We can perform the Lachman test along with the anterior and posterior drawer tests to assess the anterior and cruciate ligaments. Varus and valgus stress tests are used for collateral ligament function while the McMurray test checks the status of the medial and lateral menisci.

Conclusion – A quality physical examination requires specific tests, observes signs, helps us assess the functionality in active and passive movements of the musculoskeletal system, and helps the family physicians in recognizing pain as this is the dominant symptom that patients report in FP's offices while seeking medical advice in case of musculoskeletal diseases. An exhaustive physical examination has a huge importance among family medicine specialists competences, helps in the decision making process and it is a useful tool in the rationalization of diagnostic resources.

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Pharmacological therapy of the most common rheumatoid diseases

Keywords: *Rheumatic diseases, pharmacological treatment, side effects, guidelines*
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Introduction with aim: Advances in the treatment of rheumatological diseases over the last 70 years have been remarkable. From glucocorticoids, methotrexate to biologics and most recently, small molecule signalling inhibitors, there is a wide range of effective drugs. As diverse as the range of rheumatological diseases is, so is their pharmacological therapy. New approaches to the treatment of rheumatological diseases have allowed individualized therapy, but also require more intensive monitoring of the use of medicines. Because of the expected side effects, empowering patients to understand and respond to the expected problems is of paramount importance. The choice of medicines is influenced by our experience, the form of the disease and the characteristics of the patient. The latter include the presence of other chronic diseases, allergies, and the psychophysical characteristics of the patient. All of these should be considered when selecting and prescribing medicines if we want to achieve good patient adherence to chronic pharmacological therapy. The aim of this paper is to present an overview about the pharmacological therapy of the most common rheumatoid diseases.

Methods: We searched the Cochrane library, PubMed, Embase, Medline as well as Web of Science (Science Citation Index Expanded and Emerging Sources Citation Index) for the last five years, to identify completed and ongoing studies, and guidelines. The following keywords were used: Rheumatic diseases, pharmacological treatment, side effects, guidelines. We included articles in English, German, Croatian, and Slovene language. We conducted our searches on 25 January 2023.

Results: In the last 5 years there were published 875 papers regarding the topic of our interest. In the analysis and in writing this paper, we included 30 articles. We used the data to prepare this lecture and a short article about the pharmacological treatment of the most common rheumatic diseases.

Conclusion: Evidence based medicine has been prepared for most chronic disease diagnostic and treatment guidelines. However, an algorithmic approach to treatment should not be allowed to replace the fundamental depth and care that is implicit in the relationship between health professionals and the people with RMDs and that pervades our discipline.

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LITERATURA:

Reumatoidni artritis, sistemski eritemski lupus i gigantocelularni arteritis

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Ključne riječi: reumatoidni artritis, sistemski eritemski lupus, gigantocelularni arteritis, rana intervencija, brzi pristup
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Uvod s ciljem: Reumatoidni artritis (RA), sistemski eritemski lupus (SLE) i gigantocelularni arteritis (GCA) kronične su, autoimune bolesti. Cilj ovoga rada naglasiti je važnost rane intervencije (rane dijagnoze i ranog adekvatnog liječenja). U tom cilju potrebno je osigurati adekvatnu komunikaciju specijalista obiteljske medicine (LOM) i reumatologa/imunologa s mogućnošću ostvarenja prvog pregleda kod reumatologa u roku od četiriju tjedana. U radu je predložen model kojim bi se mogao ostvariti taj cilj.

Rasprava: Reumatoidni artritis je kronična upalna bolest koja prvenstveno zahvaća zglobove te dovodi do oštećenja hrskavice i kostiju s posljedično mogućim invaliditetom. Rana dijagnoza ključna je za optimalan terapijski uspjeh. Rizični čimbenici za loš ishod jesu visoka aktivnost bolesti, prisutnost autoantitijela i rano oštećenje kostiju. Postupnici liječenja uključuju mjerenje aktivnosti bolesti kompozitnim indeksima, primjenu strategije liječenja do zadanog cilja uz konvencionalne, kao i biološke i ne-biološke antireumatske lijekove koji modificiraju tijek bolesti. Nakon što se postigne cilj liječenja, a to je remisija ili barem niska aktivnost bolesti, treba pokušati smanjiti dozu ili povećati intervale primjene lijeka.

Sistemski eritemski lupus je kronična, potencijalno teška, autoimuna bolest koja često dovodi do invaliditeta. Zahvaća više organa s tipičnim egzacerbacijama bolesti. Devet od deset oboljelih su žene, većinom u dobi između 14. i 50. godine. SLE karakterizira stvaranje brojnih autoantitijela i često se smatra prototipom autoimune bolesti. U liječenju je potrebno utvrditi razinu aktivnosti bolesti, tj. potencijalno reverzibilna oštećenja podložna liječenju, te nepovratna oštećenja.

Gigantocelularni arteritis (nazivan i temporalni arteritis) jest vaskulitis velikih krvnih žila koji se obično javlja u osoba starijih od 50 godina. To je i najčešći vaskulitis u starijih osoba. GCA klasično zahvaća velike krvne žile, predominantno aortu i njezine ogranke. Upala arterija može dovesti do oštećenja stijenke žila što može rezultirati stenozom, okluzijama, pa i aneurizmama. Uz to, upala arterija može dovesti do ozbiljnog gubitka funkcije, uključujući gubitak vida, anoksiju udova i moždani udar. Sumnja na arteritis divovskih stanica medicinska je hitnost i bolesnike treba brzo dijagnosticirati i liječiti kako bi se spriječile nepovratne posljedice upale krvnih žila.

U RH postoji nedovoljan broj reumatologa/kliničkih imunologa, pa bolesnici moraju duže čekati na pregled. U cilju premošćivanja te nedostatnosti nastojali smo poboljšati suradnju s liječnicima/specijalistima obiteljske medicine. U KB Dubravi 2014. godine pokrenuli smo pilot-program pod nazivom e-savjetovanje koji je sadržavao sljedeće: 1. *web*-aplikaciju, 2. edukativne radionice za specijaliste/liječnike obiteljske medicine (rad u malim skupinama od 10 liječnika u trajanju od 45 min) i 3. specijalisti/liječnici obiteljske medicine koji su sudjelovali u radionici dobili su pristup *web*-aplikaciji (rani RA/SpA upitnik) kako bi pravilno trijažirali bolesnike i dobili termin za prvi pregled reumatologa u roku četiri tjedna (brzi pristup). Ovaj pilot-program pokazao je dobre rezultate.

Zaključak: Rana intervencija izuzetno je važna za optimalan ishod liječenja. Potrebno je sustavno osigurati komunikacijski kanal između LOM-a i reumatologa. Prikazan je jedan model. Ako bi se postiglo suglasje LOM-a i reumatologa/kliničkih imunologa s ovim načinom brzog pristupa (engl. *fast access*), tada bi oni zajednički trebali dati prijedlog HZZO-u i Ministarstvu koje može provesti pilot-projekt u RH te odlučiti o implementaciji u sustav.

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Rheumatoid arthritis, systemic lupus erythematosus and giant cell arteritis

Keywords: Rheumatoid arthritis, systemic lupus erythematosus, gigantocellular arteritis, early intervention, rapid access
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Introduction with aim Rheumatoid arthritis (RA), systemic lupus erythematosus (SLE) and giant cell arteritis (GCA) are chronic, autoimmune diseases. The aim of this paper is to emphasize the importance of early intervention, including early diagnosis and adequate treatment. To this end, it is necessary to ensure adequate communication between specialists in family medicine and rheumatologists/immunologists, with the possibility of achieving the date of the first examination by a rheumatologist within four weeks. This paper proposes a model that could achieve this goal.

Discussion Rheumatoid arthritis is a chronic inflammatory disease that primarily affects the joints, leading to cartilage and bone damage with consequent possible disability. Early diagnosis is crucial for optimal therapeutic success. Risk factors for a poor outcome are: high disease activity, presence of autoantibodies and early bone damage. Treatment includes the measurement of disease activity with composite indices, the application of a treatment strategy to achieve a given goal with conventional as well as biological and non-biological antirheumatic drugs that modify the course of disease. After the goal of treatment is achieved, which is remission or at least a low disease activity, one should try to reduce the dose or increase the intervals of drug administration.

Systemic lupus erythematosus is a chronic, potentially severe, autoimmune disease that often leads to disability. It affects multiple organs with typical exacerbations of the disease. Nine out of 10 patients are women, mostly between the ages of 14 and 50. SLE is characterized by the production of numerous autoantibodies and is often considered the prototype of an autoimmune disease. In treatment, it is necessary to determine the level of disease activity, i.e. potentially reversible damage amenable to treatment as well as irreversible damage.

Gigantocellular arteritis (also called temporal arteritis) is a vasculitis of large blood vessels that usually occurs in older people over 50 years of age. It is also the most common vasculitis in the elderly. GCA classically affects large blood vessels, predominantly the aorta and its branches. Arterial inflammation can lead to damage to the vessel wall, which can result in stenosis, occlusions, and even aneurysms. In addition, the inflammation of arteries can lead to a serious loss of function including: vision loss, limb anoxia, and stroke. Suspected giant cell arteritis is a medical emergency and patients should be promptly diagnosed and treated to prevent irreversible consequences of vessel inflammation.

In the Republic of Croatia, there is an insufficient number of rheumatologists/clinical immunologists, so patients have to wait longer for an examination. In order to overcome this insufficiency, we tried to improve cooperation with family physicians/specialists. In CH Dubrava, in 2014, we launched a pilot program called e-counseling, which included: 1. web application 2. educational workshops for specialists/family physicians (work in small groups of 10 doctors for 45 minutes) 3. specialists/family physicians who participated in the workshop were given access to the web application (early RA /SpA questionnaire) in order to properly triage patients and get an appointment for the first rheumatologist examination within four weeks (quick access). This pilot program has shown good results.

Conclusion Early intervention is extremely important for an optimal treatment outcome. It is necessary to systematically provide communication channels between the FP and the rheumatologist. One model has been presented here. If the FP and rheumatologist/clinical immunologist agree with this method of fast access, then they should jointly make a proposal to the Croatian Health Insurance Fund and the Ministry of Health, to launch a pilot project in the Republic of Croatia and decide on implementing it into the system.

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Urični artritis – dijagnostika, terapija i prevencija

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IUvod s ciljem: Urični artritis ili giht najčešća je forma upalnog artritisa karakterizirana recidivirajućim atakama upalnog sinovitisa zbog saturacije tkiva uratima koji dovode do odlaganja kristala urata u zglobovima i oko zglobova (najčešće metatarzofalangealnog zgloba palca). Cilj je rada dati najnoviji pregled preporuka za dijagnostiku, terapiju i prevenciju uričnog artritisa na razini liječnika obiteljske medicine.

Rasprava: Pregledane su baze podataka MEDLINE (U.S. National Library of Medicine, National Institutes of Health) korištenjem PubMed pretraživača i Google Scholar korištenjem MeSH pojmova giht (engl. *gout*), smjernice (engl. *guidelines*) i primarna zdravstvena zaštita (engl. *primary care*). Kriteriji uključivanja članaka bili su dostupnost cjelovitih preglednih članaka na engleskom jeziku objavljenih u razdoblju 2020. – 2023. Navedene kriterije zadovoljavala su 24 članka.

Prevalencija uričnog artritisa varira s obzirom na ispitivanu populaciju i primijenjenu metodu < 1 % – 6,8 %, češća je u muškaraca i raste s dobi. Od ostalih rizičnih čimbenika najvažniji su debljina, hipertenzija, konzumacija alkohola, upotreba diuretika, dijeta bogata crvenim mesom i/ili plodovima mora (muzgavci, školjke), kronična bubrežna bolest te pretjerana konzumacija hrane i pića bogatih fruktozom (prvenstveno voće i med). Dijagnoza se uglavnom postavlja klinički na osnovi simptoma (nagli početak, vrlo jaka bol, otok i crvenilo zgloba, odsutnost općih simptoma) kada se preporučuje izmjeriti serumsku razinu urata (> 360 mikromol/litra) radi potvrde dijagnoze. Ako su vrijednosti niže a klinička slika tipična, preporučuje se ponoviti nalaz za dva tjedna. Artrocenteza će biti potrebna samo u slučajevima nejasne dijagnoze ili neadekvatnog odgovora na terapiju. Ako je potrebno a nije moguće napraviti aspiraciju i analizu zglobne tekućine (potvrda prisutnosti kristala mononatrijeva urata), preporučuje se napraviti RTG snimku zahvaćenog zgloba, ultrazvuk ili CT. Terapijski pristup razlikuje se u ovisnosti o liječenju napadaja ili prevenciji ponovnog napadaja gihta. U liječenju akutnog napadaja koriste se nesteroidni protuupalni lijekovi (prvenstveno oni s visokim protuupalnim potencijalom), kortikosteroidi i kolhicin, pri čemu niske doze kolhicina predstavljaju prvu liniju. Ne preporučuje se primjena bioloških lijekova (interleukin-1-inhibitora) ni adrenokortikotropnog hormona. Za razliku od smjernica iz 2012. u smjernicama iz 2020. stoji jasna preporuka da se kao prva linija u snižavanju mokraćne kiseline koristi alopurinol, kao druga febuksostat, dok se pegloticasa preporučuje samo u slučajevima nepostizanja ciljne vrijednosti urata (< 360 mikromol/L) a pacijent ima dva i više napadaja uričnog artritisa godišnje. Primjena probenecida nije preporučljiva iako postoje radovi o njegovu povoljnijem djelovanju na pojavnost kardiovaskularnih događaja. U slučaju kronične bubrežne bolesti, stadij 3B do 5, i uričnog artritisa i nepostizanja ciljnih vrijednosti urata potrebna je konzultacija s nefrologom.

Zaključak: Urični artritis kao najčešći oblik upalnog artritisa koji se liječi na razini obiteljske medicine zahtijeva dobro poznavanje najnovijih smjernica vezanih za dijagnostiku, terapiju i prevenciju, te je potrebno stalno osvježivanje znanja liječnika obiteljske medicine o tom problemu.

Uric arthritis - diagnosis, therapy and prevention

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IIntroduction with aim. Uric arthritis (UA) or gout is the most common form of inflammatory arthritis characterized by recurring attacks of inflammatory synovitis due to tissue saturation with urates that lead to the deposition of urate crystals in and around the joints (most often the metatarsophalangeal joint of the thumb). The aim of this paper is to provide the latest overview of recommendations for diagnosis, therapy, and prevention of gouty arthritis in family medicine.

Discussion. The prevalence of UA varies depending on the studied population and the applied method and is <1%-6.8%. It is more common in men and increases with age. Among other risk factors, the most important are obesity, hypertension, alcohol consumption, use of diuretics, a diet rich in red meat and/or seafood (mussels, shellfish), chronic kidney disease, as well as excessive consumption of foods and drinks rich in fructose (primarily fruit and honey). The diagnosis is mainly made clinically based on symptoms (sudden onset, very severe pain, swelling and redness of the joint, absence of general symptoms) when it is recommended to measure the serum urate level (>360 micromol/liter) to confirm the diagnosis. If the values are lower and the clinical presentation is typical, it is recommended to repeat the test in two weeks. Arthrocentesis will only be necessary in cases of unclear diagnosis or inadequate response to therapy. If it is necessary and it is not possible to perform aspiration and analysis of the joint fluid (confirmation of the presence of monosodium urate crystals), it is recommended to perform an X-ray of the affected joint, ultrasound or CT.

The therapeutic approach differs depending on the treatment of an acute attack or the prevention of a recurrence of gout. An acute attack is treated with non-steroidal anti-inflammatory drugs (primarily those with high anti-inflammatory potential), corticosteroids and colchicine, with low doses of colchicine being the first line. The use of biological drugs (interleukin-1-inhibitors as well as adrenocorticotropic hormone) is not recommended. In contrast to the 2012 guidelines, the 2020 guidelines clearly recommend that allopurinol should be used as the first line in lowering uric acid, and febuxostat as the second, while pegloticase is recommended only in cases the target value of urate (< 360 micromol/L) has not been reached and the patient has two or more attacks of uric arthritis per year. The use of probenecid is not recommended, although there are papers on its more favorable effect on the occurrence of cardiovascular events. In the case of chronic kidney disease, stage 3B to 5 and uric arthritis and not reaching the target values of urate, a consultation with the nephrologist is required.

Conclusion. Uric arthritis, as the most common form of inflammatory arthritis treated in family medicine, requires a good knowledge of the latest guidelines related to diagnostics, therapy and prevention. It is necessary to constantly refresh family physicians' knowledge about this problem.

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Križobolja – na što obratiti pozornost?

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Uvod s ciljem: Bol je jedan od najčešćih razloga posjeta ordinaciji liječnika obiteljske medicine. Bol u leđima barem jednom u životu pogađa 60 – 80 % ljudi, a incidencija je oko 25 %. Prije pregleda pacijenta treba ispitati kako su tegobe nastale, je li nedavno bio ozlijeđen i postoje li neurološki poremećaji. Tijekom pregleda na temelju povijesti bolesti i kliničkog statusa možemo barem posumnjati na moguća stanja koja zahtijevaju upućivanje kliničkom specijalistu (npr. maligna bolest, infekcija, ozljeda, upalna bolest ili sindrom *cauda equina*). Cilj je rada olakšati dijagnostiku i liječenje križobolje u obiteljskoj medicini.

Rasprava: U većini slučajeva radi se o „običnoj“ križobolji, kod koje pacijent mora dobiti informaciju da nema razloga za brigu, da je to vrlo česta bolest, da će potpuno izlječenje nastupiti za nekoliko dana do nekoliko tjedana, da neće biti nikakvih posljedica, ali da se bol može ponoviti nakon nekog vremena. U manjeg udjela bolesnika radi se o iritaciji korijena živca; tim pacijentima kažemo da nema razloga za paniku, jer je obično dovoljno konzervativno liječenje, ali da bolovi mogu trajati 1 – 2 mjeseca i da se mogu ponoviti. I za jednostavnu bol i za radikularnu bol, pacijentu treba reći da ostane fizički aktivan i nastavi sa svim normalnim aktivnostima koje može obavljati. Podatci iz literature pokazuju da je pomno praćenje bolesnika na primarnoj razini u većini slučajeva dovoljno učinkovita mjera. Laboratorijske pretrage ne daju nam puno informacija, a radimo ih npr. kada se sumnja na metastaze (alkalna fosfataza, Ca), infekcije (hemogram, SR, CRP) ili rak prostate (PSA). Rendgen je dobar diferencijalno-dijagnostički alat za prepoznavanje tumora ili metastaza, ali inače obično ne pridonosi mnogo, jer je korelacija između kliničke slike i rendgenskih promjena loša. Ultrazvuk je koristan samo za isključivanje prenesene boli, npr. aneurizme abdominalne aorte, kod ginekoloških bolesti i bolesti bubrega. Magnetska rezonancija daje nam najviše informacija, pa pacijente kod kojih nakon četiriju tjedana nema poboljšanja ima smisla uputiti na ovu pretragu već na primarnoj razini. Za upalne bolove u leđima karakteristično je da se javljaju prije 40. godine života. To je tupa bol koja se javlja postupno, nije uzrokovana mehaničkom ozljedom i prevladava noću, ne smanjuje se mirovanjem, a tjelesna aktivnost čak smanjuje bol. Pacijenti navode da moraju ustajati noću i vježbati kako bi ublažili bol. Kod bolesnika je potrebno što prije utvrditi rizik za razvoj kronične boli. Postoji veći rizik npr. kod pacijenata koji su uplašeni, depresivni, pesimistični, nezadovoljni na poslu ili imaju neriješene zahtjeve za naknadu štete na sudu. Najbolji je sistematičan pristup, npr. pomoću upitnika *StarT Back Tool*. Pacijentima s niskim rizikom razvoja kronične boli dovoljno je dati upute za vježbe u obliku pisanog materijala ili ih uputiti na grupne vježbe. Za pacijente s visokim stupnjem rizika najbolja bi bila mogućnost brzog liječenja u multidisciplinarnom timu.

Zaključak: Većinu bolesnika s križoboljom moguće je adekvatno liječiti na primarnoj razini. Imamo dovoljno dostupnih lijekova, a pretrage su jednostavne. Problem je što se bolovi često ponavljaju i pacijenti se stalno vraćaju u naše ambulante. Fizioterapija, specijalističko, a posebno multidisciplinarno liječenje, nažalost, teško je dostupno. Svima je potrebno ponuditi mogućnost sudjelovanja u preventivnim programima.

Low Back pain –what to pay attention to?

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Introduction and aim Pain is one of the most common reasons for visiting a family physician. Back pain affects 60-80% of people at least once in their lifetime, and the incidence is about 25%. Before examining the patient, it is necessary to ask how the pain has started, whether the patient has recently been injured and whether there have been any neurological disorders. During the examination, based on the medical history and clinical status, we can suspect possible conditions that require referral to a clinical specialist (e.g. malignancy, infection, injury, inflammatory disease or caude equine syndrome). The aim of this paper is to facilitate the diagnosing and treatment of low back pain in family medicine.

Discussion In most cases, low back pain is not complicated, and the patient has to be informed that there is no reason to worry, because it is a very common disease, and complete healing will occur in a few days to a few weeks without further consequences, although the pain may reccur after some time. In a smaller proportion of patients the nerve root irritation is present; these patients should be informed that there is no reason to panic, because conservative treatment is usually sufficient, but the pain can last 1-2 months and may reccur. For both simple pain and radicular pain, the patient should be told to remain physically active and resume all normal activities they can perform. Data from literature show that close monitoring of patients at the primary level is a sufficiently effective measure in most cases. Laboratory tests do not give us much information. We preform them when metastases (alkaline phosphatase, Ca), infections (hemogram, SR, CRP) or prostate cancer (PSA) are suspected. X-ray is a good differential diagnostic tool for identifying tumors or metastases, but otherwise does not contribute much, because the correlation between the clinical picture and X-ray changes is poor. Ultrasound is useful only to rule out referred pain, e.g. abdominal aortic aneurysm, gynecological and kidney diseases. Magnetic resonance imaging gives us the most information, so it makes sense to refer patients who have not improved after 4 weeks to this examination. A characteristic of inflammatory back pain is that it occurs before the age of 40. It is a dull pain that arises gradually and is not caused by a mechanical injury. It prevails at night and it does not alleviate with rest, instead, physical activity even reduces the pain. Patients report having to get up at night and exercise to relieve pain. In all patients it is necessary to determine the risk for the development of chronic pain as soon as possible. There is a greater risk, for example, in patients who are scared, depressed, pessimistic, dissatisfied at work or have pending claims for damages in court. A systematic approach is best, e.g. using the "StarT Back Tool" questionnaire. For patients with a low risk of developing chronic pain, it is sufficient to give instructions for exercises in the form of written material or refer them to group exercises. For patients with a high degree of risk, the possibility of rapid treatment by a multidisciplinary team would be best.

Conclusion Most patients with low back pain can be adequately treated at the primary health care level. We have enough medicines available; the tests are simple. The problem is that the pain often reccurs and patients keep coming back to our clinics. Physiotherapy, specialist and especially multidisciplinary treatment is unfortunately difficult to access. It is necessary to offer everyone the opportunity to participate in preventive programs.

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7. Ako imate povećanu tjelesnu težinu javite se svom obiteljskom liječniku

Komunikacija s pretilom osobom

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Uvod s ciljem: Debljina je opći javnozdravstveni problem, posebice u zemljama niskog i srednjeg razvoja, posebno pogađa mladu populaciju i kronična je bolest koja dovodi do niza komorbiditeta. Cilj je predstaviti motivacijski intervju kao ključni alat u komunikaciji s pretilom osobom.

Rasprava: Liječnik obiteljske medicine i medicinska sestra dio su multidisciplinarnog tima u liječenju pretilosti. U komunikaciji s pacijentom najvažnije je saznati što su preferencije, kakva je spremnost na promjenu navika i načina života te koji su ciljevi liječenja pretilosti. Motivacija je ključna u intervjuu. Ona ima ulogu pridonijeti destigmatizaciji i korištenju preferencija za potporu, objašnjenju procesa liječenja, učinaka i očekivanja. Stigma pretilosti javlja se posvuda, a uzrok je psihičkih učinaka kod pretilih osoba. S druge strane, posljedice stigmatizacije mogu dovesti do povratnog učinka s još većim unosom hrane i češćim obrocima, sa smanjenom tjelesnom aktivnosti, s tjeskobom, depresijom i suicidalnim mislima te, u posljednjem slučaju, samoubojstvom. Općenito, ne postoji pretila osoba koja je zadovoljna svojim izgledom, a ne želi smršavjeti, pa se motivacijski intervju vodi s osobama kojima je potrebna podrška i njima nepoznate informacije, kao i s drugom skupinom osoba koje su u prošlosti pokušale smršavjeti. Za provođenje motivacijskog intervjua obiteljski liječnik ili drugi članovi tima trebaju biti kompetentni. Za početak konzultacije govornik se treba pripremiti za informacije o osobi s pretilošću. Komunikacija za promjenu stavova zahtijeva dovoljno vremena, alate, poruke i uvjete koji će osigurati učinkovitu komunikaciju. Treba postojati sigurno okruženje za razgovor s empatijom. Intervju se može započeti osobito tada kada pacijent dolazi zbog drugih potreba. Ne treba se koristiti osudama, kritiziranjem i zastrašivanjem.

Treba misliti i govoriti o BMI-ju ili tjelesnoj masi, a ne o pretilom ili debelom pacijentu. Treba razmotriti dotadašnje pokušaje smanjenja tjelesne težine ili *yo-yo* efekte; liječenje treba biti usmjereno na promjenu životnih navika, a ne na smanjenje tjelesne težine; očekivanja ne treba idealizirati jer je gubitak od 5 do 10 % ili smanjenje opsega struka važno za kardiometabolički proces i motivira razgovor. Valja naglasiti da je mršavljenje vrlo bitno, savjetovati o unosu niskokaloričnih namirnica i njihovu serviranju koje bi bilo privlačno za konzumaciju. Preporučuje se dogovoriti više sastanaka podrške.

Zaključak: Općenito, osoba s pretilošću vlasnik je svojeg tijela i stručnjak za sebe, a kad god dođe do promjena dolazi do ambivalentnosti. Tu bi ulogu trebao preuzeti obiteljski liječnik koji empatijom i tihim glasom, više u ulozi dobrog slušatelja, razrješuje dileme o promjenama koje su se dogodile, a zatim treba istaknuti dobrobiti promjena. Liječnici obiteljske medicine trebali bi govoriti neosuđujućim govorom, preispitati svoj stav prema debljini, uočiti prepreke kod osoba s debljinom te prije početka liječenja utvrditi ima li pretila osoba neku bolest koja je praćena pretilošću.

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Communication with an Obese Person

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Introduction and objective:Obesity is a general public health problem, especially in countries of low and medium development.It especially affects the young population and is a chronic disease that leads to a series of comorbidities.The objective of this paper is to present the motivational interview as a key tool in communication with an obese person

Discussion: The family physician and the nurse are part of a multidisciplinary team in the treatment of obesity. The most important thing in communication is to find out what the preferences are, the willingness to change habits and lifestyle, and the goals of the obesity treatment.Motivation is key in an interview. It's role is to contribute to destigmatization and the use of preferences for support, the explanation of the treatment process, the effect and expectations.The stigma of obesity occurs everywhere, and it is the cause of psychological effects in obese people. On the other hand, the consequences of stigmatization can lead to a rebound effect with even greater food intake and more frequent meals, reduced physical activity, anxiety, depression and suicidal thoughts and, ultimately, suicide. In general, there is no obese person who is satisfied with their appearance and does not want to lose weight, so a motivational interview is conducted with the people who need support and information unknown to them, as well as with another group that has tried to lose weight in the past.A competent family physician or other team members should conduct a motivational interview. To start the consultation, the speaker should prepare themself with information about the person with obesity.Communication to change attitudes requires sufficient time, tools, messages and conditions that will ensure effective communication.There should be a safe environment to talk with empathy.The interview can start under such conditions, especially when the patient comes with some other needs.Do not use condemnations, criticism and intimidation.

One should think and talk about BMI or body mass index, not about an obese or fat patient. Previous attempts to reduce body weight or yo-yo effects should be discussed; treatment should be aimed at changing life habits, not at reducing body weight; expectations should not be idealized because a loss of 5-10%, or a reduction in waist size, are important for cardiometabolic processes and motivates communication. It should be emphasized that losing weight is very important, advise should be given on the intake of low-calorie foods and their servings, which would be attractive for consumption. It is recommended to schedule several support meetings.

Conclusion: In general, a person with obesity is the owner of his/her body and an expert in himself/herself, and whenever changes occur, ambivalence follows.This role should be taken over by the family physician who, with empathy and a quiet voice, more in the role of a good listener, in the role of a leader, resolves dilemmas about the changes that have occurred and then highlight the benefits of the changes.Family physicians should speak in a non-judgmental way, reconsider their attitude towards obesity, identify obstacles in people with obesity, and before starting treatment, determine whether the obese person has any disease that is accompanied by obesity.

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Uputili ste nam pacijenta s debljinom

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Ključne riječi: debljina, hipotireoza, Cushingov sindrom, inzulinom, panhipopituitarizam
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Uvod s ciljem: Potreba za liječenjem debljine zasniva se na činjenici da je pretilost ozbiljna, kronična i progresivna bolest koja je povezana sa zdravstvenim rizicima kao što su arterijska hipertenzija, dijabetes tipa 2, dislipidemija, koronarna bolest, te povećanjem smrtnosti. Gubitkom tjelesne mase smanjuje se krvni tlak u hipertenzivnih bolesnika, progresija poremećene tolerancije glukoze u dijabetes, koncentracija lipida u bolesnika s povećanim rizikom. Dodatno, smanjuje se depresija, apneja u snu, urinarna inkontinencija, te se poboljšava pokretljivost i kvaliteta života. Iako je većina slučajeva pretilosti povezana sa sjedilačkim načinom života i povećanim unosom kalorija treba razmotriti i isključiti sekundarne uzroke debljine. U obradi bolesnika s debljinom postavlja se pitanje potrebe i opsega endokrinološke obrade kao i procjena komorbiditeta i pridruženih bolesti.

Rasprava: Nakon utvrđivanja debljine i procjene rizika treba isključiti najčešće endokrine uzroke debljine, hipotireozu i Cushingov sindrom (kontrolirati TSH i kortizol u prekonoćnom testu deksametazonske supresije), a ovisno o anamnezi, fizikalnom pregledu i osnovnim laboratorijskim nalazima i ostale endokrine bolesti koje mogu biti povezane s debljinom (sindrom policističnih ovarija, inzulinom, pseudohipoparatireoidizam, manjak hormona rasta, hipogonadizam i bolesti hipotalamusa). Uzrok povećanja tjelesne mase mogu biti lijekovi (inzulin, glukokortikoidi, antipsihotici) i prestanak pušenja. Rutinsko genetsko testiranje se ne preporučuje, jer su poremećaji koji uključuju pretilost rijetki i obično prisutni od djetinjstva. Ukoliko se isključe sekundarni uzroci debljine odabir liječenja ovisi o početnoj procjeni rizika. Svi pacijenti trebaju dobiti savjet o prehrani, tjelesnoj aktivnosti i ciljevima regulacije tjelesne mase, te je potrebno pratiti lipide, glukozu, urate i arterijski krvni tlak, kao i druge bolesti koje su češće u adipoznih bolesnika. Ukoliko za tri do šest mjeseci ne dođe do smanjenja tjelesne mase za 5 posto u odraslih osoba s indeksom tjelesne mase >30 kg/m2 ili 27 do 29,9 kg/m2 s komorbiditetima treba razmisliti o farmakološkoj terapiji i kirurškom liječenju debljine. Odluku treba donijeti individualno, nakon procjene koristi i rizika svih oblika liječenja. U adolescenata i odraslih osoba s ITM ≥ 40 kg/m2 ili 35 do 39,9 kg/m2 i barem jednim komorbiditetom, koji nisu uspjeli postići ciljeve gubitka tjelesne mase dijetom, vježbanjem i lijekovima treba razmisliti o liječenju barijatrijskom kirurgijom.

Zaključak :U svih bolesnika s debljinom potrebno je isključiti hipotireozu i Cushingov sindrom; a ovisno o anamnezi, fizikalnom pregledu i osnovnim laboratorijskim nalazima i druge endokrine bolesti povezane s debljinom. Potrebno je pratiti lipide, glikemiju, urate i arterijski krvni tlak i pravovremeno ih adekvatno liječiti, kao i druge bolesti koje su češće u adipoznih bolesnika.

You referred to us a patient with obesity

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Introduction with an aim The need to treat obesity is based on the fact that obesity is a serious, chronic and progressive disease that is associated with health risks such as arterial hypertension, type 2 diabetes, dyslipidemia, coronary disease, and increased mortality. Loss of body weight reduces blood pressure in hypertensive patients, progression of impaired glucose tolerance to diabetes, lipid concentration in patients with increased risk. Additionally, depression, sleep apnea, urinary incontinence, are reduced, and mobility and quality of life are improved. Although most cases of obesity are associated with a sedentary lifestyle and increased calorie intake, secondary causes of obesity should be considered and excluded. In the treatment of patients with obesity, the question arises of the need and extent of endocrinological treatment, as well as the assessment of comorbidities and associated diseases.

Discussion After determining obesity and risk assessment, the most common endocrine causes of obesity, hypothyroidism and Cushing's syndrome should be ruled out (control TSH and cortisol in the overnight dexamethasone suppression test) and depending on the history, physical examination and basic laboratory findings, other endocrine diseases that may be related to obesity (polycystic ovary syndrome, insulin, pseudohypoparathyroidism, growth hormone deficiency, hypogonadism and hypothalamic diseases). Weight gain can be caused by medications (insulin, glucocorticoids, antipsychotics) and smoking cessation. Routine genetic testing is not recommended, as disorders involving obesity are rare and usually present from childhood. If secondary causes of obesity are excluded, the choice of treatment depends on the initial risk assessment. All patients should receive advice on diet, physical activity and body weight regulation goals, and it is necessary to monitor lipids, glucose, urates and arterial blood pressure, as well as other diseases that are more common in obese patients. If in three to six months there is no reduction in body mass by 5 percent in adults with a body mass index >30 kg/m2 or 27 to 29.9 kg/m2 with comorbidities, pharmacological therapy and surgical treatment of obesity should be considered. The decision should be made individually, after assessing the benefits and risks of all forms of treatment. In adolescents and adults with a BMI ≥ 40 kg/m2 or 35 to 39.9 kg/m2 and at least one comorbidity, who have failed to achieve body weight loss goals with diet, exercise and medication, treatment with bariatric surgery should be considered.

Conclusion Hypothyroidism and Cushing's syndrome should be ruled out in all obese patients; and depending on the history, physical examination and basic laboratory findings, other endocrine diseases related to obesity. It is necessary to monitor lipids, glycemia, urates and arterial blood pressure and treat them adequately in a timely manner, as well as other diseases that are more common in adipose patients.

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Pretilost kao neovisan rizični čimbenik

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Ključne riječi: pretilost, rizični čimbenici, kronična bolest
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Uvod s ciljem: Pretilost je globalna epidemija, a njezina prevalencija posljednjih desetljeća raste u većini zemalja. Prepoznata je kao glavni čimbenik rizika za kronične nezarazne bolesti. Cilj je ovog rada prikazati neke česte bolesti u obiteljskoj medicini za koje je pretilost neovisan rizični čimbenik.

Rasprava: Pretilost izravno pridonosi čimbenicima kardiovaskularnog rizika, uključujući dislipidemiju, dijabetes tipa 2, hipertenziju i poremećaje spavanja. Također, dovodi do razvoja kardiovaskularnih bolesti i smrtnosti od kardiovaskularnih bolesti neovisno o drugim čimbenicima rizika za kardiovaskularne bolesti. Noviji podatci ističu abdominalnu pretilost kao marker rizika od kardiovaskularnih bolesti koji je neovisan o indeksu tjelesne mase. Aterosklerotski proces započinje gutanjem estera kolesterola od strane makrofaga i njihovim taloženjem u stijenkama krvnih žila što rezultira zadebljanjem arterijske intime. Pretilost ubrzava rane aterosklerotske promjene preko nekoliko mehanizama, uključujući inzulinsku rezistenciju i upalu. Upala povećava vjerojatnost oksidacije lipoproteina niske gustoće i uzrokuje smanjenu bioraspoloživost dušikova oksida te tako potiče aterogenezu. Pretilost je povezana s većim rizikom od pojave koronarne bolesti i kardiovaskularne smrti, zatajenja srca, iznenadne srčane smrti i fibrilacije atrija. Pretilost povećava rizik od razvoja dijabetesa tipa 2 za najmanje šest puta, neovisno o genetskoj predispoziciji za bolest. Dokazi iz studija sugeriraju da je značajno povećanje količine tjelesne masti povezano s povećanim rizikom od raznih vrsta raka, uključujući rak endometrija, dojke, debelog crijeva, bubrega, žučnog mjehura, jetre, melanoma i drugih. Postoji više metaboličkih promjena za koje se smatra da povezuju pretilost i rak, kao što su kronična sustavna upala niske razine zbog povišenih razina citokina, inzulinska rezistencija što rezultira promijenjenom signalizacijom inzulina, disregulacija adipokina, povišene razine estrogena u masnom tkivu, povećani lipidi i promjene u signalizaciji lipida te oksidacijski stres koji dovodi do staničnih i molekularnih promjena, uključujući oštećenje DNK. Najznačajniji utjecaj pretilosti na mišićno-koštani sustav povezan je s osteoartritisom. Patogeneza osteoartritisa povezana je s prekomjernim opterećenjem zglobova i promijenjenim biomehaničkim obrascima zajedno s hormonskom i citokinskom disregulacijom. Odnos između osteoporoze i pretilosti trenutačno je kontroverzan. Nekoliko je dokaza pokazalo da je povećanje indeksa tjelesne mase povezano s povećanjem mineralne gustoće kostiju. Ova opažanja mogu se objasniti mehaničkim opterećenjem te većom razinom estrogena i androgena – odgovornih za povećanu aktivnost osteoblasta i smanjenu aktivnost osteoklasta. Drugi dokazi upućuju na to da pretilost može negativno utjecati na zdravlje kostiju, što bi se moglo objasniti učinkom na kosti niza adipokina i citokina, a neki autori zaključuju da adipoznost ima negativan učinak na trabekularnu i kortikalnu kost. Pretilost i psihijatrijske bolesti usko su povezane, a najviše dokaza za povezanost postoji između depresije i pretilosti. Studije su pokazale dvosmjernu vezu između tih dvaju stanja. Dokazi su skromniji za anksiozne poremećaje, a neadekvatni za druga psihijatrijska stanja. Čini se da je spol važan posrednik u tim odnosima.

Zaključak: Pretilost smanjuje aktivnost zaštitnih antioksidansa u tijelu i povećava oksidacijski stres te joj treba posvetiti prikladnu pozornost i kad nema već razvijenih komplikacija. Treba uvesti više intervencija za primarnu prevenciju i bolje liječenje pretilosti kao kronične bolesti.

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Obesity as an independent risk factor

Keywords: obesity, risk factors, chronic disease
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Introduction with aim: Obesity is a global epidemic and its prevalence has been increasing in most countries in recent decades. It is recognized as a major risk factor for chronic non-communicable diseases. The aim of this paper is to present some common diseases in family medicine for which obesity is an independent risk factor.

Discussion: Obesity directly contributes to cardiovascular risk factors, including dyslipidemia, type 2 diabetes, hypertension, and sleep disorders. It also leads to the development of cardiovascular disease and mortality from cardiovascular disease independently of other risk factors for cardiovascular disease. Recent data highlight abdominal obesity as a marker of cardiovascular disease risk that is independent of the body mass index. The atherosclerotic process begins with the ingestion of cholesterol esters by macrophages and their deposition in the walls of blood vessels, which results in thickening of the arterial intima. Obesity accelerates early atherosclerotic changes through several mechanisms, including insulin resistance and inflammation. Inflammation increases the probability of low-density lipoprotein oxidation and causes reduced bioavailability of nitric oxide, thus promoting atherogenesis. Obesity is associated with a higher risk of coronary heart disease and cardiovascular death, heart failure, sudden cardiac death and atrial fibrillation. Obesity increases the risk of developing type 2 diabetes by at least 6 times, regardless of a genetic predisposition to the disease. Evidence from studies suggests that significant increases in body fat are associated with an increased risk of a variety of cancers, including endometrial, breast, colon, kidney, gallbladder, liver, melanoma, and others. There are multiple metabolic changes thought to link obesity and cancer, such as chronic low-level systemic inflammation due to elevated cytokine levels, insulin resistance resulting in altered insulin signaling, dysregulation of adipokines, elevated adipose tissue estrogen levels, increased lipids, and changes in lipid signaling and oxidative stress that leads to cellular and molecular changes, including DNA damage. The most significant impact of obesity is on the musculoskeletal system is associated with osteoarthritis. The pathogenesis of osteoarthritis is associated with excessive joint loading and altered biomechanical patterns along with hormonal and cytokine dysregulation. The relationship between osteoporosis and obesity is currently controversial. Several lines of evidence have shown that an increase in body mass index is associated with an increase in bone mineral density. These observations can be explained by mechanical loading and a higher level of estrogen and androgen - responsible for the increased activity of osteoblasts and decreased activity of osteoclasts. Other evidence suggests that obesity may negatively affect bone health, which could be explained by the effect of a number of adipokines and cytokines on bone, and some authors conclude that adiposity has a negative effect on trabecular and cortical bone. Obesity and psychiatric diseases are closely related, and most evidence for a link exists between depression and obesity. Studies have shown a two-way connection between the two conditions. Evidence is more modest for anxiety disorders and inadequate for other psychiatric conditions. Gender appears to be an important mediator in these relationships.

Conclusion: Obesity reduces the activity of protective antioxidants in the body, increases oxidative stress and should be given adequate attention even when there are no already developed complications. More interventions for primary prevention and better treatment of obesity as a chronic disease should be introduced.

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Prošireni sažetak

Ako imate povećanu tjelesnu težinu javite se svom obiteljskom liječniku

Suvremene metode liječenja pretilosti

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Ključne riječi: debljina, dijeta, tjelovježba, farmakoterapija pretilosti
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Uvod s ciljem: Debljina je povezana sa značajnim porastom smrtnosti i sa zdravstvenim rizicima kao što su tip 2 šećerne bolesti, dislipidemija, arterijska hipertenzija i koronarna bolest srca. Smanjenjem tjelesne mase smanjuje se napredovanje od oštećene tolerancije glukoze do šećerne bolesti, krvni tlak u bolesnika s arterijskom hipertenzijom i koncentracija lipida u bolesnika s povećanim rizikom. Nadalje, dolazi i do smanjenja apneje u snu, urinarne inkontinencije, depresije, do poboljšanja kvalitete života, tjelesnog funkcioniranja i pokretljivost. Cilj je rada prikazati suvremene metode liječenja pretilosti.

Rasprava: Prema novim smjernicama za liječenje pretilosti definirano je pet koraka u algoritmu: prepoznati, procijeniti, preporučiti, postaviti cilj, pratiti. Promjena životnog stila može dovesti do gubitka tjelesne mase za 5 – 10 %. Cilj je dijetalne prehrane smanjen unos ukupno unesenih kalorija i unošenje zdrave hrane (npr. mediteranska prehrana ili dijetalni pristup za zaustavljanje hipertenzije – DASH). Tjelesna aktivnost ima skroman učinak na smanjenje tjelesne mase, ali je važna za održavanje smanjene tjelesne mase, za smanjenje gubitka mišićne mase, za poboljšanje tjelesnog funkcioniranja i zdravlja kardiovaskularnog sustava. Preporučuje se 30 – 60 minuta aerobne tjelesne aktivnosti i vježbe opterećenja mišića/vježbe snage 5 – 7 dana u tjednu. Promjena i praćenje ponašanja prema prehrani i tjelesnoj aktivnosti, kontroliranje znakova i podražaja u okolini koji na njih utječu i samokontrola važni su za dugoročne promjene tjelesne mase. Kandidati za farmakološku terapiju odrasle su osobe s indeksom tjelesne mase (ITM) ≥ 30 kgm^{-2} ili 27,0 – 29,9 kgm^{-2} s komorbiditetima koji nisu zadovoljili ciljeve gubitka tjelesne mase (5 % ukupne tjelesne mase za 3 – 6 mjeseci) uz promjene načina života. Dostupni su nam orlistat i naltrekson/bupropion, a za bolesnike s tipom 2 šećerne bolesti i liraglutid. Kandidati za barijatrijsku kirurgiju odrasle su osobe s ITM-om ≥ 40 kgm^{-2} ili 35,0 – 39,9 kgm^{-2} s barem jednim ozbiljnim komorbiditetom koji nisu zadovoljili ciljeve gubitka tjelesne mase dijetom, vježbanjem i lijekovima. Prijeoperativna obrada treba uključiti i psihološku procjenu, koja uključuje procjenu ponašanja, kognitivnih i emocionalnih sposobnosti, motivacije i očekivanja, kako bi se utvrdilo imaju li bolesnici potrebne sposobnosti za provođenje procedura nakon barijatrijskog liječenja.

Zaključak: Smanjenje tjelesne mase za 5 – 7 % povezano je sa zdravstvenim dobrobitima. Odluka o liječenju temelji se na početnoj procjeni rizika, ali je konačna odluka individualna s obzirom na procjenu rizika i prednosti svih opcija liječenja (način života, farmakološka i kirurška terapija).

Modern methods to treat obesity

Key words: obesity, diet, exercise, pharmacotherapy of obesity
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IIntroduction and aim: Obesity is associated with a significant increase in mortality and health risks such as type 2 diabetes, dyslipidemia, arterial hypertension and coronary heart disease. Reducing the body weight is reducing the progression from impaired glucose tolerance to diabetes, blood pressure in patients with arterial hypertension, and lipid concentration in patients at increased risk. Furthermore, there is a reduction in sleep apnea, urinary incontinence, depression, the improvement in quality of life, physical functioning and mobility.

The aim of this paper is to present modern methods of treating obesity.

Discussion: According to the new guidelines for the treatment of obesity, five steps are defined in the algorithm: recognize, assess, recommend, set a goal, monitor. Changing your lifestyle can lead from 5 to 10% of weight loss. The aim of dietary nutrition is to reduce the total intake of calories, as well as to increase the intake of healthy food (e.g. the Mediterranean diet or the Dietary Approach to Stop Hypertension-DASH). Physical activity has a modest effect on the weight loss, but is important for maintaining it. It helps in reducing the muscle loss, and in improving physical functioning and cardiovascular health. Recommended exercise includes 30-60 minutes of aerobic physical activity and muscle-loading/strength training 5-7 days per week. Changing and monitoring eating and including physical activity behaviors, controlling cues and stimuli in the environment that influence them, together with self-control are important for long-term changes in the body mass. Candidates for pharmacological therapy are adults with a body mass index (BMI) ≥ 30 kgm-2 or 27.0-29.9 kgm-2 with comorbidities who have not met the goals of losing their body weight (5% of total body weight in 3-6 months) with lifestyle changes. Orlistat and naltrexone/bupropion are available for them, and liraglutide is available for those with type 2 diabetes. Candidates for bariatric surgery are adults with BMI ≥ 40 kgm-2 or 35.0-39.9 kgm-2 with at least one serious comorbidity who have not met weight loss goals with diet, exercise, and medication. Preoperative treatment should also include a psychological assessment that includes an assessment of behavior, cognitive and emotional abilities, motivation and expectations, in order to determine whether patients have the necessary abilities to follow the procedures after bariatric treatment.

Conclusion: A 5-7% reduction in the body weight is associated with health benefits. The treatment decision is based on the initial risk assessment, but the final decision is individualized considering the risk-benefit assessment of all treatment options (lifestyle, pharmacological and surgical therapy).

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Genetički testovi – da ili ne?

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Ključne riječi: genetičko testiranje, obiteljska medicina, maligne bolesti, probir
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Uvod s ciljem: Genetičko testiranje ili DNK testiranje jedno je od medicinskih prava iz zdravstvene zaštite. Ako liječnik izrazi sumnju da pacijent ima nasljednu bolest, zdravstveni sustav treba pružiti pacijentu mogućnost da nakon potrebnih kliničkih i biokemijskih analiza uradi genetički test kako bi se provelo pravilno i pravodobno liječenje. Pored proučavanja kromosoma na razini pojedinačnih gena, genetsko testiranje podrazumijeva biokemijske testove za moguću prisutnost nasljedne bolesti ili mutantnog oblika gena, koji su povezani s povećanim rizikom razvoja genetskih poremećaja. Genetičkim testiranjem otkrivaju se promjene u kromosomima, genima ili proteinima. Cilj je rada uputiti na značaj genetičkog testiranja u radu liječnika opće/obiteljske medicine.

Rasprava: U zavisnosti od situacije u kojoj se obavlja, jedan isti genetički test može poslužiti za otkrivanje uzroka postojećih simptoma bolesti (dijagnostički test), za otkrivanje toga je li tko nosilac nefunkcionalnog gena ili za otkrivanje genetskih grešaka kod nerođenog djeteta u tijeku trudnoće (prenatalni test). Katkada se genetičkim testom identificiraju samo najčešće promjene u određenom genu, a katkada se analizira cijeli gen. Međutim, u slučaju rijetkih bolesti, simptomi koje liječnik prepozna kod pacijenta često ne upućuju samo na jednu dijagnozu, te postoji sumnja na desetine različitih gena. Rezultat genetičkog testa su identificirane promjene koje narušavaju funkcioniranje gena i dovode do razvoja simptoma bolesti – i to barem jedna promjena kod dominantnih bolesti i barem dvije kod recesivnih bolesti. Različite promjene dovode do različitih posljedica, do manjeg ili većeg narušavanja rada gena, odnosno do blažih ili težih simptoma bolesti. Tehnike koje se koriste za molekularno-genetičko testiranje i naše znanje o genetici rijetkih bolesti brzo se usavršavaju i napreduju te, ako se mutacija ne može pronaći u danom trenutku, velika je vjerojatnost da će nove metode omogućiti njezino pronalaženje u budućnosti.

Genetičko će testiranje pokazati sljedeće: prisutnost štetnih mutacija s utvrđenim kliničkim značajem; prisutnost neklasificiranih varijanata čiji klinički značaj još nije utvrđen; prisutnost benignih polimorfizama.

Genetički testovi bitno pomažu u razvitku ciljanih terapija koje trebaju pridonijeti individualizaciji antikancerskog liječenja. U praksi se primjerice koristi testiranje na gen za rak dojke 1 (engl. BReast CAncer gene 1 – BRCA 1) i gen za rak dojke 2 (engl. BReast CAncer gene 2 – BRCA 2) jer su tumori u kojima se identificiraju ti geni osjetljiviji na derivate platine. U praksi se koriste testiranja i za druge gene prisutne u drugim vrstama raka.

Znanstvena istraživanja koja će omogućiti precizniju dijagnostiku u punom su jeku, a spoznaje o povezanosti gena i simptoma bolesti redovito se opisuju u medicinskoj literaturi.

Istraživanja su pokazala da nastanak većine karcinoma nije povezan s visokorizičnim genima, pa za većinu ovih pacijenata dostupno genetičko testiranje nije od koristi. Pacijenti s visokim rizikom za obolijevanje od određenog tipa karcinoma, a prema obiteljskoj povijesti bolesti, pored redovitog probira trebaju se podvrgnuti i genetičkom testiranju.

Zaključak: U radu liječnika opće/obiteljske medicine genetičko testiranje treba razmotriti u sklopu traganja za malignim bolestima, u probiru bolesnika koji imaju visok obiteljski rizik za nastanak raka te u probiru bolesnika za ciljanu terapiju.

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Genetic tests - yes or no?

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Introduction with a goal: Genetic testing or DNA testing is one of the medical rights in health care. If the doctor expresses suspicion that the patient has a hereditary disease, the health system should provide the patient with the opportunity, after the necessary clinical and biochemical analyses, to perform a genetic test, in order to implement proper and timely treatment. In addition to the study of chromosomes at the level of individual genes, genetic testing involves biochemical tests for the possible presence of a hereditary disease, or a mutant form of a gene, which is associated with an increased risk of developing genetic disorders. Genetic testing detects changes in chromosomes, genes or proteins. The aim of the paper is to point out the importance of genetic testing in the work of general/family/family medicine doctors.

Discussion: Depending on the situation in which it is performed, the same genetic test can be used: to discover the cause of existing disease symptoms (diagnostic test), to discover whether someone is a carrier of a non-functional gene or to discover genetic errors in an unborn child during pregnancy (prenatal test). Sometimes the genetic test identifies only the most common changes in a certain gene, and sometimes the entire gene is analyzed. However, in the case of rare diseases, the symptoms that the doctor recognizes in the patient often do not indicate only one diagnosis, and dozens of different genes are suspected. The result of the genetic test is identified changes that disrupt the functioning of genes and lead to the development of disease symptoms - at least one change in dominant diseases and at least two in recessive diseases. Different changes lead to different consequences, to a smaller or larger disruption of gene function, that is, to milder or more severe symptoms of the disease. The techniques used for molecular genetic testing, as well as our knowledge of the genetics of rare diseases, are rapidly improving and advancing, and if a mutation cannot be found at a given time, there is a good chance that new methods will allow it to be found in the future.

Genetic testing to show: the presence of harmful mutations with established clinical significance; the presence of unclassified variants whose clinical significance has not yet been determined; the presence of benign polymorphisms.

Genetic tests significantly help in the development of targeted therapies that should contribute to the individualization of anticancer treatment. For example, testing for breast cancer gene 1 (BReast CAncer gene 1- BRCA 1) and breast cancer gene 2 (BReast CAncer gene 1- BRCA2) is used in practice because tumors in which these genes are identified are more sensitive to platinum derivatives. In practice, tests are also used for other genes present in other types of cancer.

Scientific research that will enable more precise diagnostics is in full swing, and knowledge about the connection between genes and disease symptoms is regularly described in the medical literature.

Research has shown that most cancers are not associated with high-risk genes, so for most of these patients available genetic testing is of no use. Patients with a high risk of developing a certain type of cancer, and according to family history, should undergo genetic testing, in addition to regular screening.

Conclusion: In the work of doctors of general/family medicine, genetic testing should be considered as part of the search for malignant diseases, in the screening of patients who have a high family risk of developing cancer, and in the screening of patients for targeted therapy.

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8. Dobili ste nalaze sistematskog pregleda, javite se svom liječniku

Praćenje pacijenata s uvećanim vrijednostima kolesterola

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Ključne riječi: kolesterol, prevencija, statini
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Uvod i cilj: U svakodnevnoj praksi sve se češće susrećemo sa „sistematskim pregledima“ široke populacije. Obvezni je dijagnostički dio laboratorijska analiza lipidograma. S tim nalazima pacijenti se javljaju obiteljskom liječniku, bilo da već imaju neku registriranu bolest vezanu uz hiperkolesterolemiju ili pripadajuće rizike, bilo da su upozoreni na to da su asimptomatski potencijalni bolesnici. Cilj je rada pomoći razriješiti dva osnovna problema u kliničkoj praksi: odlučiti kada uopće započeti terapiju i kako pratiti rezultate terapije.

Rasprava: Praćenje razine kolesterola uobičajena je klinička aktivnost. Indikacije za medikamentno liječenje značajno su se proširile u smjernicama i kliničkoj praksi, te su lijekovi koji utječu na snižavanje kolesterola postali izuzetno često korišteni, što je rezultiralo značajnim povećanjem troškova, a povećao se i broj pregleda zbog praćenja dislipidemija. Podatci iz velikih studija sugeriraju da se nakon tretmana prave dugoročne promjene u razini ukupnoga i LDL-kolesterola javljaju relativno sporo. Prosječno smanjenje razine kolesterola od 0,5 % godišnje jest ispod 10 %, ali treba uzeti u obzir i preporučene dijetetske mjere. Odluka o početku liječenja za snižavanje kolesterola donosi se individualno. Smjernice uzimaju u obzir trenutačne razine lipida, rizik od razvoja kardiovaskularnih incidenata, prisutnost ili odsutnost kardiovaskularnih bolesti i druge čimbenike rizika. Ciljne vrijednosti kolesterola razlikuju se s obzirom na kardiovaskularni rizik: vrlo visok < 1,8 mmol/L, visok < 2,2 mmol/L, umjeren < 2,6 mmol/L, nizak < 3,0 mmol/l. Pacijenti s razvijenom koronarnom bolesti, dijabetesom, stanjem nakon cerebrovaskularnog ili kardiovaskularnog udara moraju imati hipolipemik u stalnoj terapiji. Treba biti uporan u provođenju dijetetskih mjera. Oportuno uvođenje statina u terapiju može pacijentima dati lažnu sigurnost i uvjerenje kako sami ne moraju ništa učiniti. Nakon početka terapije statinima ponovno se provjerava LDL-kolesterol nakon 12 tjedana i po prilagodbi na terapiju hipolipemikom nakon 12 tjedana dok se ne postigne ciljna vrijednost. Po postizanju ciljne vrijednosti dovoljne su kontrole jedanput godišnje. Ako se LDL-kolesterol smanji ispod ciljne vrijednosti, može se smanjiti doza statina, a ako i dalje razina LDL-a bude ispod ciljne vrijednosti, statin se može ukinuti i u razdoblju od šest mjeseci treba kontrolirati dijetetske mjere. Obvezno je u praćenju liječenja kontrolirati jetrene enzime. Ako vrijednost ALT-a nije veća od trostruke referentne vrijednosti, terapija statinima se ne prekida, ali je nužna kontrola ALT-a za četiri do šest tjedana. Ako je vrijednost ALT-a tri puta viša od referentne vrijednosti, terapija statinima mora se prekinuti ili smanjiti doza uz kontrolu ALT-a nakon četiri do šest tjedana. Po normalizaciji vrijednosti ALT-a može se ponovno pažljivo razmotriti oprezno uvođenje statina.

Zaključak: Pri donošenju odluke o praćenju pacijenata s uvećanim vrijednostima kolesterola treba voditi računa o komorbiditetima, ukupnom kardiovaskularnom riziku, mogućim sekundarnim uzrocima i mogućoj obiteljskoj hiperkolesterolemiji, koja je mnogo češća nego što registriramo. Odluka o trenutku kada su iscrpljene dijetetske mjere i kada je potrebno započeti medikamentnu terapiju izuzetno je složena u većini slučajeva, jer uglavnom bilježimo povećanje vrijednosti do 20 % iznad referentnih. Liječnik obiteljske medicine ima veliku odgovornost za sustav edukacije, laboratorijskog praćenja, uvođenja medikamentne terapije i valorizacije svakog čimbenika koji može utjecati na vrijednosti kolesterola.

Monitoring patients with elevated cholesterol

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ntroduction and aim: In everyday practice, we increasingly encounter "systematic reviews" of a wide population. The mandatory diagnostic part is the laboratory analysis of lipidogram. With these findings, patients report to their family physician, whether they already have a registered disease related to hypercholesterolemia or associated risks, or whether they have been warned that they are asymptomatic potential patients. The aim of this paper is to help to solve two basic problems in clinical practice: firstly, deciding when to start therapy, and secondly, how to monitor the results of the therapy.

Discussion: Monitoring cholesterol levels is a common clinical activity. Indications for drug treatment have significantly expanded in guidelines and clinical practice, and drugs that affect cholesterol lowering have become extremely frequently used, which has resulted in a significant increase in costs, while the number of examinations has also increased, due to the monitoring of dyslipidemia. Data from large studies suggest that after treatment, real long-term changes in total and LDL cholesterol levels progress relatively slowly. An average reduction in cholesterol levels of 0.5% per year is below 10%, but the recommended dietary measures should also be taken into account. The decision to start cholesterol-lowering treatment is made individually. The guidelines take into account current lipid levels, the risk of developing cardiovascular events, the presence or absence of cardiovascular disease and other risk factors. Cholesterol target values differ according to the cardiovascular risk: very high: <1.8 mmol/L, high: <2.2 mmol/L, moderate: <2.6 mmol/L, low: <3.0 mmol/l. Patients with developed coronary disease, diabetes, conditions after a cerebrovascular or cardiovascular attack must have a hypolipemic agent in constant therapy. It is necessary to be persistent in implementing dietary measures. Timely introduction of statins into therapy can give patients false security and the belief that they do not have to do anything themselves. After starting statin therapy, LDL cholesterol is rechecked after 12 weeks and after adjustment to hypolipemic therapy after 12 weeks until the target value is reached. Once it is reached, controls once a year are sufficient. If the LDL cholesterol is reduced below the target value, the statin dose can be reduced, and if the LDL level is still below the target value, statin can be discontinued and dietary measures controlled for a period of six months. It is mandatory to control liver enzymes during treatment. If the ALT value is not higher than three times the reference value, statin therapy is not interrupted, but ALT control is necessary for four to six weeks. If the ALT value is three times higher than the reference value, statin therapy must be stopped or the dose reduced with ALT control after four to six weeks. After the normalization of the ALT value, a cautious introduction of statins can be reconsidered.

Conclusion: Making a decision on monitoring patients with increased cholesterol values, one should take into account comorbidities, total cardiovascular risk, possible secondary causes and possible familial hypercholesterolemia, which is much more common than we register. The decision on the moment when the dietary measures have been exhausted and it is necessary to start drug therapy is extremely complex in most cases, because we generally record an increase in values up to 20% above the reference values. The family physician has a great responsibility for the system of education, laboratory monitoring, introduction of drug therapy and valorization of every factor that can affect cholesterol values.

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Dobili smo patološki ultrazvučni nalaz na štitnoj žlijezdi, što dalje?

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Ključne riječi: štitnjača, ultrazvuk, fokalna promjena, difuzna promjena, dijagnoza
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Uvod s ciljem: Prema smjernicama Hrvatskog društva za štitnjaču ne preporučuje se rutinski probir opće populacije ultrazvukom štitnjače ni ultrazvučni pregledi štitnjače u sistematskim pregledima. Ipak, pacijenti se sve češće javljaju liječniku obiteljske medicine (LOM) s UZV nalazom štitnjače urađenim bez jasne medicinske indikacije. S obzirom na to da je UZV štitnjače jeftina, neinvazivna, lako izvodiva i za pacijente sigurna metoda pregleda, koja se izvodi brzo, često se obavlja „usput“ i radi financijske koristi. UZV-om štitnjače često se otkriju fokalne, pojedinačne ili multiple, i/ili difuzne promjene u parenhimu. Takvi nalazi kod LOM-a kojem se pacijenti javljaju mogu izazvati dilemu što dalje poduzeti, pogotovo uzimajući u obzir činjenicu da se u posljednje vrijeme bilježi porast obolijevanja štitnjače, uključujući i maligne bolesti. Cilj je rada upozoriti na (zlo)upotrebu UZV-a štitnjače bez medicinske indikacije i na nužnost kvartarne prevencije od strane LOM-a. U radu su dane smjernice LOM-u za tretman pacijenta bez simptoma oboljenja sa strukturnim i/ili anatomskim, fokalnim i/ili difuznim promjenama na štitnjači nađenima „usputnim“ UZV pregledom, a da pri tome pacijenta poštede nepotrebnih pretraga.

Rasprava: Posrijedi su najčešće fokalne promjene s benignim ultrazvučnim karakteristikama, kao što su ciste i/ili druge solitarne ili multiple fokalne promjene. Čvorovi u štitnjači relativno su česta pojava, a njihova učestalost raste sa životnom dobi, posebno u žena, tako da svaka druga žena starija od 50 godina ima barem jedan ili više čvorova u štitnjači. Nisu rijetke ni difuzne promjene parenhima štitnjače koje se evidentiraju ultrazvučnim pregledom. Prvim UZV pregledom bitno je odrediti lokaciju, veličinu, broj, ehogenost te eventualne maligne ili benigne karakteristike fokalnih promjena. Dalja dijagnostička obrada ovisi o karakteristikama nađenih promjena, o eventualnoj simptomatologiji te osobnoj i obiteljskoj anamnezi. Manje benigne cistične promjene ne zahtijevaju nikakvu dodatnu dijagnostičku obradu. Izuzetno, ako se radi o većim ehogenim čvorovima malignih karakteristika, potrebna je dalja obrada pod kontrolom nadležnih specijalista (hormonalni status štitnjače, scintigrafija, biopsija i citološka obrada). Ako UZV pokaže difuzne promjene parenhima štitnjače, s fokalnim promjenama ili bez njih, potrebno je pored hormonalnog statusa odrediti i razinu anti-Tg (tireoglobulinskih antitijela) i anti-TPO (antitijela protiv tiroidne peroksidaze) radi dijagnoze eventualne autoimune bolesti štitnjače (Hashimotov tireoiditis).

Zaključak: Kada LOM dobije patološki UZV nalaz štitnjače, dalje postupa ovisno o vrsti nalaza te ostalim čimbenicima rizika posebnima za svakog pacijenta, a u skladu sa smjernicama Hrvatskog društva za štitnjaču. Važno je prepoznati stanja koja zahtijevaju dalju dijagnostičku obradu i razlikovati ih od stanja koja to ne zahtijevaju. Najvažnija uloga LOM-a jest u kvartarnoj prevenciji i sprječavanju izlaganja pacijenata nepotrebnom UZV pregledu štitnjače.

We received a pathological ultrasound finding on the thyroid gland, what next?

Keywords: Thyroid gland, ultrasound, focal change, diffuse change, diagnosis
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Introduction with aim: According to the guidelines of the Croatian Thyroid Society, routine screening of the general population with thyroid ultrasound is not recommended, nor are thyroid ultrasound examinations included in physical checkups. However, more and more often patients present to the family physician (FP) with a thyroid ultrasound scan performed without a clear medical indication. Considering that thyroid ultrasound is a cheap, non-invasive, easy-to-perform, and safe examination method for patients, which is performed quickly, it is often done "by the way" and for a financial benefit. Ultrasound of the thyroid often reveals focal, single or multiple, and/or diffuse changes in the parenchyma. Such findings in patients presented to the FP can cause a dilemma as to what to do next, especially taking into account the fact that recently there has been an increase in thyroid diseases, including malignant diseases.

This paper aims to point out the (mis)use of thyroid ultrasound without medical indication and the necessary quaternary prevention by the FP. The paper will provide guidelines for the treatment of the patient without symptoms of the disease with structural and/or anatomical, focal, and/or diffuse changes in the thyroid found by an "incidental" ultrasound examination while sparing the patient from unnecessary examinations.

Discussion: The most common are focal changes with benign ultrasound characteristics, such as subsites and/or other solitary or multiple focal changes. Thyroid nodules are relatively common, and their frequency increases with age, especially in women. Every other woman over 50 years of age has at least one or more thyroid nodules. Diffuse changes in the thyroid parenchyma, recorded by ultrasound examinations are not rare either. In the first ultrasound examination, it is important to determine the location, size, number, echogenicity, and possible malignant or benign characteristics of focal changes. Further diagnostic procedures depend on the characteristics of these changes, possible symptoms, and personal and family history. Minor, benign, cystic changes do not require any additional diagnostic procedures. Exceptionally, in case of larger, echogenic nodules with malignant characteristics, further analyses are required under the control of competent specialists (hormonal status of the thyroid, scintigraphy, biopsy, and cytological analyses). If the ultrasound shows diffuse changes in the thyroid parenchyma, with or without focal changes, in addition to the hormonal status, it is necessary to determine the level of Tg AT (thyroglobulin antibodies) and TPO At (antibodies against thyroid peroxidase) to diagnose possible autoimmune thyroid disease (Hashimoto's thyroiditis).

Conclusion: When FPs receive pathological ultrasound findings of the thyroid gland, they proceed depending on the type of findings and other risk factors of each patient, and by the guidelines of the Croatian Thyroid Association. It is important to distinguish conditions that require further diagnostic procedures from those which do not. The most important role of the FP is quaternary prevention and in preventing the exposure of patients to unnecessary thyroid ultrasound examinations.

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Propisivanje antibiotika prve linije u akutnom cistitisu: učinak edukacijske intervencije među obiteljskim liječnicima u Hrvatskoj

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Ključne riječi: antimikrobna terapija, mokraćne infekcije, primarna zdravstvena zaštita, edukacijska intervencija
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Uvod s ciljem: Porast upotrebe antibiotika prve linije s niskim potencijalom za indukciju rezistentnih sojeva uropatogena ima velik značaj u prevenciji daljeg širenja rezistencije. Cilj je rada kvantitativna ocjena učinka jednostavne edukacijske intervencije na propisivanje antibiotika prve linije u akutnom cistitisu u uzorku liječnika obiteljske medicine.

Metode: Istraživanje je provedeno prema modelu „prije-poslije“, u trajanju od osam mjeseci. Podatci o broju recepata propisanih za antibiotike za mokraćne infekcije prikupljani su četiri mjeseca prije edukacijske intervencije (1. 3. – 30. 6. 2019.) te četiri mjeseca nakon nje (1. 7. – 31. 10. 2019.). Edukacijski materijal sastojao se iz dva dijela. Prvi dio činio je pregledni članak s ključnim argumentima o primjeni antibiotika prve linije te o pouzdanosti anamneze i jednostavnih testova u razlučivanju nekompliciranog cistitisa od kompliciranih urinarnih infekcija. U drugom dijelu prikazano je 17 slučajeva iz svakodnevne prakse, s komentarima. Članak je distribuiran u posljednjem tjednu predintervencijskog razdoblja.

Uzorak je uključivao 42 liječnika obiteljske medicine iz svih dijelova Hrvatske. Agregirani podatci o posjetima liječniku, dijagnozama i broju recepata prikupljani su iz mjesečnih izvješća u elektroničkim zapisima svakog od liječnika. Statistička značajnost porasta propisivanja antibiotika prve linije nakon edukacije testirana je Wilcoxonovim testom ranga i predznaka.

Rezultati: Ukupno je propisan 3581 recept: 1717 recepata prije i 1964 poslije intervencije. Ukupan broj recepata porastao je za 8,5 %. Propisivanje antibiotika prve linije poraslo je za 21,2 % (837 recepata prije edukacije, 1015 poslije), fluorokinolona se smanjilo za 6,6 %, dok je propisivanje beta-laktamskih antibiotika bilo bez promjene. Nitrofurantoin je bio najpropisivaniji antibiotik nakon intervencije, s porastom od 33,3 % (477 recepata prije edukacije, 636 poslije). Udio žena kojima je propisan antibiotik prve linije nije dosegao prihvatljiv opseg (80 – 100 %) prema indikatorima kvalitete propisivanja europskog projekta praćenja potrošnje antibiotika (European Surveillance of Antimicrobial Consumption – ESAC). Udio fluorokinolona (17,9 %) bio je znatno iznad prihvatljivog opsega (5 – 10 %).

Zaključak: Jednostavna edukacijska intervencija pokazala se korisnom metodom za brzo usvajanje boljeg obrasca propisivanja. Znatan porast u propisivanju nitrofurantoina od posebnog je značaja zbog njegove podjednake učinkovitosti prema osjetljivim i prema višestruko rezistentnim urinarnim patogenima.

Prescribing first-line antibiotics in acute cystitis: effect of educational intervention among general practitioners in Croatia

Keywords: antimicrobial therapy urinary infections, primary health care, educational intervention
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Introduction and aim The increase in the use of first-line antibiotics with a low potential for the induction of resistant strains of uropathogens is of great importance in preventing the further spread of resistance.

The aim of this work was to assess the effectiveness of a brief education intervention on prescribing the first-line antibiotics in acute cystitis.

Methods This before-after study was conducted over a period of 8 months. We collected prescriptions of antibiotics related to urinary tract infections (UTI) in the four months before the educational intervention (from 1st March to 30th June 2019) and in the four months after it (from 1st July to 31st October 2019). The educational material consisted of two parts. The first part was a review article with information on the main rationale for choosing the first-line antibiotics and the reliability of medical history and simple tests in distinguishing uncomplicated and complicated cases. In the second part 17 cases from routine practice were described together with comments. The article was distributed in the last week of the pre-intervention period.

The sample included 42 general practitioners from all parts of Croatia. Aggregate data on office visits, diagnoses, and issued prescriptions were collected from each practice's electronic medical records (EMRs), based on monthly reports. Statistical significance of an increase of the first-line antibiotics was tested by Wilcoxon signed rank test.

Results A total of 3581 prescriptions were issued: 1717 before and 1864 after the intervention. The total number of prescriptions increased by 8.5%. The use of the first-line antibiotics increased by 21.2% (837 prescriptions before the education, 1015 prescriptions after), the use of fluoroquinolones decreased by 6.6%, while the use of beta-lactams remained unchanged. After the intervention, nitrofurantoin was the most prescribed first-line antibiotic with an increase of 33,3% (477 prescriptions before the education, 636 prescriptions after). The proportion of women who were prescribed first-line antibiotic did not reach the acceptable range (80-100%) according to the European Surveillance of Antimicrobial Consumption (ESAC) quality indicators. The proportion of fluoroquinolones (17.9%) use was well above the acceptable range (0-5%).

Conclusion A brief educational intervention proved to be a useful method in adopting better prescribing habits. A considerable increase in the use of nitrofurantoin due to its reliable efficacy against multidrug-resistant urinary pathogens is of particular importance.

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Masna jetra – odraz životnog stila ili nešto više

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Ključne riječi: nealkoholna bolest masne jetre, obiteljski liječnik, inzulinska rezistencija, hiperkolesterolemija
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Uvod s ciljem: Nealkoholna bolest masne jetre (engl. *nonalcoholic fatty liver disease*, NAFLD) najčešća je bolest jetre u razvijenim zemljama koja zahvaća između 17 % i 46 % odraslih osoba. Učestalost NAFLD-a u stalnom je porastu i prati porast učestalosti metaboličkog sindroma, prisutnost kojega ujedno povećava rizik od uznapredovale bolesti jetre, odnosno nealkoholnog steatohepatitisa (NASH) i ciroze. Probir na NAFLD potrebno je raditi bolesnicima s dijabetesom tipa 2 ili osobama s dva ili više rizičnih čimbenika u sklopu metaboličkog sindroma. Probir se izvodi neinvazivnim laboratorijskim i slikovnim metodama za otkrivanje fibroze. Obradom je potrebno isključiti postojanje drugih uzroka oštećenja jetre. Liječnik obiteljske medicine u svakodnevnoj se praksi susreće sa sve više bolesnika s nalazom ultrazvuka koji opisuje promjene u smislu steatoze jetre te s dvojbom što treba poduzeti kod takva nalaza. Stoga je cilj rada prikazati smjernice za dijagnostiku, liječenje i dinamiku praćenja ovakvih bolesnika.

Rasprava: Epidemiološke studije potvrđuju veću učestalost NAFLD-a u rizičnim skupinama. Ta je bolest prisutna u 50 – 60 % ljudi s prekomjernom tjelesnom težinom i u 93 % pretilih osoba, dok u bolesnika s dijabetesom tipa 2 iznosi oko 55 % na svjetskoj razini. Oko 7 % osoba normalne tjelesne mase ima NAFLD. Češće je to slučaj kod žena, osoba mlađe životne dobi, u osoba s inzulinskom rezistencijom te hiperkolesterolemijom kod kojih su jetreni enzimi uredni. NAFLD je u pravilu češći kod muškaraca. Kad jednom nastane, pokazuje bržu progresiju u žena, osobito u dobi iznad 50 godina. Bolest je većinom asimptomatska, dok rijetki bolesnici navode tegobe kao što su umor, slabost ili nelagoda ispod desnog rebrenog luka. Najčešće se otkriva slučajnim nalazom povišenih jetrenih enzima u laboratorijskim nalazima ili slučajnim nalazom steatoze jetre slikovnim metodama, odnosno ciljanim probirom rizičnih osoba s metaboličkim sindromom. Budući da za NAFLD zasad još ne postoje specifični serološki biljezi koji mogu potvrditi dijagnozu, za postavljanje dijagnoze nužno je utvrditi postojanje metaboličkog sindroma te dokazati ili isključiti istodobnu prisutnost i drugih kroničnih bolesti jetre koje zahtijevaju drugo specifično liječenje.

Zaključak: Obradom bolesnika s NAFLD-om potrebno je isključiti postojanje drugih uzroka oštećenja jetre te utvrditi stadij fibroze kao najvažnijeg čimbenika u prognozi bolesti.

Bolesnici s početnim stadijima fibroze nastavljaju se pratiti na razini primarne zdravstvene zaštite uz liječenje metaboličkih rizičnih čimbenika, dijetetske mjere i pojačanu tjelesnu aktivnost. Bolesnike sa značajnom fibrozom preporučuje se uputiti gastroenterologu/hepatologu radi daljnjeg liječenja, praćenja te prepoznavanja i zbrinjavanja komplikacija bolesti. Osnova liječenja bolesnika s nealkoholnom bolesti masne jetre jest sveobuhvatna promjena životnih navika, pri čemu bi obiteljski liječnik trebao imati vodeću ulogu.

Fatty liver – a reflection of lifestyle or something more

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Key words: Non-alcoholic Fatty Liver Disease; Family Physicians ; Insulin Resistance; Hypercholesterolemia
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Introduction and aim: Non-alcoholic fatty liver disease (NAFLD) is the most common liver disease in developed countries, affecting between 17% and 46% of adults. The frequency prevalence of NAFLD is constantly increasing and is accompanied by an increase in the prevalencefrequency of metabolic syndrome, the presence of which also increases the risk of advanced liver disease, i.e. non-alcoholic steatohepatitis (NASH) and cirrhosis. Screening for NAFLD should be done in patients with type 2 diabetes or people with two or more risk factors as part of the metabolic syndrome. Screening is performed using non-invasive laboratory and imaging methods to detect fibrosis. During treatment, it is necessary to rule out the existence of other causes of liver damage. In his their daily practice, a family physicians encounters more patients with ultrasound findings that describe changes in terms of liver steatosis and are uncertain doubts about what to do with such a finding. The aim of theis paper is to present guidelines for diagnosisng, treatment and follow-up of such patients.

Discussion: Epidemiological studies confirm a higher frequency prevalence of NAFLD in risk groups. It is present in 50%-60% of overweight people and in 93% of obese people, while in patients with type 2 diabetes it is around 55% worldwide. About 7% of people of normal body weight have NAFLD. This is more often the case in women, people of a younger age, in people with insulin resistance and hypercholesterolemia whose liver enzymes are normal. As a rule, NAFLD is more common in men. Once it occurs, it shows a faster progression in women, especially at the age of over 50. The disease is mostly asymptomatic, while rare patients report complaints such as fatigue, weakness or discomfort under the right rib cage. It is most often detected by the accidental finding of elevated liver enzymes in laboratory findings or by the accidental finding of liver steatosis by imaging methods, that is, by targeted screening of at-risk individuals with metabolic syndrome. Since there are still no specific serological markers for NAFLD that can confirm the diagnosis, to establish the diagnosis it is necessary to establish the existence of the metabolic syndrome and to prove or rule out the simultaneous presence of other chronic liver diseases that require other specific treatment.

Conclusion: When treating patients with NAFLD, it is necessary to exclude the existence of other causes of liver damage and to determine the stage of fibrosis as the most important factor in the prognosis of the disease. Patients with initial stages of fibrosis continue to be monitored at the level of primary health care with treatment of metabolic risk factors, dietary measures and increased physical activity. Patients with significant fibrosis are recommended to be referred to a gastroenterologist/ hepatologist for further treatment, monitoring, and recognition and management of disease complications. The basis of treatment for patients with non-alcoholic fatty liver disease is a comprehensive change in lifestyle habits, in which the family doctor physician should play a leading role.

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Pristup pacijentu s povišenim vrijednostima glikemije

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Ključne riječi: dijabetes melitus tipa 2, obiteljska medicina, mogućnosti probira, pristup bolesniku nakon dijagnoze
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Uvod s ciljem: Unatoč velikoj mogućnosti prevencije, ranom otkrivanju i značaju pravilnog vođenja dijabetesa melitusa tipa 2 (DMT2) u obiteljskoj medicini (OM), većina zdravstvenih sustava na području jugoistočne Europe i dalje sistematskim pregledima (prije svega radno sposobne populacije) očekuje pravodobno postavljanje dijagnoze DM-a tipa 2. U suvremenoj strategiji prevencije obolijevanja preporučuju se dobno specifične preventivne intervencije. Prema recentnim smjernicama umjesto probira opće populacije preporučen je probir osoba koje imaju povišen rizik za razvoj DM-a. Zapravo, najnovije preporuke Američke udruge za dijabetes (engl. *American Diabetes Association* – ADA), objavljene 2023. godine, definiraju da se probir za dijabetes uvjetno zdravih osoba počne u dobi od 35 godina. Cilj ovog rada bio je uputiti na mogućnosti probira i na kriterije za otkrivanje DM-a tipa 2 u obiteljskoj medicini te dati upute o pristupu pacijentu nakon postavljanja dijagnoze.

Rasprava: U OM-u preporučeno je koristiti se Finskim bodovnim upitnikom procjene rizika (engl. *Finnish Diabetes Risk Score* – FINDRISC) koji predviđa vjerojatnost razvoja DM-a tipa 2 u sljedećih deset godina, čime se omogućuje prepoznavanje pacijenata s visokim rizikom nedijagnosticiranog dijabetesa. Osobe s visokim rizikom trebaju se uputiti na mjerenje glukoze u plazmi (GUK) natašte ili koncentracije tromjesečnog glikoliziranog hemoglobina (HbA1c) kako bi se potvrdila ili isključila dijagnoza dijabetesa. Ako su pak pacijenti došli s povišenim vrijednostima GUK-a dobivenoga na sistematskom pregledu, trebaju ga uvijek provjeriti ponovnim određivanjem nakon sedam dana uz strogo poštovanje preporuke o potrebi 8-satnog gladovanja prije laboratorijskog testa. Prema ADA-i, sljedeći su kriteriji za probir na dijabetes ili predijabetes u asimptomatskih odraslih osoba: prekomjerna tjelesna težina ili pretilost (BMI ≥ 25 kg/m^2) s jednim ili više čimbenika rizika (rođak u prvom stupnju s dijabetesom, visokorizična rasa/etnička pripadnost, povijest kardiovaskularnih bolesti, hipertenzija ≥ 140/90 mmHg ili terapija hipertenzije, razina HDL-kolesterola 0,90 mmol/L i/ili razina triglicerida 2,82 mmol/L; žene sa sindromom policističnih jajnika; tjelesna neaktivnost; druga klinička stanja povezana s inzulinskom rezistencijom; bolesnici s predijabetesom (HbA1c ≥ 5,7 %), oštećena tolerancija glukoze ili smanjena razina glukoze natašte, koji se trebaju testirati jednom godišnje; žene kojima je dijagnosticiran gestacijski dijabetes, doživotno testiranje najmanje svake tri godine; za sve ostale pacijente testiranje bi trebalo započeti u dobi od 35 godina, a ako su rezultati normalni, testiranje treba ponoviti nakon najmanje tri godine. Dijagnoza DMT2 postavlja se ako je glukoza natašte veća ili jednaka 7,0 mmol/L (gladovanje duže od 8 sati); glukoza u krvi veća ili jednaka 11,1 mmol/L nakon 2 sata od uzimanja 75 gr oralne glukoze (OGTT); glukoza u krvi nasumično veća ili jednaka 11,1 mmol/L ili HbA1c veći ili jednak 6,5 %. Prema novim smjernicama Europskoga kardiološkog društva (engl. *European Society of Cardiology* – ESC) iz 2021. bolesnici s DM-om kategoriziraju se kao osobe u vrlo visokom riziku ako uz DM imaju utvrđenu arteriosklerotsku kardiovaskularnu bolest, ako imaju oštećenje ciljnih organa, ako imaju tri ili više velikih rizičnih čimbenika ili imaju DMT1 koji traje dulje od 20 godina. Za sve pacijente od postavljanja dijagnoze potrebno je učiniti procjenu kardiovaskularnog rizika te na osnovi individualnog tretmana postaviti ciljne vrijednosti glikemija, lipida i sistoličkog krvnog tlaka.

Zaključak: Sukladno stručnim smjernicama oportunistički probir zdravih osoba, a posebice visokorizičnih pacijenata, omogućuje rano otkrivanje DM-a tipa 2. Rano otkrivanje DM-a tipa 2 osigurava pravodobno započinjanje individualnog tretmana svih rizičnih čimbenika u obiteljskoj medicini koji će dovesti do poboljšane kontrole glikemije i posljedično do smanjenja ili odgađanja nastanka komplikacija.

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Approach to the patient with elevated glycemic values

Keywords: type 2 diabetes mellitus, family medicine, screening possibilities, approach the patient after diagnosis
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Introduction with aim Despite ample possibilities of prevention and early detection and despite the importance of a proper management of type 2 diabetes mellitus (DMT2) in family medicine (FM), most health systems in the region of Southeast Europe still expect timely diagnosis of DMT2 through systematic check-ups (primarily of the working-age population). In the modern disease prevention strategy, age-specific preventive interventions are recommended. According to recent guidelines, instead of screening the general population, it is recommended that people who have an increased risk of developing DM are screened. In fact, the latest recommendations of the American Diabetes Association (ADA) published in 2023 define that screening for diabetes in conditionally healthy people should begin at the age of 35. **Aim** of this paper was to point out screening possibilities, the criteria for detecting DMT2 in FM, and to suggest an approach to patient treatment after diagnosis.

Discussion Finnish Diabetes Risk Score (FINDRISC) can be used in family medicine. It predicts the probability of developing DMT2 in the next 10 years, thus enabling the identification of patients at high risk of undiagnosed diabetes. Individuals at high risk should be referred for fasting plasma glucose (FPG) or 3-month glycated hemoglobin (HbA1c) to confirm or exclude the diagnosis of diabetes. If patients come with increased FPG values obtained by a check-up, they should always be re-tested after seven days with strict adherence to the recommendation for 8-hour fasting before the laboratory test. According to the ADA, the screening criteria for diabetes or prediabetes in asymptomatic adults are: being overweight or obese (BMI ≥25 kg/m2) with one or more risk factors (first-degree relative with diabetes, high-risk race/ethnicity, history of cardiovascular disease, hypertension ≥140/90 mmHg or hypertension therapy, HDL cholesterol level < 0.90 mmol/L and/or triglyceride level >2.82 mmol/L; women with polycystic ovary syndrome; physical inactivity; other clinical conditions associated with insulin resistance; patients with prediabetes (HbA1c ≥5.7%), impaired glucose tolerance or reduced fasting glucose who should be tested once a year; women diagnosed with gestational diabetes for life testing at least every 3 years; for all other patients, testing should begin at age 35, and if results are normal, testing should be repeated after at least 3 years. DMT2 is diagnosed if: fasting glucose is greater than or equal to 7.0 mmol/L (fasting for more than 8 hours); blood glucose greater than or equal to 11.1 mmol/L after 2 hours of taking 75 g of oral glucose (OGTT); blood glucose randomly greater than or equal to 11.1 mmol/L or HbA1c greater than or equal to 6.5%. According to the new guidelines of the European Society of Cardiology (ESC) from 2021, patients with DM are categorized as very high risk if, in addition to DM, they have established arteriosclerotic cardiovascular disease, have damaged target organs, three or more major risk factors, or have T1DM for more than 20 years. For all patients, it is necessary to perform a cardiovascular risk assessment after the diagnosis has been set and, on the basis of their individual treatment plan, set target values of glycemia, lipids and systolic blood pressure.

Conclusion In accordance with professional guidelines, opportunistic screening of healthy individuals, especially high-risk patients, enables early detection of DMT2. Early detection of DMT2 ensures timely initiation of individual treatment including all risk factors in family medicine, which will lead to an improvement of glycemic control and consequent reduction or delay of complications.

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9. Kašljete i nemate dovoljno zraka? Javite se svom obiteljskom liječniku

Kašalj kao simptom u ordinaciji liječnika obiteljske medicine

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Ključne riječi: kašalj, LOM, dijagnoza, uzroci, liječenje
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Uvod s ciljem: Kašalj je vrlo čest razlog dolaska u ordinaciju liječnika obiteljske medicine (LOM). Uzrokovan je brojnim i raznolikim bolestima i stanjima, a prema trajanju dijeli se na akutni (do tri tjedna), subakutni (od tri do osam tjedana) i kronični (duže od osam tjedana). Cilj ovog rada jest prikazati pristup kašlju iz perspektive LOM-a.

Rasprava: Procjena kašlja uključuje pitanja o pušačkom statusu, izloženosti štetnim tvarima iz okoliša i/ili na radnom mjestu i lijekovima koje bolesnik uzima. Crvene zastavice su vrućica, gubitak kilograma, hemoptiza, promuklost, noćna i/ili dispneja u mirovanju, periferni edemi uz dobitak na težini, ponavljajuće upale pluća, pušači stariji od 45 godina s novonastalim kašljem, promjenom u karakteru kašlja ili promjenom glasa, pušači u dobi od 55 do 80 godina s *pack year* 30, bivši pušači u dobi od 55 do 80 godina koji su prestali pušiti unatrag 15 godina. Potrebno je pitati za poteškoće pri gutanju krute hrane ili tekućine, a također je poželjno da pacijent svojim riječima opiše karakter kašlja, vrijeme javljanja, prisutnost ili odsutnost sputuma. Uporan i jak kašalj može značajno narušiti kvalitetu života i uzrokovati povraćanje, bolove u mišićima, prijelom rebara, urinarnu inkontinenciju, umor, sinkopu i depresiju. RTG prsnog koša preporučuje se u određenim indikacijama kod akutnog kašlja, a kod kroničnog je obvezan. Akutni kašalj u odraslih uzrokuju životno ugrožavajuća stanja poput plućne embolije, akutnog plućnog edema, egzacerbacije astme ili kronične opstruktivne plućne bolesti (KOPB) te akutne infekcije gornjih i donjih dišnih puteva. Najčešći uzroci kroničnog kašlja u odraslih osoba jesu sindrom kašlja porijeklom iz gornjih dišnih puteva (engl. *upper airway cough syndrome* – UACS), astma, gastroezofagealna (GERB) i/ili laringofaringealna refluksna bolest i KOPB te upotreba ACE-inhibitora i postinfektivni kašalj. UACS je najčešći uzrok kroničnog kašlja te uključuje kronični rinosinuitis, alergijski rinitis i nealergijski rinitis. Rinoreja, začepljenost nosa, kihanje, svrbež nosa, pročišćavanje grla i postnazalna drenaža upućuju na dijagnozu, ali odsutnost tih simptoma ne isključuje UACS. Pregledom se nalaze otečene nosne školjke, postnazalna drenaža te hiperemija i hipertrofija tkiva stražnjeg zida ždrijela (engl. *cobblestone throat*). Liječenje uključuje dekongestive, antihistaminike, toaletu nosa fiziološkom otopinom i intranazalne kortikosteroide. U astmi se uz kašalj javlja kratki dah, piskanje i stezanje u prsima, ali kašalj može biti i jedina manifestacija astme. Smirivanje kašlja nakon započetog specifičnog liječenja ima dijagnostičko značenje. Žgaravica, regurgitacija, kiseli okus u ustima, promuklost i osjećaj knedle u grlu upućuju na to da su GERB i/ili laringofaringealni refluks uzroci kroničnog kašlja te se preporučuje liječenje IPP-om tijekom najmanje osam tjedana uz higijensko-dijetetske mjere. Zaduha, kašalj i/ili iskašljaj te gnojni sputum simptomi su egzacerbacije KOPB-a. Suhi kašalj povezan s ACE-inhibitorima češći je u žena. Može se javiti u roku od nekoliko sati do mjeseci od početka uzimanja lijeka, a smiruje se u roku od jednog tjedna do tri mjeseca nakon prestanka uzimanja lijeka. Postinfektivni kašalj najčešće zaostaje nakon akutne infekcije gornjih dišnih puteva, traje duže od tri pa do osam tjedana, spontano prolazi, ali ponekad može potrajati čak tri ili više mjeseci. Dijagnoza psihogenog ili habitualnog kašlja postavlja se isključivanjem ostalih uzroka. Najčešći su okidači promjena okolišne temperature, duboki udah, smijanje, izlaganje dimu cigarete ili parfemu.

Zaključak: LOM svojim holističkim pristupom može postaviti radnu dijagnozu, započeti liječenje i usmjeriti dijagnostiku najčešćih uzroka kašlja. Pacijente s nerazjašnjenim kroničnim kašljem treba uputiti na pregled pulmologu ili otorinolaringologu.

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Cough as a symptom in the family physician's office

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Introduction. Cough is a very common reason for visiting a family physician's office. With regard to duration, cough can be divided into acute (up to three weeks), subacute (from three to eight weeks) and chronic (more than eight weeks). The aim of this paper is to present the approach to cough from the family physician's perspective.

Discussion. The evaluation of cough begins with the patient's history, which must include questions about their smoking status, exposure to harmful substances from the environment and/or at the workplace and medications the patient is taking. One should always consider red flags: fever, weight loss, hemoptysis, hoarseness, nocturnal and/or dyspnea at rest, peripheral edema with weight gain, recurrent pneumonia, smokers older than 45 years with new-onset cough, change in the character of the cough or voice change, smokers aged 55 to 80 with pack year 30, ex-smokers aged 55 to 80 who stopped smoking 15 years ago. It is necessary to ask about difficulties in swallowing solid food or liquids, and it is also desirable that the patient describes in their own words the character of cough, the time of onset, the presence or absence of sputum. Persistent and excessive cough can significantly impair quality of life and cause problems such as vomiting, muscle pain, rib fractures, urinary incontinence, fatigue, syncope, and depression. Chest X-ray is recommended in certain indications for acute cough, and mandatory for chronic cough. Causes of acute cough in adults can be life-threatening conditions such as pulmonary embolism, acute pulmonary edema, exacerbation of asthma or chronic obstructive pulmonary disease (COPD) and acute infections of the upper and lower respiratory tract (common cold, acute bronchitis and pneumonia). The most common causes of chronic cough in adults are: upper airway cough syndrome (UACS), asthma, gastroesophageal (GERD) and/or laryngopharyngeal reflux disease and COPD, the use of ACE inhibitors and post-infectious cough. UACS is the most common cause of chronic cough and includes chronic rhinosinusitis, allergic rhinitis and nonallergic rhinitis. Rhinorrhea, nasal congestion, sneezing, nasal itching, throat clearing, and postnasal drainage suggest the diagnosis, but the absence of these symptoms does not rule out UACS. In the physical status, we can find swollen nasal shells, postnasal drainage, and hyperemia and hypertrophy of the tissue of the back wall of the pharynx (cobblestone throat). Treatment includes decongestants, antihistamines, saline nasal irrigation, and intranasal corticosteroids. Clinical improvement should occur within days to weeks of starting treatment. Asthma should be suspected if cough is accompanied by shortness of breath, wheezing and tightness in the chest, but cough can be the only manifestation of asthma. Calming of the cough after starting specific treatment has diagnostic significance. Symptoms should resolve within one to two weeks of starting treatment. Complaints such as heartburn, regurgitation, sour taste in the mouth, hoarseness and the feeling of a lump in the throat point to GERD and/or laryngopharyngeal reflux as causes of chronic cough. In such cases it is recommended to carry out PPI therapy for at least eight weeks with hygienic dietary measures. Shortness of breath, cough and/or expectoration and the production of purulent sputum are the symptoms of a COPD exacerbation. Dry cough associated with ACE inhibitors is more common in women. It can occur within a few hours to months after starting of the medicine. Once the medication is stopped, the cough should subside within one week to three months. Post-infectious cough usually lingers after an acute infection of the upper respiratory tract, lasts longer than three and up to eight weeks, goes away spontaneously, but sometimes can last even three or more months. The diagnosis of psychogenic or habitual cough is made by excluding other causes. The most common triggers include change in ambient temperature, a deep breath, laughing, exposure to cigarette smoke or perfume.

Conclusion. Cough appears as part of very different diseases and conditions, from chronic to life-threatening. With its holistic approach, family physician can establish a working diagnosis, start treatment and guide the diagnosis of the most common causes of cough. Patients with an unexplained chronic cough should be referred to a pulmonologist or otorhinolaryngologist.

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Rana kronična opstruktivna plućna bolest

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Uvod s ciljem: Kronična opstruktivna plućna bolest jedan je od najvećih globalnih zdravstvenih problema zbog visoke prevalencije (od KOPB-a obolijeva oko 10 % odrasle svjetske populacije) i smrtnosti te vjerojatnog porasta incidencije u nadolazećim desetljećima (s obzirom na starenje čovječanstva, ali i s obzirom na sve jače onečišćenje zraka). KOPB je često udružen s drugim kroničnim nezaraznim bolestima različitog stupnja težine.

Cilj je rada procijeniti važnost KOPB-a i raspraviti rani razvoj kronične opstruktivne plućne bolesti, njezine uzroke, kliničke značajke i mogućnosti liječenja.

Rasprava: Najčešći komorbiditeti KOPB-a uključuju kardiovaskularne i cerebrovaskularne bolesti, osteoporozu, karcinom pluća, mentalne bolesti i poremećaje poput depresije i ovisnosti o duhanu, šećernu bolest, ali i česte kronične respiratorne bolesti poput astme, poremećaja disanja u spavanju i plućne hipertenzije. Multimorbiditet je tradicionalno objašnjavan starenjem, ali sve je jasnije kako se začetci kroničnih nezaraznih bolesti javljaju znatno prije pojave simptoma. U ranom KOPB-u započinju mehanizmi koji u kasnijem tijeku dovode do pojave tipičnih simptoma. Pritom se simptomi mogu pojaviti bez dokazane bronhoopstrukcije te je stoga odnedavno ponovno uveden termin pre-KOPB-a, a s druge strane, za spirometrijske abnormalnosti uz još održan Tiffeneauov indeks kod pušača skovan je termin PRISm (engl. *preserved index impaired spirometry*). U obje ove skupine može doći do progresije u KOPB.

Zaključak: Pravovremena dijagnoza, praćenje i liječenje ranog KOPB-a s ciljem sprječavanja gubitka plućne funkcije od najveće su važnosti.

Early chronic obstructive pulmonary disease

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Introduction and aim: Chronic obstructive pulmonary disease (COPD) is considered a major global health problem due to its high prevalence (it affects about 10% of global adult population), mortality, estimated even higher future incidence (probably in correlation with higher population longevity, but also global air pollution).

Aim: To evaluate and discuss early development of chronic obstructive lung disease, its causes, clinical features and possible treatment options.

Discussion: COPD is often associated with a variety of other chronic non-communicable diseases at different stages of severity: major comorbidities include cardiovascular diseases, stroke, osteoporosis, lung cancer, diabetes, but also some common chronic respiratory diseases such as asthma, obstructive sleep apnoea and pulmonary hypertension and mental and behavioural conditions such as smoking and depressive disorder,. Multimorbidity has traditionally been explained by ageing, but it has become clear that the origins of chronic non-communicable diseases emerge much earlier than their symptoms. Early COPD is related to the initiation of mechanisms of the disease that eventually leads to the onset of symptoms. Some individuals may develop symptoms in the absence of airflow obstruction, so recently the term of pre-COPD has been reintroduced, and the other, usually smokers, may have spirometric abnormalities but still preserved FEV1/FVC ratio (PRISm, *preserved index impaired spirometry*) – both pre-COPD and PRISM can eventually develop COPD.

Conclusion: It is of the utmost relevance to diagnose, follow and treat early COPD, but most of all prevent an accelerated loss of lung function.

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Management of chronic obstructive respiratory disease exacerbations in primary care

Keywords: COPD exacerbations, management, guidelines, primary care
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Introduction with aim. Due to its high prevalence and chronicity, chronic obstructive pulmonary disease (COPD) causes frequent visits to primary health care and acute exacerbations pose a significant challenge for family physicians. Recent evidence shows that treatment of COPD exacerbations in primary care is not usually in line with existing guidelines. Therefore, this paper summarizes the latest recommendations for pharmacologic management of COPD exacerbation and strategies to improve patient care and reduce hospitalization.

Discussion. COPD is a progressive disease characterized by reduced airflow due to chronic inflammation in lungs. It is estimated that 10 % of middle-aged patients meet the criteria for the diagnosis, and with increasing age and smoking status the prevalence could be higher. One of the most important manifestations of COPD is exacerbation-acute worsening of existing symptoms that require treatment. Almost half of the patients with COPD experience at least one exacerbation per year which, depending on the severity, significantly impairs lung function and quality of life. They are usually triggered by infection. About 80% of patients can be managed in outpatient settings using adequate therapy. International guidelines recommend using short acting beta 2 agonists with or without short acting anticholinergics for managing mild exacerbations. In moderate exacerbations systemic corticosteroids and antibiotics should be added for 5-7 days. The choice of antibiotic should be guided by local resistance rate and includes amino-penicillin with clavulanic acid, macrolide, or tetracycline. Methylxanthines are not recommended. Severe exacerbations require hospitalization and can be associated with acute respiratory failure. Additionally, onset of new physical symptoms (cyanosis, peripheral edema etc.), failure to respond to initial treatment, severe comorbidities and insufficient home support are the main indicators for assessing the need for hospitalization.

Conclusion. primary physicians should regularly update their knowledge in order to provide the best treatment options to minimize the negative impact of the current exacerbation and to prevent future events.

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Spirometrija u ordinaciji liječnika obiteljske medicine

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Uvod s ciljem: Spirometrija je osnovni test u procjeni funkcije pluća i zlatni standard postavljanja dijagnoze kronične opstruktivne plućne bolesti (KOPB). Liječnik obiteljske medicine ima važnu ulogu u što ranijem prepoznavanju i dijagnosticiranju KOPB-a u svojih pacijenata, a pravilno izvedena spirometrija važna je i u praćenju liječenja bolesnika s opstruktivnim bolestima pluća. Cilj ovog rada bio je prikazati važnost izvođenja spirometrije u ordinaciji liječnika obiteljske medicine.

Rasprava: Unazad nekoliko godina sve je veći broj oboljelih od opstruktivnih bolesti pluća. Prema važećim smjernicama Globalna inicijativa za kroničnu opstruktivnu plućnu bolest (engl. *Global Initiative for Chronic Obstructive Lung Disease*, GOLD) i Globalna inicijativa za astmu (engl. *Global Initiative for Asthma*, GINA) svakom oboljelom od astme ili KOPB-a potrebno je barem jednom godišnje učiniti spirometriju. Zbog velikog broja oboljelih i nedovoljnog broja specijalista pulmologa (2021. g. u Republici Hrvatskoj bilo je 239 132 oboljelih i 26 specijalista pulmologa) liječnik obiteljske medicine ima sve značajniju ulogu u praćenju ovih bolesnika te stoga mora biti educiran za pravilno izvođenje same tehnike spirometrije i interpretaciju spirometrijskog nalaza. Spirometrija se izvodi prema važećim nacionalnim i/ili međunarodnim preporukama uspoređujući dobivene s referentnim vrijednostima s obzirom na dob, tjelesnu visinu, spol i rasu. Prije samog izvođenja spirometrije potrebno je upozoriti pacijenta da ne jede i ne konzumira alkohol barem dva sata prije pretrage te da ne puši 30 minuta prije pretrage. Također je potrebno upozoriti one bolesnike koji se već liječe da ne uzmu kratkodjelujuće bronhodilatatore 6 – 8 sati prije testiranja, dugodjelujuće 12 sati, a tiotropij, indakaterol, glikopironij i teofilin 24 sata prije testiranja. Kako je spirometrija metoda mjerenja za koju je vrlo bitna suradnja pacijenta, prema smjernicama potrebno ju je izvesti barem tri puta. Stanka između udaha i izdaha mora biti kraća od jedne sekunde, a samo izvođenje spirometrije mora trajati dok se ne postigne plato volumena, što u težem stupnju KOPB-a može trajati i 15 sekunda. Vrijednosti forsiranog vitalnog kapaciteta (FVC) i forsiranog izdisajnog volumena u prvoj sekundi (FEV1) moraju biti najbolje vrijednosti dobivene u trima tehnički zadovoljavajuće izvedenim spirometrijama. Vrijednosti FEV1 i FVC dobivene iz tih triju izvođenja ne smiju se razlikovati za više od 5 % ili 150 mL. Bronhodilatacijski test izvodi se primjenom 400 mcg kratkodjelujućeg beta-2-agonista ili 160 mcg kratkodjelujućeg antikolinergika uz ponovljenu spirometriju nakon 15 (kratkodjelujući beta-2-agonist) ili 30 do 45 minuta (kratkodjelujući antikolinergik). Postbronhodilatacijski FEV1/FVC < 0,7 govori u prilog nepotpuno reverzibilne opstrukcije dišnih puteva.

Zaključak: Kvalitetno educirani liječnik obiteljske medicine može pravilno izvesti spirometriju u svojih pacijenata i interpretirati nalaz te time pridonijeti boljoj skrbi za oboljele od opstruktivnih plućnih bolesti.

Spirometry in general practice office

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Introduction. Spirometry is the basic test in assessing lung function and the gold standard in diagnosing chronic obstructive pulmonary disease (COPD). The family physician has an important role in the early recognition and diagnosis of COPD in their patients. Properly performed spirometry is also important in monitoring the treatment of patients with obstructive lung diseases. The aim of this paper was to show the importance of performing spirometry in the family practice office.

Discussion. Over the past few years, the number of people suffering from obstructive lung diseases has been increasing. According to the current guidelines of the Global Initiative for Chronic Obstructive Pulmonary Disease, GOLD and Global Initiative for Asthma, GINA, every patient with asthma or COPD should have spirometry done at least once a year. Due to the large number of patients and the insufficient number of specialist pulmonologists (in 2021, there were 239,132 patients and 26 specialist pulmonologists in the Republic of Croatia), the family physician plays an increasingly important role in monitoring these patients and therefore must be educated in the proper performance of the spirometry technique and interpretation of spirometric findings. Spirometry should be performed following national and/or international recommendations and measurements and evaluated in comparison with the results of appropriate reference values based on age, height, sex and race. Prior to performing spirometry, the patient should be warned not to eat or drink alcohol at least 2 hours before the test and not to smoke 30 minutes before. It is also necessary to warn those patients who are already being treated not to take short-acting bronchodilators 6-8 hours before the test, long-acting 12 hours, nor tiotropium, indacaterol, glycopyrronium and theophylline 24 hours before the test. As spirometry is a measurement method for which the cooperation of the patient is very important, according to the guidelines, it must be performed at least 3 times. The pause between inspiration and expiration should be < one second. The recording should go on long enough for a volume plateau to be reached, which may take more than 15 seconds in severe disease. Both FVC and FEV1 should be the largest value obtained in any of three technically satisfactory curves and should vary by no more than 5% or 150mL whichever is greater. The bronchodilation test is performed using 400mcg of a short-acting beta2 agonist or 160mcg of a short-acting anticholinergic with repeated spirometry after 15 (short-acting beta2 agonist) or 30 to 45 minutes (short-acting anticholinergic). The presence of postbronchodilator FEV1/FVC < 0.7 confirms the presence of non-fully reversible airflow obstruction.

Conclusion. Well-educated family physicians are able to properly perform the spirometry of their patients and interpret the results, thus contributing to better care of their patients suffering from obstructive pulmonary diseases.

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Quaternary prevention and the advocacy principle of family medicine in the light of health tourism data

Keywords: Health tourism, family medicine, advocacy, quaternary prevention
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Introduction: Health tourism is defined as a visit of individuals to a country other than their country of residence to receive preventive, curative, rehabilitative, and health-promoting services. It is divided into subgroups thermal health tourism, medical tourism, elderly tourism, and disabled people tourism. Health tourism is a line of work that must be provided by experts in the field and under the moderation of health professionals.

Our purpose is to share the health tourism data of Turkiye and to evaluate the issue in terms of the quaternary prevention and advocacy principle of family medicine.

Sample and Methods: Health tourism data between the years 2019-2022, the official reports of the Turkish Statistical Institute, International Health Services Inc., and The Association of Turkish Travel Agencies were examined and evaluated.

Results: 701046 people received health services in 2019, 407423 people in 2020, and 670730 people in 2021 within the scope of health tourism and tourist health. Due to the global epidemic in 2020, there has been a noticeable decrease in the number of health tourists. In the first three quarters of 2022, a total of 876521 people came to our country to receive health services.

Tourism income from foreign visitors coming for health and medical reasons and citizen visitors residing abroad is 1.492.438.000 USD in 2019, 1.164.779.000 dollars in 2020, **1.726.973.000** dollars in 2021, and 1.603.479.000 dollars in the first three quarters of 2022. The clinical branches most preferred by international patients are: obstetrics and gynecology, internal medicine, ophthalmology, medical biochemistry, general surgery, dentistry and orthopedics and traumatology.

Conclusion: The fact that this service area is growing and unfortunately, it brings with it the risk that abuses in the field of health will also increase. By the 'advocacy principle', the family physician should be with the people they take responsibility for in all health matters and relations with other health care providers. By providing active consultancy to individuals who want to receive services within the scope of health tourism and by ensuring that these people are protected from over-diagnosing and over-treatment within the scope of 'quaternary prevention', they should be protected from being abused in this regard.

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10.Simptom Bol

Doktore, boli me u prsima – što mi je?

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Uvod s ciljem: Bol u prsima neugodno je osjetno i emocionalno iskustvo praćeno stvarnim ili potencijalnim oštećenjem tkiva. S obzirom na veliku raznolikost etiologije i značaj bol u prsima također je velik dijagnostički izazov za liječnika obiteljske medicine.

Cilj je rada dati prikaz kompleksnosti i specifičnog načina odlučivanja u obiteljskoj medicini u pristupu pacijentu sa simptomom boli u prsima.

Da se dođe do ispravne dijagnoze, važno je razmotriti koje sve bolesti dolaze u obzir kod simptoma koje bolesnik ima i koja je bolest u konkretnom slučaju najvjerojatnija. Mnoge od tih bolesti mogu imati jednake ili vrlo slične simptome. Problem je tim veći kada liječnik vidi bolesnika u ranoj fazi te na osnovi oskudnih informacija mora donijeti za bolesnika važnu odluku, a istodobno je prediktivna vrijednost kliničkog pregleda i pretraga manje pouzdana.

Rasprava: Bol u prsnom košu prema izvorištu i važnosti klasificira se kao kardiološka (ishemička i neishemička) i nekardiološka. Nekardiološka bol izvorište najčešće ima u gastrointestinalnim, pulmonalnim, neurogenim, mišićno-koštanim i psihičkim bolestima. Dijagnostičkim postupkom prioritetno je isključiti kardiološku bolest (akutni koronarni sindrom, perikarditis, miokarditis, poremećaj ritma i promjene na valvulama) i akutna hitna stanja (plućnu emboliju, disekciju aorte i akutni pneumotoraks), a čije je rano prepoznavanje od velike važnosti za pravodobno, ispravno i uspješno liječenje.

Najčešći razlog dolaska bolesnika s boli u prsima u ordinaciju obiteljskog liječnika jest mišićno-koštana bol koja se mijenja s pokretima i položajem tijela, a često se pojačava dubokim udahom i kašljem. Osim ograničene pokretljivosti i boli, nije praćena drugim simptomima i nije životno ugrožavajuća, primjerice kostohondritis, Tietzeov sindrom, mialgije i traumatska stanja. Čest razlog boli u prsnom košu također su bolesti jednjaka, GERB, hijatalna hernija i poremećaji motiliteta jednjaka. Bol se može prenijeti iz nekih organa u trbuhu. Najčešće je to kolelitijaza i upala gušterače.

Diferencijalna dijagnostika svih navedenih stanja katkad se čini teška, no u većini slučajeva ipak je moguća temeljitom anamnezom i vješto izvedenim kliničkim pregledom. Dijagnostičke pretrage koje su moguće u ordinaciji obiteljske medicine (EKG, pulsni oksimetar, brzi laboratorijski testovi i slično) mogu uvelike pomoći pri razmatranju diferencijalnih dijagnoza boli u prsima.

Zaključak: U postupanju s pacijentom potrebno je odrediti radi li se o stabilnom ili nestabilnom bolesniku i procijeniti stupanj hitnosti, pacijentove potrebe, vlastite mogućnosti postupanja i dijagnostike te potrebu aktiviranja hitne službe, transporta i pratnje.

I have a chest pain – what's wrong with me?

Keywords: chest pain, family physician
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Introduction with aim. Chest pain is an unpleasant sensual and emotional experience accompanying an existing or potential tissue damage. Given the wide variety of etiology and importance of the topic, chest pain is a considerable diagnostic challenge for family physicians.

The aim of this paper is to present the complexity and specific way of decision-making in family medicine through the approach to the patient with the chest (breast) pain symptom.

In order to establish a proper diagnosis, it is important to consider which diseases are involved in the symptoms the patient is reporting and which disease it is most likely to be. Many of these diseases can present with the same or very similar symptoms. Even bigger problems arise when the physician sees the patient during an early stage and has to make an important decision for the patient based on scarce information. On the other hand, the predictive value of the clinical examination and tests is less reliable.

Discussion Chest pain is classified as cardiac (ischemic and non-ischemic) and non-cardiac according to the origin and severity. Non-cardiological pain most often originates from gastrointestinal, pulmonary, neurogenic, musculoskeletal and psychological diseases. With the diagnostic procedure, it is a priority to rule out cardiac disease (acute coronary syndrome, pericarditis, myocarditis, rhythm disorder and valve changes) and acute emergency conditions (pulmonary embolism, aortic dissection and acute pneumothorax). Early recognition is the key for proper, successful and fast treatment. The most common reason for patients with chest pain to visit a family physician is muscle and bone pain that changes with movements and body position. It is often intensified by deep breathing and coughing. Apart from limited mobility and pain, it is not accompanied by other symptoms nor is it life-threatening like some other diseases which are common causes of chest pain (e.g. costochondritis, Tietze syndrome, myalgias and traumatic conditions. GERD, hiatal hernia and esophageal motility disorders). Pain can also be transferred from some organs in the abdomen. Most often it is cholelithiasis and inflammation of the pancreas. The differential diagnosis of above-mentioned conditions sometimes seems difficult. However, in most cases, it is possible to reach a diagnosis with a thorough history check and skilfully performed clinical examination. Appropriate knowledge of the patient and diagnostic tests available in the family medicine office (ECG, pulse oximeter, rapid laboratory tests, etc.) can help when considering the differential diagnoses of chest pain, assessing the condition and further treatment.

Conclusion When dealing with a patient, it is necessary to determine whether the patient is stable or unstable, as well as to assess the degree of urgency, the patient's needs, one's own possibilities for treatment and diagnosis and the need to activate emergency services, transport and escort.

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Doktore, boli me trbuh – što mi je?

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Uvod s ciljem: Zbog velikog broja mogućih uzroka obiteljski liječnici često se suočavaju s izazovima u liječenju pacijenata koji se žale na bolove u trbuhu. Klinički su nalazi prikriveni nejasnom simptomatologijom, što otežava korelaciju s disfunkcijom određenih organa i povećava vjerojatnost pogrešnih dijagnoza. Većina slučajeva abdominalnog bola je benigna, ipak neki se pacijenti možda suočavaju s ozbiljnim za život opasnim problemima. Obiteljski liječnici moraju biti vješti u procjeni pacijenata koji traže pomoć zbog bolova u trbuhu. U ovom izlaganju bit će riječi o metodama procjene i dijagnosticiranja abdominalne boli u kontekstu primarne zdravstvene zaštite.

Rasprava: Anamneza pacijenta s abdominalnim bolom uključuje određivanje je li bol akutna ili kronična uz detaljan opis karaktera, kvalitete i jačine bola i povezanih simptoma, koje treba tumačiti s drugim aspektima povijesti bolesti. Osobito je značajna trenutačna i prethodna lokalizacija bola i radijacija bola. Lokalizacija bola može upućivati na određene izvore bola. Potrebno je ispitati i prateće simptome kao što su mučnina, povraćanje, zatvor ili proljev. Fizikalni pregled mora biti temeljit s pažljivom procjenom vitalnih znakova, inspekcijom, auskultacijom, perkusijom i palpacijom trbuha. U nekim slučajevima potreban je rektalni pregled i pregled zdjelice. Pacijente s nestabilnim vitalnim znakovima, znakovima peritonitisa i znakovima stanja opasnog za život (npr. akutna opstrukcija crijeva, akutna mezenterična ishemija, perforacija, akutni infarkt miokarda, izvanmaternična trudnoća) treba uputiti u hitnu službu.

Zaključak: U postupku s pacijentom s bolom u trbuhu potrebno je pažljivo uzeti anamnezu i temeljito pregledati pacijenta. Trajanje, priroda, lokalizacija i širenje bola mogu pomoći obiteljskom liječniku da postavi ispravnu dijagnozu. Po potrebi se koriste laboratorijski testovi, ultrazvuk i druga dijagnostika. Pacijente za koje se sumnja da imaju stanje koje ugrožava život treba uputiti u urgentne bolničke centre.

Doctor, I have a stomachache - what's wrong with me?

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Introduction and aim Due to the wide variety of potential causes, family physicians frequently face challenges while treating patients complaining of abdominal pain. Clinical findings are obscured by vague symptomatology, which makes it difficult to correlate with the dysfunction of certain organs and increases the likelihood of setting wrong diagnoses. Most cases of abdominal pain are benign; however, some patients may be facing serious, life-threatening conditions. Family physicians need to be skilled in assessing patients seeking help for abdominal pain. This presentation will discuss the methods of assessment and diagnosis of abdominal pain in primary health care.

Discussion Taking the history of a patient with abdominal pain includes determining whether the pain is acute or chronic with a detailed description of the nature, quality, and severity of the pain and associated symptoms, which should be interpreted with other aspects of medical history. Current and previous localization and radiation of pain are particularly significant. Localization can indicate the sources of pain. Accompanying symptoms such as nausea, vomiting, constipation or diarrhoea should also be examined. Physical examination has to be thorough with careful assessment of vital signs, inspection, auscultation, percussion, and palpation. In some cases, a rectal and pelvic examination is needed. In further evaluation, the family physician can use laboratory tests, ultrasound, or refer the patient to hospital emergency services. Patients with unstable vital signs, signs of peritonitis, and signs of a life-threatening condition (eg, acute bowel obstruction, acute mesenteric ischemia, perforation, acute myocardial infarction, ectopic pregnancy) should be referred to the emergency department.

Conclusion Approaching the patient with abdominal pain, it is crucial to take a complete history and conduct a thorough examination. The duration, nature, localization, and radiation of pain can help the family physician in establishing the appropriate diagnosis. As required, laboratory testing, ultrasonography, and other diagnostic procedures should be used. Patients suspected of having a life-threatening condition should be referred to hospital emergency departments.

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Doktore imam glavobolju – trebam li se brinuti?

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Uvod s ciljem: Glavobolja je jedan od čestih razloga zbog kojega se bolesnici javljaju svojem izabranom liječniku. Dijagnostički i terapijski korisno je uzeti u obzir da se glavobolje dijele u dvije kategorije, primarne i sekundarne. Cilj je rada uputiti na važnost uloge obiteljskog liječnika u otkrivanju mogućeg uzroka glavobolje, pri čemu je bitno ustanoviti stanja koja su životno ugrožavajuća.

Rasprava: Primarna je zadaća obiteljskog liječnika utvrditi ima li bolesnik za život potencijalno opasan uzrok glavobolje. U pristupu bolesniku potrebno je utvrditi sljedeće podatke: početak glavobolje, prethodne napadaje boli i njihovo trajanje, dane u mjesecu s glavoboljom, lokalitet boli, druge simptome povezane s glavoboljom, ozbiljnost glavobolje, učinak na rad i obiteljske aktivnosti. Uobičajene glavobolje (migrena, glavobolja tenzijskog tipa, *cluster* glavobolja i glavobolja uzrokovana prekomjernom uporabom lijekova) treba prepoznati i liječiti na razini primarne zaštite. Sekundarne glavobolje povezane su s drugim poremećajem. Razlikovanje tipova primarne glavobolje jednih od drugih, u odnosu na sekundarne glavobolje temeljem detaljne anamneze i neurološkog pregleda, općenito je dostatno da bi se utvrdilo ima li bolesnik glavobolju opasnu za život. Bolne kranijalne neuropatije i drugi bolovi lica uključuju neuralgiju trigeminusa i trajnu idiopatsku bol lica, koje je potrebno prepoznati u primarnoj zdravstvenoj zaštiti. Znakovi „crvene zastave“ koji zahtijevaju hitno zbrinjavanje uključuju naglo nastalu glavobolju, atipičan klinički tijek, pojačanje boli ili promjenu karaktera boli u bolesnika s poznatim sindromom glavobolje te istodobnu pojavu drugih neuroloških simptoma ili deficita. Laboratorijski testovi i slikovne pretrage u obradi primarne glavobolje u odsutnosti se alarmantnih znakova ne preporučuju. Korisno je da bolesnici vode dnevnik glavobolje, koji može biti ključan u dijagnostici stanja koje karakterizira glavobolja ≥ 15 dana mjesečno, uključujući glavobolju uzrokovanu prekomjernom uporabom lijekova. Kalendari glavobolje bilježe vremensku pojavu epizoda glavobolje i povezanih događaja kao što su menstruacija i uzimanje lijekova. Preporučuju se u primarnoj zdravstvenoj zaštiti tijekom praćenja nakon što se dijagnosticira glavobolja. Procjena poremećaja glavobolje zahtijeva više od dijagnoze: potrebno je odrediti u kojoj mjeri poremećaj utječe na bolesnikov život, stoga se u praksi koriste određeni protokoli kao uvod u planiranje i procjenu liječenja. Indeksi gubitka vremena pripisanog glavobolji (engl. *The Headache-Attributed Lost Time*, HALT) mjere opterećenja za liječenje glavobolje u primarnoj zdravstvenoj zaštiti.

Zaključak: Glavobolje predstavljaju značajan razlog pobola u općoj populaciji. Uloga je obiteljskog liječnika da prepozna glavobolje potencijalno opasne za život, pomogne bolesnicima u liječenju i posebno obrati pozornost na biopsihosocijalni model u pristupu bolesniku.

Doctor, I have a headache - should I be worried? arterial etiology

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Introduction with aim. Headache is one of the frequent reasons why patients consult their family doctors. Diagnostically and therapeutically, it is useful to consider that headaches are divided into two categories, primary and secondary.

The aim of this paper is to point out the importance of the role of the physician in discovering the possible cause of headaches, where it is important to establish conditions that are life-threatening.

Discussion. The primary task of the family doctor is to determine whether the patient has a potentially life-threatening cause of headaches. It is necessary to determine the following information: onset of a headache, previous pain attacks and duration, days of the month with a headache, location of pain, other symptoms associated with a headache, the severity of a headache, effect on work and family activities. Common headaches (migraine, tension-type headaches, cluster headaches and headaches caused by excessive use of drugs) should be recognized and treated at the primary care level. Secondary headaches are related to another disorder. Distinguishing the types of primary headaches from each another, in relation to secondary headaches based on a detailed history and a neurological examination, is generally sufficient to determine whether the patient has a life-threatening headache. Painful cranial neuropathies and other facial pain include trigeminal neuralgia and persistent idiopathic facial pain, which should be recognized in primary care. “Red flag” signs that require immediate treatment include sudden headache, atypical clinical course, intensification of pain or change in pain character in patients with a known headache syndrome, the simultaneous occurrence of other neurological symptoms or deficits. Laboratory tests and imaging studies in the treatment of primary headache in the absence of alarming signs are not recommended. It is useful for patients to keep a headache diary, which can be crucial in diagnosing conditions that are ≥15 days per month, including headaches caused by an overuse of medication. Headache calendars record the temporal occurrence of headache episodes and related events such as menstruation and medication. They are recommended in primary health care during follow-up after a headache is diagnosed. The assessment of headache disorder requires more than a diagnosis: it is necessary to determine to what extent the disorder affects the patient’s life. Therefore certain protocols are used in practice as an introduction to treatment planning and assessment. The Headache-Attributed Lost Time HALT indices measure the burden of headache treatment in primary care.

Conclusion: Headaches represent a significant cause of morbidity in the general population. The role of the family physician is to recognize potentially life-threatening headaches, help patients with treatment and pay special attention to the biopsychosocial model in the approach to the patient.

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Psihološki pristup bolesniku s boli

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Ključne riječi: doživljaj boli, psihološki pristup, obiteljski liječnik
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Uvod s ciljem: Definicije boli ističu da je bol neugodan doživljaj, što implicira značaj psihološkog pristupa u liječenju bolesnika koji trpi bol. Psihološki pristup uklapa se u biopsihosocijalni model, na kojemu se temelji rad obiteljskih liječnika. Obiteljski liječnik primjenjuje psihološki pristup od prvog susreta s pacijentom koji se tuži na akutnu ili kroničnu bol. Psihološki pristup posebno je važan kada se radi o kroničnoj boli kao što su to maligna i neuropatska bol. Psihološki pristup komplementaran je farmakološkom liječenju boli, kao i specifičnim procedurama fizikalne terapije. Psihološkim pristupom, koji pozitivno djeluje na emocije, kogniciju i ponašanje pacijenta, obiteljski liječnik pomaže pacijentu smanjiti doživljaj boli, uz poboljšano svakodnevno funkcioniranje i bolje zdravstvene ishode.

Cilj je rada ukratko prikazati strukturirane načine psihološkog pristupa u liječenju pacijenta s boli.

Rasprava: Psihološki pristup bolesniku s boli, posebno kada s radi o kroničnim bolnim sindromima, široko je prihvaćen i temeljen na dokazima. Psihologija boli dio je zdravstvene psihologije koja analizira psihološke tretmane za ublaživanje bolnih sindroma. Najviše dokaza o učinkovitosti ima kognitivno-bihevioralna terapija (KBT), a kao komplementarni pristup ističe se terapija prihvaćanja i predanosti koja naglašava fleksibilnost i individualni pristup. Tehnike za kontrolu boli u sklopu kognitivno-bihevioralne terapije jesu tehnike relaksacije, upravljanje stresom, upravljanje ljutnjom, modifikacija prehrane i kretanja te kognitivne tehnike za promjenu disfunkcionalnih misli vezanih za doživljaj boli. Empatija i vještina aktivnog slušanja temeljne su odrednice psihološkog pristupa u liječenju boli, tako da svaki specijalist obiteljske medicine može suvereno pomoći pacijentima koje muče bolovi. Uloga obiteljskog liječnika jest poučiti pacijenta vještinama suočavanja s boli. Na prvom mjestu je razumijevanje mehanizma nastanka boli te farmakoloških i nefarmakoloških načina kupiranja boli. Važno je prihvatiti bol kao neugodan doživljaj koji će neko vrijeme trajati, ali vještinom suočavanja sa stresom izazvanom boli može se uspješno kontrolirati. Prilagoditi odnosno uravnotežiti svakodnevno funkcioniranje tako da izaziva najmanju bol značajna je vještina kojom bolesnik smanjuje potrebu za medikamentnom terapijom. Predviđanje i izbjegavanje situacija koje mogu pojačati bol također je vještina koju će bolesnik steći pri savjetovanju sa svojim obiteljskim liječnikom.

Zaključak: Psihološki pristup bolesniku s boli komplementaran je farmakološkom liječenju boli, kao i nefarmakološkim tehnikama. Obiteljski liječnik dobro osmišljenim i individualiziranim psihološkom pristupom pomaže pacijentu modificirati doživljaj boli i uspješno se nositi s izazovom kronične boli.

Psychological approach to the patient with pain

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IIntroduction and aim: Definitions of pain point out that pain is an unpleasant experience, which implies the importance of a psychological approach in the treatment of patients suffering from pain. The psychological approach fits into the biopsychosocial model, on which the work of family physicians is based. The family physician applies a psychological approach from the first meeting with a patient who complains of acute or chronic pain. A psychological approach is especially important when dealing with chronic pain such as malignant and neuropathic pain. The psychological approach is complementary to the pharmacological treatment of pain, as well as specific physical therapy procedures. With the psychological approach, which has a positive effect on the patient's emotions, cognition and behavior, the family physician helps the patient reduce the perception of pain, with improved daily functioning and better health outcomes. The aim of this paper is tobriefly present the structured methods of psychological approach in the treatment of patients with pain.

Discussion: The psychological approach to the patient with pain, especially when dealing with chronic pain syndromes, is widely accepted and evidence based. Pain psychology is a part of health psychology that analyzes psychological treatments to relieve pain syndromes. Cognitive behavioral therapy (CBT) has the most evidence of effectiveness, and as a complementary approach, Acceptance and Commitment Therapy emphasizes flexibility and individual approach. Techniques for pain control in the framework of cognitive-behavioral therapy are: relaxation techniques, stress management, anger management, modification of diet and movement andcognitive techniques for changing dysfunctional thoughts related to the perception of pain. Empathy and the skills of active listening are the fundamental determinants of the psychological approach in pain treatment, so that every specialist in family medicine can sovereignly help patients suffering from pain. The role of the family physician is to teach the patient coping skills. In the first place is understanding the mechanism of pain perception, and pharmacological and non-pharmacological ways of relieving pain. It is important to accept pain as an unpleasant experience that will last for some time, but with the skill of dealing with the stress caused by pain, it can be successfully controlled. Adapting or balancing daily functioning in a way that causes the least amount of pain is an important skill with which the patient reduces the need for drug therapy. Anticipating and avoiding situations that can increase pain is a skill that the patient will acquire during the consultation with their family physician.

Conclusion: The psychological approach to the patient with pain is complementary to the pharmacological treatment of pain, as well as non-pharmacological techniques. With a well-designed and individualized psychological approach, the family physician helps the patient modify the perception of pain and successfully deal with the challenge of chronic pain.

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Pseudo science in primary care practice

Key words: Pseudoscience, conventional medicine, medical interventions.
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Introduction and aim:

Accumulated information about nature, the method of understanding the universal truth and a critical analysis of the results according to the current paradigm and findings of this process produce contemporary scientific facts. Daily conventional medical practice depends on these processes. However, several approaches to information and practice are also used in medical practice both by medical practitioners and other medical or non-medical professionals. The emergence of evidence-based medicine in medical practice is the result of this contemporary scientific need in medical practice. There should be reliable criteria to discriminate between science and pseudoscience.

The aim of this presentation is to describe what is pseudoscience and use reliable information to direct our daily practice. This approach may help us to easily discriminate between science and pseudoscience.

In this review I will describe the scientific development process and make a critical analysis of the collected scientific information and our daily practice.

Discussion

Medical technology and contemporary medical practice has risen above the development of basic sciences. The improvement in contemporary clinical knowledge and practice is developed with the accumulation of basic sciences knowledge and reached a significantly high level in the 19th and early 20th century. Continuous increase of information in natural sciences made any medical discipline unaware of other medical disciplines. The increased number of new scientific departments and the amount of information have raised the need for scientific literacy. Medical practitioners' efforts to apply evidence-based approach to their patients may be useful to discriminate between scientific and unscientific. The use of contemporary scientific improvements can be realized by using new scientific improvements together with increased scientific literacy of the public.

In order to predict the future of pseudo-scientific medical interventions, looking back and reviewing the past interventions used in medical practice may contribute to our understanding of the issues we are encountering. Several elements, chemical mixtures, external interventions on the body were used to restore or improve health on a pseudoscientific basis. Therapies based on biology "diet, phytotherapy, vitamins and e.t.c.", manipulations on human body "osteopathy, chiropractic, and e.t.c.", energy therapies "Reiki, qui gong, tai chi and e.t.c.", body and mind therapies "yoga, meditation and e.t.c.", alternative medical systems "acupuncture, homeopathy, ayurveda and e.t.c." should all be reconsidered in the practice of primary care physicians. A new paradigm for a critical analysis of current scientific interventions should be implemented. Otherwise, physicians in primary care and in all other medical disciplines, would practice in a way which is very different from established theory and practice. Implementing new interventions with reliable scientific basis can lead to improving our practice.

Conclusion: The nature of providing primary health care is both an opportunity to use contemporary scientific information-technology and a limitation in discriminating between science and pseudoscience. A critical evaluation of scientific paradigm may not be easy but would considerably contribute the practitioner's daily practice in primary care.

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11. Vođenje bolesnika s kroničnim bolestima u obiteljskoj medicini

Osposobljavanje bolesnika s kroničnim bolestima u obiteljskoj medicini

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Uvod s ciljem: Velik napredak medicine i produženje životnog vijeka doveli su do izuzetnog porasta broja bolesnika koji boluju od jedne ili više kroničnih bolesti istodobno. Aktivno sudjelovanje bolesnika vrlo je bitno za postizanje kvalitetne skrbi i pozitivnih ishoda, posebice onih bolesnika koji boluju od više kroničnih bolesti istodobno (multimorbiditet). Multimorbiditet je velik izazov za zdravstvenu zaštitu, posebice za obiteljsku medicinu, zbog visoke prevalencije, kompleksnosti skrbi i utjecaja na život bolesnika i njegove obitelji. Osposobljavanje bolesnika da djeluje kao aktivan partner u provedbi zdravstvene skrbi uvelike pridonosi učinkovitom djelovanju zdravstvenog sustava. Pozitivni učinci uključuju efikasno i primjereno korištenje svih resursa zdravstvenog sustava, povećanje zadovoljstva pacijenata i zdravstvenih profesionalaca, povećanje preventivnih aktivnosti i bolje zdravstvene ishode.

Cilj je rada prikazati elemente aktivnog sudjelovanja bolesnika kako bi se liječnici obiteljske medicine njima primjereno koristili u praksi.

Rasprava: Aktivno sudjelovanje bolesnika ključno je u konceptu bolesniku usmjerene skrbi. U tom konceptu bolesnik treba imati veću moć u donošenju odluka i više izbora, mora biti uključeno socijalno i emocionalno okružje bolesnika te bolesnikove jedinstvene fizičke, psihosocijalne, kulturološke i emocionalne potrebe. Aktivno sudjelovanje unaprjeđuje motivaciju bolesnika za liječenje, povećava adherenciju i samozbrinjavanje osoba koje žive s kroničnim bolestima. Za aktivno sudjelovanje u skrbi bolesnik mora steći znanje i vještine. Liječnik obiteljske medicine (LOM) treba na bolesniku primjeren način dati ključne informacije o simptomima, bolesti, liječenju, komplikacijama te učincima bolesti na sveukupni život kako bolesnika, tako i njegove obitelji. Primjerice, bolesnik sa šećernom bolesti moći će si dati odgovarajuću dozu inzulina tek onda kad ima dostatna znanja o bolesti i djelovanju inzulina i kad svlada vještinu injektiranja inzulina. Nadalje, bolesnik i njegova obitelj moraju naučiti i primijeniti preporuke o pravilnoj prehrani. Dobar odnos između LOM-a i bolesnika, međusobno uvažavanje te dugotrajnost skrbi znatno pridonose usvajanju znanja i vještina nužnih za aktivno sudjelovanje bolesnika. Zdravstvena pismenost, više obrazovanje i mlađa životna dob bolesnika čimbenici su koji pozitivno utječu na usvajanje znanja bolesnika. Duža konzultacija pridonosi osposobljavanju bolesnika da se lakše suoči sa svim problemima koje njegova bolest/bolesti donose u njegov život. Duže i bolje poznavanje liječnika te liječnikova empatija također pozitivno utječu na osposobljavanje bolesnika.

Zaključak: Aktivno sudjelovanje bolesnika u skrbi podrazumijeva osposobljavanje bolesnika za stjecanje znanja i vještina potrebnih za razumijevanje i svladavanje poteškoća koje bolest donosi u njegov život.

Koncept bolesniku usmjerene skrbi, liječnikova empatija, kontinuitet skrbi, dobar odnos između liječnika i bolesnika te duža konzultacija ključni su elementi osposobljavanja bolesnika.

Chronic patients' enablement in family medicine

Key words: *active patient participation, patient enablement, family medicine*
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Introduction with aim: The great progress of medicine, the extension of life expectancy have led to an extraordinary increase in the number of patients suffering from one or more chronic diseases. Active patient participation is very important for achieving quality care and positive outcomes, especially for those patients who suffer from several chronic diseases at the same time, i.e. multimorbidity. Multimorbidity is a big challenge for health care, especially for family medicine, due to its high prevalence, complexity of care and impact on the life of the patient and their family. Enabling patients to act as active partners in their health care greatly contributes to the effective operation of the health system. Positive effects include efficient and appropriate use of all resources of the health system, increased patients' and health professionals' satisfaction, an increased usage of preventive services and improved health outcomes.

The aim of this paper is to present the elements of active patient participation so that family physicians can use them in practice appropriately.

Discussion: Active patient participation (APP) is a key element in the concept of patient-centred care. In this concept, patients should have more power in making decisions and more choices, and their social and emotional environment and their unique physical, psychosocial, cultural and emotional needs must be included. APP improves patients' motivation for treatment, increasing adherence and self-care of the people living with chronic diseases. To actively participate in care, the patient must acquire appropriate knowledge and skills.

The family physician (FP) should provide patients with key information about the symptoms, disease, treatment, complications and the effects of the disease on the overall life of patients and their families. For example, a patient with diabetes will be able to give himself/herself an adequate dose of insulin only when s/he has sufficient knowledge about the disease and the action of insulin and when s/he has mastered the skill of injecting insulin. Furthermore, patients and their families must learn and apply recommendations on proper nutrition. A good relationship between the FP and the patient, mutual respect and long-term care significantly contribute to the acquisition of knowledge and skills necessary for the APP. Health literacy, higher education and younger age are factors that positively influence the acquisition of knowledge by the patient. A longer consultation contributes to the patient enablement for effective coping with all the challenges that their illness/diseases bring into their life. Longer and better knowledge of the FP and the FP's empathy also have a positive effect on the patient enablement.

Conclusion: The APP in care implies the patient enablement to acquire the knowledge and skills necessary to understand and overcome the difficulties that the disease brings to their life. The concept of patient-centred care, the FP's empathy, continuity of care, good relationship between the FP and the patient and longer consultation are key elements of patient enablement.

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Alati za programiranu skrb kroničnih bolesnika – paneli kroničnih bolesti

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Uvod s ciljem: Kronične bolesti (KB) mogu se definirati kao stanja koja traju godinu dana ili duže, a zahtijevaju stalnu medicinsku skrb i/ili ograničavaju svakodnevne aktivnosti. Unatoč ubrzanim naporima za poboljšanjem globalnog zdravlja, kronične bolesti nastavljaju biti jedan od glavnih uzroka loših zdravstvenih ishoda, što često vodi u smanjenje kvalitete života bolesnika i povezane povećane troškove zdravstvene skrbi.

Cilj ovog rada bio je naglasiti ulogu panela KB-a kao alata za programiranu skrb za kronične bolesnike u praksi liječnika obiteljske medicine (LOM-a) i revidirati izazove u njihovu korištenju u praksi.

Rasprava: Preventivne aktivnosti (PA) središnji su aspekt rada liječnika primarne zdravstvene zaštite (PZZ), a uključuju primarnu, sekundarnu, tercijarnu i kvartarnu razinu prevencije. Unatoč tomu što učinkovito provođene takve aktivnosti na razini PZZ-a mogu smanjiti mortalitet i morbiditet kroničnih i akutnih bolesti, one su u praksi često zapostavljene i ne provode se u skladu sa stručnim smjernicama. Jedna od glavnih zapreka liječnicima u provođenju PA-e jest nedostatak vremena. Stalni rast zdravstvenih potreba i zdravstvenih zahtjeva populacije koja stari s povećanim komorbiditetom dovodi do situacije u kojoj je gotovo nemoguće da liječnik pruži skrb u skladu sa stručnim preporukama bez potpore drugih službi. Različite inovacije u skrbi za bolesnike mogu pomoći smanjiti opterećenje liječnika, a jedna od njih jest i korištenje digitalnih zdravstvenih inovacija. U elektroničkim zdravstvenim kartonima pacijenata u Hrvatskoj oblikovani su paneli KB-a kako bi se potaknulo provođenje PA-e i kontrola kroničnih bolesti te kako bi se lakše kvantificirala i vrednovala ovakva vrsta rada liječnika. U panelima su obuhvaćeni parametri koje je potrebno pratiti u programiranoj skrbi za bolesnike koji boluju od hipertenzije, dijabetesa i astme/kronične opstruktivne plućne bolesti uz praktične podsjetnike ako pacijentu u preporučenom razdoblju nije ispunjen panel. Pandemija bolesti COVID-19 imala je za posljedicu promjenu modaliteta rada LOM-a – dovela je do više telefonskih i e-konzultacija te smanjila prilike za provođenje PA-e i ispunjavanje preventivnih panela i panela KB-a. Osim toga, posljednjih godina prati se drastičan porast broja konzultacija u ordinacijama LOM-a u Hrvatskoj uz stagniranje ili čak blagi pad broja pregleda. Takvi rezultati dio su navedenoga globalnog trenda porasta zahtjeva za zdravstvenom skrbi, ali odražavaju i visoko opterećenje administrativnim zadatcima u praksi LOM-a. Prema rezultatima pilot-projekta provedenoga u Domu zdravlja Zagreb – Centar, pokazalo se kako administrativno rasterećenje zdravstvenog osoblja ambulante može dovesti do značajnog utjecaja na veće korištenje kako preventivnih, tako i panela KB-a. Rezultati time sugeriraju dostupnost praktično provedive intervencije koja bi mogla imati značajan pozitivan učinak na kontrolu KB-a.

Zaključak: Unatoč dostupnosti alata za programirano praćenje kroničnih bolesnika postoje znatne zapreke njihovu učinkovitom korištenju u praksi LOM-a s potencijalnim negativnim utjecajem na morbiditet i mortalitet bolesnika te financijsko opterećenje zdravstvenog sustava. Potrebno je ulaganje dodatnih napora za veće korištenje dostupnih alata u praćenju kroničnih bolesnika kako na individualnoj, tako i na organizacijskoj razini – vremenskim i administrativnim rasterećenjem LOM-a.

Tools for programmed care of chronic patients – panels of chronic diseases

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Introduction and aim: Chronic diseases (CD) can be defined as conditions that last a year or more, require constant medical care and/or limit daily activities. Despite accelerated efforts to improve global health, CDs continue to be one of the main causes of poor health outcomes, often leading to a reduced patient's quality of life and associated increased health care costs.

The aim of this paper was to emphasize the role of CD panels as tools for programmed care of chronic patients in the practice of family physicians (FPs) and to review the challenges of using them in practice.

Discussion: Preventive activities (PAs) are a central aspect of the work of primary health care (PHC) physicians, and include primary, secondary, tertiary and quaternary levels of prevention. Despite the fact that effectively implemented PAs at the PHC level can reduce the mortality and morbidity of chronic and acute diseases, these activities are often neglected in practice and are not carried out in accordance with professional guidelines. One of the main barriers to the implementation of PAs by physicians is the lack of time. The constant growth of health needs and health requirements of an aging population with increased comorbidity leads to a situation where it is almost impossible for a doctor to provide care in accordance with professional guidelines without the support of other services. Various innovations in patient care can help reduce the burden on doctors, and one of them is the use of digital health innovations. CD panels were created in the electronic health records of patients in Croatia in order to encourage the implementation of PAs, improve the control of chronic diseases, and to make it easier to quantify and evaluate this type of doctors' work. The panels include parameters that need to be monitored in programmed care for patients suffering from hypertension, diabetes, and asthma/chronic obstructive pulmonary disease with practical reminders if the patient's panel was not completed within the recommended period. The COVID-19 pandemic resulted in a change in the modality of FPs work to more telephone and e-consultations and a reduction in the opportunity to conduct PAs and fill out preventive panels and CD panels. In addition, in recent years, there has been a drastic increase in the number of consultations in FP's offices in Croatia, along with a stagnation or even a slight decline in the number of physical examinations. Such results are part of the aforementioned global trend of increasing demands for health care, but also reflect the high burden of administrative tasks in the practice of FPs. According to the results of the pilot project carried out in the Health Center Zagreb - Center, it was shown that the administrative relief of the clinic's health staff can lead to a significant impact on the greater use of both preventive and CD panels. Such results suggest the availability of a practically implementable intervention that could have a significant positive effect on the control of CD.

Conclusion: Despite the availability of tools for programmed care of chronic patients, there are considerable obstacles to their effective use in FP's practice with a potential negative impact on patient morbidity and mortality and the financial burden on the healthcare system. It is necessary to invest additional efforts for a greater use of available tools in the monitoring of chronic patients both at the individual and organizational level - by relieving the time and administrative burden of the FPs.

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Principi smanjivanja propisivanja lijekova u kroničnih bolesnika – “depreskripcija”

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Uvod s ciljem: Polifarmacija je redovito korištenje pet ili više lijekova. Najčešća je u osoba starije životne dobi, među ostalim zbog veće učestalosti multimorbiditeta, i u toj skupini iznosi 39 – 45 %. Polifarmacija je povezana s negativnim pojavama poput veće učestalosti nuspojava, smanjenja funkcionalnih i kognitivnih sposobnosti, s lošijim nutritivnim statusom, lošom adherencijom, smanjenjem kvalitete života, povećanim rizikom padova i posljedica padova. Smanjenje negativnih učinaka polifarmacije zbog toga možemo smatrati vrijednim ciljem u skrbi za kronične bolesnike, a prestanak propisivanja ili smanjenje doza lijekova – depreskripcija, vrijedan je alat koji može pridonijeti kvaliteti skrbi. Cilj je ovog rada prikazati aktualna istraživanja i ključne principe u modernom pristupu depreskripciji.

Rasprava: U međunarodnim istraživanjima prikazano je kako oko 20 % bolesnika koji primaju polifarmaciju imaju barem jedan neprimjeren lijek u terapiji, definirano kao lijek kod kojeg potencijalne koristi ne nadmašuju moguće štetne učinke. Posljedice neprimjerenog propisivanja pogađaju nerazmjerno najstarije bolesnike (> 80 godina) zbog fizioloških promjena koje utječu na metabolizam lijekova. Preskripcija (i depreskripcija) osobito je izazovna u nemoćnih bolesnika koji imaju narušene funkcionalne i/ili kognitivne sposobnosti te imaju ograničenu socijalnu podršku. Zbog tih razloga istraživanja koja se bave depreskripcijom fokusiraju se na smanjenje negativnih učinaka neprimjerenog propisivanja lijekova, pod vodstvom liječnika, a koje za cilj ima poboljšanje zdravstvenih ishoda.

Zaključak: Depreskripcija kao dio rutinske prakse primjenjuje se ustaljeno za lijekove koji se koriste u preventivne svrhe kod bolesnika koji imaju ograničeno očekivano trajanje života ili su uključeni u program palijativne skrbi. Međutim, depreskripcija ima svoje mjesto i u skrbi za bolesnike s pojedinim kroničnim bolestima koji nisu u završnom stadiju bolesti te u skrbi za bolesnike s multimorbiditetom. Aktivan pristup u promišljanju i komunikaciji s bolesnicima o depreskripciji mogao bi imati pozitivne učinke na određene ishode zdravstvene skrbi u skupinama bolesnika opterećenih polifarmacijom.

Principles of reducing the prescription of drugs in chronic patients - deprescribing

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Introduction and aim: Polypharmacy is the regular use of five or more medications. It is most common in elderly people, among other reasons, due to the higher frequency of multimorbidity, and in this group it amounts to 39-45%. Polypharmacy is associated with negative phenomena such as higher frequency of side effects, reduction of functional and cognitive abilities, worse nutritional status, poor medication adherence, reduction of quality of life, increased risk of falls and their consequences. Therefore, we can consider reducing the negative effects of polypharmacy as a valuable goal in the care of chronic patients, and stopping prescribing or reducing drug doses - deprescription as a valuable tool that can contribute to the quality of care. The aim of this paper is to review current research and key principles in the modern approach to deprescription.

Discussion: In international research, it has been shown that about 20% of patients who receive polypharmacy have at least one inappropriate drug in their therapy, defined as a drug whose potential benefits do not outweigh possible adverse effects. The consequences of inappropriate prescribing disproportionately affect the oldest patients (>80 years old) due to physiological changes that affect drug metabolism. Prescription (and deprescription) is particularly challenging in frail patients who have impaired functional and/or cognitive abilities, and limited social support. For these reasons, deprescribing research focuses on reducing the negative effects of inappropriate prescribing, under the guidance of physicians, with the goal of improving health outcomes.

Conclusion: Deprescription as part of routine practice is routinely applied to drugs used for preventive purposes in patients who have a limited life expectancy or are included in a palliative care program. However, deprescription also has its place in the care of patients with certain chronic diseases who are not in the final stage of the disease and of patients with multimorbidity. An active approach in thinking about and communicating with patients about deprescription could have positive effects on certain health care outcomes in the group of patients burdened by polypharmacy.

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Vođenje bolesnika s multimorbiditetom kroničnih bolesti

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Uvod s ciljem: Multimorbiditet (istodobna prisutnost dviju ili više kroničnih bolesti) čest je problem obiteljske medicine. Međusobna interakcija bolesti može dovesti do teže procjene prisutnih simptoma odnosno kliničke slike ili laboratorijskih vrijednosti. Napredovanje jedne bolesti može pogoršati druge, a važna je i interakcija psihičkih i tjelesnih bolesti. Također su česte interakcije između bolesti i lijekova te nefarmakoloških mjera. Liječenje može dovesti do polifarmacije, a time i do nuspojava lijekova, kaskade propisivanja i slabije adherencije bolesnika. Međudjelovanje bolesti i stanja, liječenja i pacijentovih biomedicinskih, bihevioralnih i socioekonomskih čimbenika čini skrb za multimorbidne pacijente vrlo kompleksnom. Liječniku su u tom slučaju smjernice za liječenje pojedinih bolesti od ograničene pomoći.

Cilj je rada prikazati principe liječenja koji mogu poboljšati vođenje multimorbidnog bolesnika u obiteljskoj medicini.

Rasprava: Multimorbidni bolesnici međusobno se jako razlikuju. Ponekad bolesnici s kontroliranim kroničnim bolestima ne trebaju poseban tretman. Specijalan pristup trebaju prije svega bolesnici s većim teretom bolesti; koji imaju problema s uzimanjem lijekova, načinom liječenja ili medicinskih aktivnosti; koji zahtijevaju skrb u više medicinskih i nemedicinskih službi ili vođenje više specijalističkih službi; imaju i fizičke i tjelesne bolesti i stanja; koji često traže neplaniranu ili hitnu pomoć te bolesnici koji su krhki. U takvih bolesnika kumulativna provedba preporuka za pojedinu bolest može biti nepraktična ili čak štetna. Umjesto toga, potreban je pristup usmjeren na pacijenta. Ovdje je bitan odnos između liječnika i pacijenta. Liječnik razumije bolesnika kao cjelovitu osobu i poznaje njegova iskustva vezana uz bolest, životne okolnosti i društveni kontekst. Stoga liječnik može oblikovati individualizirani plan skrbi zajedno s pacijentom (zajedničko donošenje odluka). To zahtijeva prioritizaciju zdravstvenih problema, pri čemu liječnik mora uravnotežiti prioritete pacijenta i vođenje pojedinačnih bolesti te suzbijanje rizika u budućnosti. Vrlo je važno podržati pacijenta ili njegovatelje u samoliječenju ili aktivnom sudjelovanju u skrbi. Dokazi sugeriraju da optimalna skrb zahtijeva multidisciplinarnu integriranu skrb timova obiteljske medicine, kliničkih farmakologa, socijalnih radnika i drugih stručnjaka.

Zdravstveni sustav koji je usmjeren na specijalističko liječenje pojedinih bolesti dovodi do fragmentirane i neučinkovite skrbi koja nije primjerena multimorbidnim bolesnicima. Zdravstveni sustavi trebaju podržavati širi (generalistički) pristup, kako jačanjem primarne razine, tako i promicanjem generalističkog pristupa na sekundarnoj razini.

Zaključak: Multimorbidnim bolesnicima potreban je individualni tretman usmjeren na pacijenta, gdje liječnik zajedno s bolesnikom, a po potrebi i s njegovom obitelji, sastavlja plan liječenja, utvrđuje cilj i plan praćenja. U liječenju sudjeluje cijeli tim obiteljske medicine, no često je potrebna multidisciplinarna obrada. Tu je ključan kontinuitet skrbi i međusobni odnos pacijenta i liječnika. Promjene su potrebne i u dijelu zdravstvenog sustava koji mora poticati međurazinsku suradnju i cjelovitu skrb.

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Management of patients with multimorbidity

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Introduction and aim: Multimorbidity (simultaneous presence of two or more chronic diseases) is a common problem in family medicine. Mutual interaction of diseases can lead to difficulties in assessing the symptoms, the clinical presentation or laboratory values. The progression of one disease can worsen others, and the interaction between mental and physical diseases is important, too. Interactions between the disease and drugs and non-pharmacological measures are also frequent. Treatment can lead to polypharmacy, causing adverse drug effects, prescription cascade and poorer patient adherence. The interplay between diseases and conditions, treatments and the patient's biomedical, behavioral and socioeconomic factors makes the care of multimorbid patients very complex, in which guidelines for individual diseases are of limited use.

The aim of this paper is to present treatment principles that can improve the management of multimorbid patients in family medicine.

Discussion: Multimorbid patients differ greatly from each other. Some patients with well managed chronic diseases do not need a special approach. A different approach is required for patients with a greater burden of disease; those who find taking medications, managing treatments or activities difficult; those who require care from several medical and non-medical services or are in the care of several different clinical specialists; those who have both mental and physical health conditions; who often seek unplanned or emergency medical care; and patients with frailty. In such patients, the cumulative implementation of recommendations for individual diseases may be impractical or even limited. Instead, they require a patient-centered approach. In this setting, the relationship between the physician and the patient is crucial. The physician understands the patient as a whole person and knows theirs experiences related to illnesses, life circumstances and social context. Therefore, the physician can create an individualized care plan together with the patient (shared decision-making). This requires the prioritization of health problems, whereby the physician must balance the patient's priorities with the management of individual diseases and the prevention of future risk. It is very important to support the patient or caregivers in self-management and active participation in care. Evidence suggests that optimal care requires multidisciplinary integrated care provided by family medicine teams, clinical pharmacologists, social workers, and other professionals.

A healthcare system focused on specialist treatment of individual diseases leads to fragmented and ineffective care that is not suitable for multimorbid patients. Healthcare systems should support a broader (generalist) approach, both by strengthening the primary level and promoting a generalist approach at the secondary level.

Conclusion: Multimorbid patients need individual patient-oriented management, where the physician together with the patient and, if necessary, their family, draws up a treatment plan, determines treatment goals, and plans a follow-up. The entire family medicine team participates in the management, but a multidisciplinary management is often required. Continuity of care and mutual relationship between the patient and the physician are of key importance. Changes are also needed on the part of the health system that must encourage interlevel cooperation and comprehensive care.

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Current Palliative Health Care Practice in Türkiye

Key words: *Family medicine, palliative care, biopsychosocial perspectives.*
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Introduction and aim: Palliative care is a comprehensive, continuous, multidisciplinary patient care which aims at controlling and eliminating symptoms rather than treating the disease. In palliative care, patients, caregivers, consultants, nurses, social workers and other healthcare professionals are involved to provide their services. The main principles of palliative care are: good communication, management planning, a control of symptoms, emotional, social and spiritual support, medical counselling and education, patient involvement in the decision phase and support for those involved in the patients' care.

In the USA, patients are not treated until the last moment in intensive care clinics like we do. The Don't Resuscitate (DNR) program that is valid there should be legally implemented in Turkey as well. Due to the absence of this legal regulation in Turkey, there is a legal vacuum in palliative services. The aim of this paper is to present current palliative health care practice in Turkey.

Discussion: The numbers of the elderly population in Turkey are increasing day by day, so the need for palliative services is increasing, too. According to the data of Turkish Statistical Institute the average life expectancy in Turkey is 81.2 years for women and 75.6 years for men. (3) The increase in the incidence of diseases with increasing age seems to increase the need for palliative care even more.

The need for the family physician was first brought to attention by Francis Peabody in 1923. He emphasized the necessity of a specialty that would provide comprehensive and personal health care, because patients were left in the middle as a result of over-specialization in medical sciences. The physician dealing with palliative care should have the ability and knowledge to approach the patient from multidisciplinary and biopsychosocial perspectives, so the branch of family medicine is the most appropriate specialty to take part in palliative care. Family medicine specialists carry out approximately half of the responsibility of palliative services in Turkey.

The patient portfolio in our clinics consists of cerebrovascular diseases, cancers, muscle diseases, dementia and chronic obstructive pulmonary diseases (COPD).

Conclusion: In accordance with the family medicine specialization discipline, we follow our patients from the preconceptional period till the moment of their death and even after death, providing support to their family members based on the psychosocial approach. We have the ability to be in multi-communication with other clinical units when necessary. For all these reasons and with our own experience, I believe that family medicine should focus more on palliative care as a requirement to fulfil patients' needs today.

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12. Sve odgovore o vašem seksualnom zdravlju može vam dati vaš obiteljski liječnik

Nedostatak seksualne želje

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Uvod: Smanjena seksualna želja (engl. *hypoactive sexual desire disorder*, HSDD) u žena predstavlja najčešću seksualnu disfunkciju, a kod muškaraca je u značajnom porastu. U Dijagnostičkom i statističkom priručniku za mentalne poremećaje, četvrto izdanje (DSM-IV), definira se kao trajni nedostatak ili jako smanjenje seksualnih fantazija i želje za seksualnom aktivnošću koja uzrokuje izraženu patnju ili poteškoće u partnerstvu, a traje najmanje šest mjeseci (F52). U DSM-V HSDD je kod muškaraca zasebni poremećaj, a kod žena se spaja sa smetnjama uzbuđenja. **Cilj** je prikazati učestalost i značajke ovog poremećaja te njegovo mjesto u praksi obiteljskog liječnika.

Rasprava: Poznato je da prevalencija HSDD-a raste s dobi, a podatci variraju od 5 do 15 % u muškaraca do čak 10 – 30 % u žena. HSDD često koegzistira s drugim seksualnim poremećajima, kao što je erektilna disfunkcija (ED), a može se razviti i kao njihova posljedica.

Osim kao posljedica problema u odnosu s partnerom, HSDD nastaje kod nedostatka androgena (npr. u andropauzi i menopauzi), povišene razine prolaktina, prekomjerne upotrebe lijekova (SSRI, antiandrogena, antihipertenziva, antikonvulziva itd.), različitih sistemskih bolesti i medicinskih postupaka (npr. uklanjanje prostate), depresije i drugih psiholoških problema. HSDD je povezan s nižom kvalitetom života, smanjenim zadovoljstvom u partnerskom životu i s negativnim emocionalnim stanjima. Pacijenti koji pate od HSDD-a često imaju izražen sram i neugodu prema iznošenju svojih tegoba, pa je i to razlog da poremećaj kao takav često ostaje neprepoznat. S druge strane, zdravstveni radnici rijetko pitaju pacijente o seksualnom zdravlju zbog ograničenog vremena, nedostatne edukacije, nelagode i sl. Istraživanje ispitanika u dobi od 40 do 80 godina pokazalo je da je samo njih 8 do 10 % bilo upitano o seksualnom zdravlju tijekom rutinskog posjeta liječniku. Manje od polovice pacijenata sa seksualnim problemima traži pomoć ili započinje razgovore s liječnicima. Pacijenti vjeruju da bi liječnici trebali inicirati razgovor jer se boje moguće nelagode liječnika.

Terapijski pristup uvijek je individualan. Osim promjena stila života, liječenja osnovne bolesti i korekcije postojeće medikamentne terapije, kod problema u vezi seksualno savjetovanje je prva linija. Seksualna terapija, individualna ili terapija para, može pomoći u poticanju zadovoljavajućeg i zdravijeg odnosa prema vlastitoj seksualnosti i poboljšati želju za fizičkom intimnošću. *Mindfulness* je korisna tehnika, kao i kognitivno-bihevioralni pristup.

U farmakološkom liječenju HSDD-a u žena prvi odobreni lijek bio je flibanserin, a odnedavno i bremelanotid, agonist receptora melanokortina, odobren za liječenje stečenoga, generaliziranog HSDD-a u žena u predmenopauzi. Androgeni imaju važnu ulogu u seksualnoj motivaciji muškaraca i žena i sve je veći interes za korištenje testosteronske nadomjesne terapije za liječenje HSDD-a, osim kod muškaraca i kod žena u postmenopauzi.

Zaključak: Liječnik obiteljske medicine može pomoći pacijentima s hipoaktivnom seksualnom željom tako da ih o tome pita i time otvori put prema još uvijek tabuiziranim sadržajima ljudske seksualnosti. Bez obzira na to ima li dodatnu edukaciju iz seksualne medicine, razgovor u sigurnom i povjerljivom okruženju otvara put prema rješavanju problema, a pacijent (i liječnik) nadilaze barijeru srama i nelagode koji najčešće prate razgovor kod ovih specifičnih tegoba.

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Prošireni sažetak

Your family physician can give you all the answers to questions about sexual health

Lack of sexual desire

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Introduction. Hypoactive sexual desire disorder (HSDD) is the most common sexual dysfunction in women, and it is on the rise in men. In the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), it is defined as a persistent absence or severe reduction of sexual fantasies and desire for sexual activity that causes marked distress or difficulty in partnership, lasting at least six months (F52). In DSM-V, HSDD is a separate disorder in men, and it is combined with arousal disorders in women.

The aim of this paper is to show the frequency and features of this disorder in the practice of a family physician.

Discussion. Prevalence of HSDD increases with age, and the data varies from 5-15% in men to 10-30% in women. HSDD often coexists with other sexual disorders, such as erectile dysfunction (ED), and can develop as a consequence of them.

In addition to problems in the relationship with the partner, HSDD can develop with androgen deficiency (e.g. in andropause and menopause), elevated prolactin levels, the excessive use of drugs (SSRIs, antiandrogens, antihypertensives, anticonvulsants, etc.), various systemic diseases and medical procedures (e.g. prostate removal), depression and other psychological problems. HSDD is associated with a lower quality of life, reduced satisfaction in the relationship, and negative emotional states. Patients who suffer from HSDD often have a pronounced shame and embarrassment about presenting these complaints, so this disorder often remains unrecognized. On the other hand, healthcare professionals rarely ask patients about their sexual health due to limited time, a lack of training, discomfort, etc. A survey of respondents aged 40 to 80 showed that only 8 to 10% of them were asked about sexual health during a routine visit to the physician. Less than half of the patients with sexual problems seek help or initiate conversations with physicians. Patients are inhibited by the fear of embarrassing physicians and believe that physicians should initiate the conversation.

The therapeutic approach is always individual. Sexual counseling is the first line, in addition to lifestyle changes, a treatment of the underlying disease, and a correction of existing drug therapy. Sexual therapy, whether individual or couple, can help foster a more satisfying and healthy relationship with one's own sexuality and improve the desire for physical intimacy. Mindfulness techniqe and the cognitive-behavioral approach are used.

Flibanserin was the first drug approved for treatment of acquired, generalized HSDD in premenopausal women and, more recently, bremelanotide, a melanocortin receptor agonist has been prescribed. Androgens play an important role in the male and female sexual motivation. There is an increasing interest in the use of testosterone replacement therapy even for the treatment of HSDD in postmenopausal women.

Conclusion. A family medicine physician can help patients by asking them about their sexuality. Regardless of whether they have additional education in sexual medicine, a confidential conversation in a safe environment opens the way to problem solving, and both the patient and the physician overcome the barriers of shame and embarrassment that usually accompany the conversation about these specific difficulties.

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Poveznice reproduktivnog zdravlja i ljudske seksualnosti

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Uvod s ciljem: U domeni liječnika obiteljske medicine je skrb za održavanje funkcionalnosti obitelji. Reproduktivna funkcija predstavlja jednu od važnih funkcija obitelji i time postaje predmetom od interesa u provođenju preventivne i kurativne skrbi za obitelj. Tim slijedom liječnik obiteljske medicine trebao bi obratiti pozornost na poveznicu problematike ljudske seksualnosti i reproduktivnog zdravlja kada rješava probleme pojedinaca, parova i obitelji. **Rasprava:** Prateći osobu u sklopu obiteljskog ciklusa, tijekom njezina odrastanja do starije dobi, pred obiteljskog liječnika postavljaju se različiti zadatci vezani za ljudsku seksualnost. Tu se prepoznaje potreba prevencije seksualno prenosivih bolesti (STD), racionalne kontracepcije i planirane koncepcije, pomoći u vođenju trudnoće, njegovanje odgojne funkcije obitelji, organizacije života višečlane i višegeneracijske obitelji, prilagodbe emotivnog i seksualnog života u starijoj dobi i slično. U svim opisanim situacijama javlja se osjetljiva poveznica seksualnosti i reproduktivnog zdravlja. U praksi to, među ostalim, znači suočavanje s problemom pojave STD-a, s pitanjima prevencije neželjene trudnoće sustavom *pil-after*, sa skrbi za maloljetničku trudnoću, s postupkom asistirane trudnoće, s neusklađenosti želja partnera vezanih za reprodukciju, sa seksualnosti tijekom poroda i nakon njega, s razlikama u seksualnim preferencijama partnera i s onima koje nastaju kao posljedice velike razlike u starosti partnera uključujući biološke razlike u reproduktivnoj sposobnosti muškaraca i žena. Rane i kasne posljedice neriješenih problema mogu značajno odrediti reproduktivnu funkcionalnost osobe i obitelji. Koristeći se okvirom kojim se procjenjuje izvor seksualnih problema, liječnik može uočiti probleme pojedinca koji mogu biti biološke (npr. neplodnost) i/ili psihološke prirode (npr. vaginizam). Drugi izvor problema može se kriti u problemu partnerstva, a problem može biti situacijski/privremen (npr. fizička odvojenost vezana za ekonomsku migraciju) i stalan (npr. razlike u seksualnom porivu). Treći važan izvor problema javlja se pri pritisku okoline koji opet može biti različito usmjeren: prokreativno (npr. pritisak obitelji na ostvarivanje potomstva) ili kontracepcijski (pritisak okoline u obliku zabrane seksualnosti). Taj oblik pritiska može biti interni kada dolazi od osobe u partnerstvu ili eksterni kako je već opisno od šire obitelji. Potrebno je naglasiti važnost društvene klime koja također može izvana utjecati na par, kako zabranama, tako i promicanjem seksualnosti kao dokazom mladosti, ljepote i uspješnosti.

Zaključak: U dijagnostici problema liječnik obiteljske medicine priprema teren za rješavanje problema potičući otvoreni razgovor i nudeći sigurno okruženje u kojem osoba ili par mogu slobodno govoriti o intimnim detaljima svojeg osobnog ili obiteljskog života. Intervencija liječnika obiteljske medicine temelji se na realističnom dijagnosticiranju problema, edukativnim i preskriptivnim psihološkim intervencijama, ali i na adekvatnoj medikamentnoj terapiji.

Proširenи sažetak

Your family physician can give you all the answers to questions about sexual health

Links between reproductive health and human sexuality

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Introduction: Family physicians are responsible for maintaining the family functionality. The reproductive function represents one of the important functions of the family and thus becomes a subject of interest in the implementation of preventive and curative care of the family. Consequently, a family physician should pay attention to the connection between the issues of human sexuality and reproductive health when solving the problems of individuals, couples and families.

Discussion: Following a person through the family cycle, through growing up to old age, the family physician is faced with various tasks related to human sexuality. This recognizes the need for prevention of sexually transmitted diseases (STDs), rational contraception and planned conception, help in managing pregnancy, fostering the educational function of the family, organizing the life of a multi-member and multi-generational family, adjusting emotional and sexual life in old age, and the like. In all the situations described, there is a sensitive link between sexuality and reproductive health. Among other things, in practice this means dealing with the problem of the emergence of STDs, issues of prevention of unwanted pregnancy through the "pill-after" system, care for minor pregnancy, the procedure of assisted pregnancy, incompatibility of the wishes of partners related to reproduction, sexuality during and after childbirth, differences in the sexual preferences of partners, differences arising from big age differences between partners, including biological differences in the reproductive capacity of men and women. Early and late consequences of unresolved problems can significantly determine the reproductive functionality of a person and the family.

Using a framework that assesses the source of sexual problems, the physician can see the individual's problems, which can be biological (e.g. infertility) and/or psychological in nature (e.g. vaginismus). Another source of the problem can be hidden in the partnership dynamics and can be situational/temporary (e.g. physical separation related to economic migration) and permanent (e.g. differences in sexual drive). The third important source of problems arises from environmental pressures, which again can be differently directed: procreative (e.g. family pressure to produce offspring) or contraceptive (environmental pressure). This form of pressure can be internal when it comes from a person in the partnership or external, as already described, from the wider family. It is necessary to emphasize the importance of the social climate, which can also influence the couple from the outside, both by banning and by promoting sexuality as the evidence of youth, beauty and success.

Conclusion: In diagnosing the problem, the family physician prepares the ground for solving the problem by encouraging open conversation and offering a safe environment in which a person or a couple can talk freely about the intimate details of their personal or family life. The intervention of the family physician is based on a realistic diagnosis of the problem, educational and prescriptive psychological interventions, but also on adequate drug therapy.

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Bezreceptni lijekovi i dodatci prehrani u liječenju erektilne disfunkcije

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Uvod: Erektilna disfunkcija (ED) definirana je kao nemogućnost postizanja i/ili održavanja erekcije penisa dovoljne za zadovoljavajuću seksualnu izvedbu. Liječenje ED-a temelji se na utvrđenim načelima i potrebnom liječničkom pregledu kako bi se propisala odgovarajuća terapija. Muški pacijenti ne žele razgovarati o erektilnoj disfunkciji i to je jedan od razloga zašto umjesto posjeta obiteljskom liječniku pristupaju lijekovima bez recepta i dodatcima prehrani koje najčešće kupuju preko interneta.

Cilj: Podizanje svijesti liječnika obiteljske medicine o bezreceptnim lijekovima i dodatcima prehrani koje pacijenti uzimaju sami u liječenju ED-a.

Rasprava: Načela liječenja ED-a jesu: obnova ili poboljšanje spolne funkcije, poboljšanje tjelesnog zdravlja, kvalitete života, dobrobiti muža i partnera. Pristup liječenju bolesnika individualan je prema simptomima, stupnju anksioznosti, komorbiditetima, njegovim ciljevima, sociokulturnom, obrazovnom i vjerskom kontekstu te zahtijeva odgovarajući liječnički pregled. Velik broj pacijenata zbog različitih uvjerenja, a najviše srama, ne traži pravovremenu liječničku pomoć za ovo stanje i sami započinju liječenje bezreceptnim lijekovima i dodatcima prehrani. U europskim zemljama propisivanje sildenafila, vardenafila, tadalafila i avanafila drukčije je regulirano, a u nekim zemljama, poput RS Makedonije, ti se lijekovi mogu uzimati bez liječničkog recepta. Mali broj studija koje su ispitivale učinke najčešćih biljnih dodataka prehrani za liječenje ED-a: dehidroepiandrosteron (DHEA), epimedium, ginko, L-arginin, propionil-L-karnitin, crveni ginseng, yohimbine, izvješćuju o ograničenim prednostima kod poboljšanja ED-a i nuspojavama te ih ne preporučuju kao samostalan lijek za liječenje ili se uopće ne preporučuju. Razvoj internetske komunikacije omogućuje pacijentima nesmetan i lakši pristup velikom broju bezreceptnih lijekova i dodataka prehrani za ED. Njihova nekontrolirana primjena utječe na smanjenje kvalitete života bolesnika, pojavu nuspojava i odgađa odgovarajuće liječenje pod neposrednim liječničkim nadzorom.

Zaključak: Pravovremena edukacija i podizanje zdravstvene svijesti o ED-u kao stanju za koje postoji potvrđena medicinska obrada prioritet su u svakodnevnoj komunikaciji liječnika obiteljske medicine s muškom populacijom. Erektilna disfunkcija izravno utječe na kvalitetu života bolesnika, a pravovremena dijagnoza omogućuje individualizirano liječenje i vraćanje dobrog stanja muškarca. Bezreceptni lijekovi i dodatci prehrani za liječenje ED-a pacijentima su široko dostupni. Liječnik obiteljske medicine trebao bi imati odgovarajuće znanje o njihovoj učinkovitosti i biti svjestan da se pacijenti liječe samoinicijativno prije nego što potraže liječničku pomoć.

Over the counter drugs and nutritional supplements in the treatment of erectile dysfunction

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Introduction. Erectile dysfunction (ED) is defined as an inability to achieve and/or maintain a penile erection sufficient for satisfactory sexual performance. The treatment of ED is based on established principles and a necessary medical examination in order to prescribe appropriate therapy. Male patients do not want to talk about erectile dysfunction and this is one of the reasons why instead of visiting a family physician, they acquire over-the-counter drugs and nutritional supplements, which they usually buy online.

Aim. Raising the awareness of family physicians about over the counter drugs and dietary supplements that patients take themselves in the treatment of ED.

Discussion. The principles of ED treatment are: a restoration or improvement of sexual function, physical health, quality of life, well-being of the husband and partner. The approach to patient treatment is individual according to symptoms, degree of anxiety, comorbidities, his goals, sociocultural, educational and religious context. It requires an appropriate medical examination. A large number of patients, due to different beliefs and, mostly, shame do not seek timely medical help for this condition and start treatment themselves with over-the-counter drugs and nutritional supplements. In European countries, the prescription of sildenafil, vardenafil, tadalafil and avanafil is regulated differently, and in some countries, such as the Republic of North Macedonia, these drugs can be taken without a doctor’s prescription. A small number of studies examining the effects of the most common herbal supplements for the treatment of ED: dehydroepiandrosterone (DHEA), epimedium, ginkgo, L-arginine, propionyl-L-carnitine, red ginseng, yohimbine, report limited benefits in improving ED, their side effects and they are not recommended as an independent drug for treatment or are not recommended at all. The development of Internet communication enables patients to have smooth and easier access to a large number of over-the-counter drugs and nutritional supplements for ED. Their uncontrolled use affects the reduction of the patient’s quality of life, the occurrence of side effects and it delays appropriate treatment under close medical supervision.

Conclusion. Timely education and raising health awareness about ED as a condition for which there is medical treatment are a priority in the daily communication of family physicians with the male population. Erectile dysfunction directly affects the patient’s quality of life, and timely diagnosis enables individualized treatment and a restoration of a man’s good condition. Over-the-counter medications and nutritional supplements to treat ED are widely available to patients. The family physician should have adequate knowledge of their effectiveness and be aware that patients self-medicate before seeking medical help.

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Utjecaj medija i društvenih mreža na seksualno zdravlje

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Ključne riječi: internet, društvene mreže, seksualno zdravlje, liječnik obiteljske medicine
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Uvod s ciljem: Mediji, internet i društvene mreže (MIDM) danas su sastavni dio svakodnevnog života i značajno utječu na različita područja života, pa tako i na seksualnost. Oko 80 % odrasle populacije na MIDM-u traži odgovore vezane uz pitanja iz područja seksualnog zdravlja. Cilj ovog rada bio je pregledati znanstvenu literaturu o korištenju MIDM-a, proširiti znanje liječnika obiteljske medicine o utjecaju tih medija na zdravlje pojedinca i o njihovu posljedičnom djelovanju na socijalne odnose te uputiti na to kako iskoristiti internet i društvene mreže za promicanje seksualnog zdravlja.

Metoda: U bazama PubMed i Medscape pregledani su radovi o utjecaju medija i društvenih mreža na seksualno zdravlje u razdoblju od 2017. do 2022. godine. Od ukupno 85 cjelovitih radova pregledano je i uvršteno u analizu njih 34 u kojima se istraživao utjecaj više od jednoga od navedenih medija.

Rezultati: Tijekom proteklog desetljeća *online* društveno umrežavanje uzrokovalo je duboke promjene u načinu na koji ljudi komuniciraju. Do travnja 2022. bilo je pet milijardi korisnika interneta diljem svijeta, što predstavlja 63 % svjetske populacije. Procjenjuje se da većina ljudi, a osobito mlađe osobe, provode više sati dnevno na MIDM-u, a neki čak i više od 12 sati dnevno.

Sve veći broj literature povezuje pretjeranu uporabu i ovisnost o digitalnim medijima s fizičkim, psihološkim, društvenim i neurološkim štetnim posljedicama. Istraživanja sugeriraju da su trajanje, sadržaj, korištenje po noći, vrsta medija i broj uređaja ključne komponente koje određuju učinke vremena pred ekranom. Neki su od učinaka gubitak sna, depresija, negativan utjecaj na čimbenike rizika za kardiovaskularne bolesti, inzulinska rezistencija, loša regulacija stresa, a visoka simpatička uzbuđenost i disregulacija kortizola i dopamina nepovoljno utječu i na seksualno zdravlje. Istraživanja vezana uz seksualno zdravlje i MIDM najviše proučavaju utjecaj na seksualne stavove, doživljaj rodne uloge, romantične veze, doživljaj slike o vlastitom tijelu, samopoštovanje i rizična ponašanja. Međutim, uporaba MIDM-a u promociji seksualnog zdravlja pokazala je da je u 27 % slučajeva poboljšano seksualno zdravlje, kao što su na primjer smanjenje broja pozitivnih slučaja klamidije i gonoreje, kvalitetnija uporaba kontracepcije, osnaživanje u traženju rješenja za pojedine seksualne disfunkcije.

Zaključak: Liječnik obiteljske medicine treba poznavati negativne, ali i pozitivne učinke MIDM-a. Budući da su ti mediji popularni i često se njima koriste mnogi ljudi različite dobi diljem svijeta, postoji velik potencijal da se oni učinkovitije rabe za promicanje zdravlja, uključujući i seksualno zdravlje.

The influence of media and social networks on sexual health

Keywords: internet, social networks, sexual health, family physician
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Introduction with aim Nowadays, the media, internet and social networks (MISN) are an integral part of everyday life and have a significant impact on various areas of life, including sexuality. About 80% of the adult population using the MISN seek answers related to questions in the field of sexual health. The aim of this paper is to review the scientific literature on the MISN use, to expand the knowledge of family physicians about their impact on individual health as well as the consequent effect on social relationships and how the Internet and social networks can be used to promote sexual health.

Methods Papers on the influence of the media and social networks on sexual health in the period from 2017 to 2022 were reviewed in the databases of PubMed and Medscape. Out of a total of 85 complete papers, 34 papers were reviewed and included in the analysis in which the influence of more than one of the mentioned media was investigated.

Results Over the past decade, online social networking has caused profound changes in the way people communicate. By April 2022, there were 5 billion Internet users worldwide, representing 63% of the world's population. It is estimated that most people, especially younger people, spend several hours a day on the MISN, and some even more than 12 hours a day. A growing body of literature links the excessive use and addiction to digital media with physical, psychological, social, and neurological adverse consequences. Research suggests that duration, content, use after dark, media type, and the number of devices are key components in determining the effects of screen time. Some of the effects are sleep loss, depression, a negative impact on cardiovascular disease risk factors, insulin resistance, poor stress regulation, and a high sympathetic arousal and dysregulation of cortisol and dopamine adversely affect sexual health. Research related to sexual health and the MISN mainly studies the influence on sexual attitudes, the experience of gender roles, romantic relationships, the experience of one's own body image, self-esteem and risky behaviors. On the other hand, the use of the MISN in the promotion of sexual health indicated that sexual health improved in 27% of cases, such as, for example, a reduction in the number of positive cases of chlamydia and gonorrhea, a better use of contraception, and empowerment in seeking solutions for certain sexual dysfunctions.

Conclusion A family physician should know about the negative as well as positive effects of the MISN. Since the MISN are popular and frequently used by many people of different ages around the world, there is a great potential in using these media more effectively to promote health, including sexual health.

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Uloga liječnika obiteljske medicine u savjetovanju adolescenata i mladih o korištenju kontracepcije

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Ključne riječi: kontracepcija, liječnik opće/obiteljske medicine, projekt, adolescenti, dostupnost
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Uvod: Informacije o kontracepciji i usluge kontracepcije osnovna su zdravstvena i ljudska prava svih pojedinaca. Unatoč naporima da se poveća uporaba kontracepcijskih sredstava među adolescentima i mladima, još uvijek postoje velike praznine, stvarajući nezadovoljenu potrebu za planiranjem obitelji.

Cilj: Od 2020. do 2022., uz financijsku potporu Japanskog zakladnog fonda Međunarodne federacije za planirano roditeljstvo, proveden je projekt *Obiteljski liječnici – partneri* kako bi se proširio pristup i izbor usluga kontracepcije za seksualno i reproduktivno zdravlje.

Materijali i metode: Projekt provodi Udruga za zdravstveno obrazovanje i istraživanje – HERA, u suradnji s Ministarstvom zdravstva, Fondom za zdravstveno osiguranje i Medicinskim fakultetom u Skoplju. Cilj ovog projekta jest poboljšati seksualno i reproduktivno zdravlje (SRZ) djevojaka i žena iz ruralnih područja, iz romskih zajednica te djevojaka/žena s tjelesnim invaliditetom, koje imaju ograničen pristup zdravstvenim uslugama, u deset zdravstvenih regija u Sjevernoj Makedoniji (Makedonski Brod, Probištip, Kruševo, Radoviš, Demir Hisar, Kratovo, Delčevo, Štip, Kriva Palanka i Resen). Odabrane regije imaju mali broj obiteljskih ginekologa, ali dovoljan broj liječnika opće prakse koji mogu aktivno pridonijeti razvoju kompetencija za spolno i reproduktivno zdravlje. Zdravstvene usluge za spolno i reproduktivno zdravlje definirane su 2019. godine Popisom zdravstvenih usluga u područje obiteljske medicine koje se mogu provoditi u ambulantama obiteljske medicine na primarnoj razini zdravstvene zaštite. Tijekom 2020./2021. prvi je put izrađena cjelovita Nacionalna smjernica za planiranje obitelji, koja je u postupku donošenja u Ministarstvu zdravstva, namijenjena svim razinama zdravstvene zaštite, uključujući posebne aspekte koji se odnose na izabrane liječnike primarne zdravstvene zaštite.

Rezultati: Tijekom pilot-programa Projekta, od travnja do rujna 2022., liječnici opće medicine, njih 15, za osobe do 25 godina obavili su 231 savjetovanje o planiranju obitelji, podijeljeno je 88 oralnih kontraceptiva, a recepti su propisani za 13 osoba. Isporučena su i 392 kondoma.

Samoprocjena o kompetencijama u pružanju usluga PRZ-a pokazuje razlike ovisno o vrsti usluge. Od usluga koje su pružene 2022. godine najviše ih je bilo za prevenciju raka dojke i prostate te menopauze, a najmanje su bile zastupljene usluge vaginalnog pregleda. Unatoč tomu, napredak je postignut jer je sedam liječnika obiteljske medicine koji su sudjelovali u projektu (40 %) i ispunili konačnu anketu obavilo vaginalne preglede te godine. Gotovo svi liječnici koji su izjavili da su 2022. pružili usluge vezane uz vaginalni pregled, uključujući vaginalni bris i/ili bris, iz gradova su u kojima su ordinacije smještene u domovima zdravlja dobile opremu u sklopu Projekta (Makedonski Brod, Radoviš i Delčevo).

Zaključak: Dostupnost kompetentno educiranih liječnika opće prakse te dostupnost obiteljske ambulante pružaju bolju mogućnost za promicanje zdravlja i prevenciju u području spolno reproduktivnog zdravlja, što će nedvojbeno unaprijediti korištenje suvremene kontracepcije. Mladi vjeruju svojem liječniku opće prakse i otvorenije prihvaćaju razgovore o planiranju obitelji i korištenju suvremene kontracepcije.

Liječnici opće/obiteljske medicine kontinuirano skrbe o biopsihosocijalnim potrebama adolescenata i upoznati su s tim potrebama te imaju važnu ulogu u osiguravanju pristupa visokokvalitetnim i neosuđujućim uslugama i metodama kontracepcije.

General practitioners' role in counseling adolescents and young people on the use of contraception

Keywords: contraception, general practitioner (GP), project, adolescents, availability.
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Introduction: Contraceptive information and services are basic health and human rights of all individuals. Despite efforts to increase the use of contraceptives among adolescents and youth, large areas for improvement still exist, creating an unmet need for family planning.

Aim: From 2020 to 2022, financially supported by the Japan Trust Fund of The International Federation for Planned Parenthood, the project "Family Doctors − Partners." was implemented to expand access and choice to contraceptive services for sexual and reproductive health".

Materials and methods: The project is implemented by Health Education and Research Association − HERA, in cooperation with the Ministry of Health, the Fund for health insurance, and the Faculty of Medicine Skopje. The aim of this project was to improve the sexual and reproductive health (SRH) of girls and women from rural areas, from Roma communities, and girls/women with physical disabilities, who have limited access to health services in 10 health regions in North Macedonia (Makedonski Brod, Probishtip, Krushevo, Radovish, Demir Hisar, Kratovo, Delchevo, Shtip, Kriva Palanka, and Resen). The selected regions have a small number of family gynecologists, but a sufficient number of general practitioners who can actively contribute to the development of sexual and reproductive health competencies. Health services for sexual and reproductive health are defined in 2019 by the List of health services in family medicine, which can be provided in family medicine clinics at the primary healthcare level. During 2020/2021 for the first time, a comprehensive National Family Planning Guideline was prepared, which is in the process of adoption by the Ministry of Health, intended for all levels of healthcare, including special aspects applicable to selected primary care physicians.

Results: During the pilot program of the Project, from April to September 2022 by 15 general practitioners for people under 25 years of age, 231 family planning consultations were given, 88 oral contraceptives were distributed, prescriptions were issued for 13 people and 392 condoms were delivered.

The availability of competent trained general practitioners, and the accessibility of the family clinic, provide a better opportunity for health promotion and prevention in the area of sexual and reproductive health, which will undoubtedly improve the use of modern contraceptives. Young people trust their GPs and more openly accept to discuss family planning and the use of modern contraception.

Conclusion: General practitioners continuously care for and know the biopsychosocial needs of adolescents. They have an important role in providing access to high-quality and non-judgmental services and methods of contraception. The self-assessmet of the competencies in providing SRH related services shows differences depending on the type of service. Most of the services provided in 2022 were for the prevention of breast and prostate cancer and menopause, while vaginal examination services were least represented. Nonetheless, progress has been made, since 7 of the family physicianss that took part of the project (40%) who completed the final survery, had conducted vaginal examinations in 2022. Almost all of the doctors who have stated that in 2022 they had delivered services related to vaginal examination, including vaginal swab and/or smear test, are from towns where surgeries located in the health centres received equipment through the project (Makedonski Brod, Radovis and Delcevo).

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13 Promicanje zdravlja

Zašto je bitno dovoljno se naspavati?

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Uvod s ciljem: Problemi spavanja rasprostranjen su i značajan javnozdravstveni problem kojem se pridaje premalo pozornosti i prečesto ga se smatra samo simptomom, a ne zasebnim kliničkim entitetom. Takvi problemi nepovoljno utječu na kvalitetu života bolesnika, a zahtijevaju cjelovit pristup koji podrazumijeva posebno znanje i vještine.

Cilj je rada osvijestiti liječnike obiteljske medicine o važnosti kvalitete sna i o posljedicama koje poremećaji spavanja imaju na zdravlje pojedinca.

Rasprava: Spavanje je kompleksan biološki proces na koji otpada trećina čovjekova života. Manje od sedam sati sna povezano je s porastom tjelesne težine, sa šećernom bolesti, s kardiovaskularnim bolestima, depresijom, oslabljenom imunološkom funkcijom, povećanim rizikom od nesreća i povećanim rizikom od smrti. Rizični čimbenici mogu biti fizički, psihosocijalni, okolišni, zatim razna komorbidna stanja, stimulansi ili pak psihološke promjene te, u posljednje vrijeme, COVID-19 infekcija. Uz probleme spavanja prisutan je visok postotak komorbiditeta, ali su i problemi spavanja, posebno nesanica, često komorbidno stanje uz druge bolesti.

San je važan zbog očuvanja energije, obnove tkiva, rasta, regulacije emocija, neuralnog sazrijevanja, pamćenja i termoregulacije. Posljedice nedovoljnog i nekvalitetnog spavanja povezane su s različitim problemima i poteškoćama poput promjenjivog raspoloženja, depresivnosti, anksioznosti, smanjene radne učinkovitosti, smanjene koncentracije i motivacije, s problemima u socijalnim odnosima, s učestalim ozljedama, nezgodama i nesrećama, s različitim zdravstvenim poteškoćama te s duljinom života.

Problemi spavanja vrlo se rijetko spontano prijavljuju liječnicima obiteljske medicine. Zanemareni su i od bolesnika, ali i od liječnika, te se često pripisuju posljedicama drugih komorbiditeta. Postoje brojni upitnici, ali i dnevnik spavanja, koji je vrlo jednostavan, a zlatni je standard u postavljanju dijagnoze.

Zaključak: Problemi spavanja utječu na kvalitetu života, ali i predstavljaju rizik za nastanak brojnih bolesti. Još uvijek prisutna COVID pandemija ima jak utjecaj na svakodnevno funkcioniranje, na kvalitetu života, ali i na kvalitetu spavanja. Liječnik obiteljske medicine najbolje poznaje svoje bolesnike, stoga je u idealnoj poziciji da prepozna probleme spavanja, propituje, upotrebljava postojeće upitnike i poboljša san, a time i kvalitetu života i zdravlje svojih pacijenata.

Why is it important to get enough sleep?

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Introduction with aim. Sleep disorders are a widespread and important public health problem given too little attention and too often considered as a symptom rather than a separate clinical entity. They have an adverse impact on the patient's quality of life and require a comprehensive approach which implies specialized knowledge and skills.

The aim of this paper is to raise awareness among family physiciansof the importance of the sleep quality and the consequences that sleep disorders have on an individual's health.

Discussion. Sleep is a complex biological process that makes up a third of a person's life. Less than seven hours of sleep is associated with weight gain, diabetes, cardiovascular disease, depression, weakened immune function, an increased risk of accidents, and an increased risk of death. Risk factors can be physical, psychosocial, environmental, followed by various comorbid conditions, stimulants or psychological changes, and lately, the COVID-19 infection. There is a high percentage of comorbidity with sleep disorders, sleep disorders, especially insomnia, being often a comorbid condition with other diseases.

Sleep is important for energy conservation, tissue repair, growth, emotion regulation, neural maturation, memory and thermoregulation. The consequences of insufficient and poor-quality sleep are associated with various problems and difficulties such as mood swings, depression, anxiety, reduced work efficiency, reduced concentration and motivation, problems in social relationships, frequent injuries, accidents, various health problems and a decline in life expectancy.

Sleep disorders are rarely spontaneously reported to family medicine doctors. They are neglected by both patients and doctors and are often attributed to the consequences of other comorbidities. There are numerous questionnaires, as well as a sleep diary, which is very simple to keep and is a gold standard in establishing a diagnosis.

Conclusion. Sleep disorders affect the quality of life, but also represent a risk for many diseases. The continuing presence of COVID pandemic has a strong impact on daily functioning, the quality of life, but also on the quality of sleep. A family physician knows their patients best. Therefore, they are in an ideal position to recognize sleep disorders, ask questions, use existing questionnaires and improve sleep, and thus the quality of life and health of their patients.

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Kako prehranom sačuvati zdravlje?

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Uvod s ciljem: Mediteranska prehrana prepoznata je i od Svjetske zdravstvene organizacije kao važan čimbenik u očuvanju kvalitetnog zdravlja, a samim tim i života. Više randomiziranih kliničkih studija dokazalo je korisnost takve prehrane u primarnoj i sekundarnoj prevenciji kroničnih nezaraznih bolesti (kardiovaskularnih bolesti, dijabetesa tipa 2, nekih vrsta karcinoma…) što dovodi do produljenja životnog vijeka. Cilj je rada prikazati način djelovanja mediteranske prehrane na očuvanje zdravlja.

Rasprava: Točan mehanizam kojim se to događa još uvijek nije potpuno poznat, ali se prati pet parametara na koje djeluje mediteranski način prehrane: (a) učinak snižavanja lipida, (b) zaštita od oksidacijskog stresa, upale i agregacije trombocita, (c) modifikacija uključenih hormona i faktora rasta u patogenezi raka, (d) inhibicija puteva osjeta hranjivih tvari specifičnim ograničenjem aminokiselina i (e) proizvodnja metabolita posredovana crijevnom mikrobiotom koji utječu na metaboličko zdravlje. Kronična upala niskog stupnja predstavlja pozadinski patogenetski mehanizam koji povezuje metaboličke čimbenike rizika s povećanim rizikom od kroničnih degenerativnih bolesti. Upravo zbog mnoštva hranjivih tvari, fitokemikalija (polifenoli, karotenoidi, flavonoidi i dr.), mediteranski način prehrane smanjuje količinu biomarkera povezanih s kroničnom upalom, a samim tim i kardiovaskularne i cerebrovaskularne događaje. Neke su studije izvijestile o pozitivnom učinku pridržavanja mediteranske prehrane i učestalosti zatajenja srca, dok su druge, kao istraživanje Primarna prevencija kardiovaskularnih bolesti mediteranskom dijetom (engl. *Primary Prevention of Cardiovascular Disease with a Mediterranean Diet* – PREDIMED), pokazale da je učestalost velikih kardiovaskularnih događaja bila niža među ispitanicima kojima je dodijeljena mediteranska prehrana s dodatkom ekstradjevičanskog maslinova ulja nego među onima kojima je dodijeljena dijeta sa smanjenim udjelom masti.

Zaključak: Brojne metaanalize upućuju na korisnost mediteranskog načina prehrane što se ogleda u njezinu povoljnom utjecaju na metaboličko zdravlje, a samim tim i na dužinu životnog vijeka, te je potrebno i dalje promicati ovaj prehrambeni obrazac kod odrasle populacije. Obiteljski liječnici u najboljoj su poziciji da svojim pacijentima preporučuju upravo takav način prehrane pod uvjetom da su i oni dobro educirani.

How to preserve health through nutrition?

Key words: Mediterranean diet, non-communicable chronic diseases, life expectancy, family physician
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Introduction and aim: The Mediterranean diet is recognized by the World Health Organization as an important factor in preserving quality health and thus life. Several randomized clinical studies have proven the usefulness of such a diet in the primary and secondary prevention of chronic non-communicable diseases (cardiovascular diseases, type 2 diabetes, some types of cancer...) which leads to an increase in life expectancy. The aim of the paper is to show the way the Mediterranean diet works to preserve health.

Discussion: The exact mechanism by which this happens is still not fully known, but five parameters are monitored on which the Mediterranean diet works: (a) lipid-lowering effect, (b) protection against oxidative stress, inflammation and platelet aggregation, (c) modification of the involved hormones and growth factors in cancer pathogenesis, (d) inhibition of nutrient sensing pathways by specific amino acid limitation, and (e) intestinal microbiota-mediated production of metabolites that influence metabolic health. Low-grade chronic inflammation represents a background pathogenetic mechanism that links metabolic risk factors to an increased risk of chronic degenerative diseases. Precisely because of the abundance of nutrients, phytochemicals (polyphenols, carotenoids, flavonoids, etc), the Mediterranean diet reduces the amount of biomarkers associated with chronic inflammation and thus cardiovascular and cerebrovascular events. Some studies have reported a positive effect of following a Mediterranean diet on the incidence of heart failure, while others, as Primary Prevention of Cardiovascular Disease with a Mediterranean Diet – PREDIMED, have shown that the incidence of major cardiovascular events was lower among subjects assigned to a Mediterranean diet supplemented with extra virgin olive oil than among those assigned low-fat diet.

Conclusion: Numerous meta-analyses point to the usefulness of the Mediterranean diet on metabolic health and thus on the length of life, and it is necessary to continue to promote this dietary pattern in the adult population. Family physicians are in the best position to recommend this lifestyle to their patients, provided they are also well educated.

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Vježbajmo za zdravlje

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Uvod: Tjelesna aktivnost je svako trajno kretanje tijela koje povećava potrošnju energije, kao što su hodanje, trčanje, ples, vrtlarstvo. Vježbanje je potkategorija tjelesne aktivnosti koja je planirana, svrsishodna i ponavljana kako bi se poboljšalo ili održalo zdravlje i kondicija. Vježbe se mogu podijeliti u četiri glavne vrste: 1) aerobne vježbe ili vježbe izdržljivosti (hodanje ili trčanje), 2) vježbe snage ili otpora (sklekovi, čučanj), 3) vježbe ravnoteže (hodanje petom do pete, tai chi) i 4) vježbe pokretljivosti ili fleksibilnosti (istezanje, joga).

Cilj ove prezentacije jest pomoći liječnicima obiteljske medicine da evaluiraju trenutačnu razinu tjelesne aktivnosti i pacijentima propišu adekvatno vježbanje.

Rasprava: Osobe bez tjelesne aktivnosti imaju dva do tri puta veću vjerojatnost da će razviti akutne kardiovaskularne događaje ili umrijeti tijekom praćenja od svojih prikladnijih kolega, bez obzira na njihov profil rizika, tjelesni habitus ili prisutnost kardiovaskularnih bolesti. Redovita tjelovježba nudi brojne zdravstvene dobrobiti: smanjenje opće smrtnosti, morbiditeta, kardiovaskularnog rizika, krvnog tlaka, razine glukoze u krvi, razine upalnih markera, tjelesne težine, rizika za brojne karcinome i poboljšanje mentalnog statusa. Postoje dokazi da sjedilački način života može biti točniji prediktor smrti od priznatih čimbenika rizika kao što su pušenje, hipertenzija i dijabetes. Zbog tih činjenica svi obiteljski liječnici trebaju procijeniti razinu tjelesne aktivnosti svojih pacijenata i njihovu spremnost za vježbanje, trebaju ih motivirati i savjetovati im tjelesno vježbanje kao najvažniju mjeru za očuvanje zdravlja, prevenciju i liječenje brojnih bolesti. U savjetovanju se treba koristiti sustavom 5 P: pitati, posavjetovati, procijeniti, pomoći i pratiti.

Zaključak: Sve objavljene smjernice potiču 150 minuta ili više kumulativnog tjelesnog vježbanja umjerenog intenziteta svaki tjedan. Razina tjelesne aktivnosti, procjena spremnosti za promjene, propisana tjelesna aktivnost i razina suradljivosti trebaju se povremeno zapisivati u zdravstveni karton pacijenta.

Let's exercise for health

Keywords: Physical activity, Exercises, Family Medicine, Health Benefits
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Introduction Physical activity are any sustained body movements which increase energy expenditure (walking, jogging, dancing, gardening). Exercise is a subcategory of physical activity that is planned, purposeful, and repeated on a regular basis to improve or maintain health and fitness. Exercises may be divided into four major types: aerobic or endurance exercises (walking or running), strength or resistance exercises (push up, squat), balance exercises (heel-toe walking, tai chi), and mobility or flexibility exercises (stretching, yoga).

Aim The aim of this presentation is to help family physicians to evaluate and prescribe adequate exercise to patients.

Discussion Regular exercise offers numerous health benefits: reduced general mortality and morbidity, reduced cardiovascular risk, reduced blood pressure, improved glycaemic status, reduced levels of inflammatory markers, decreased body weight, and decreased risks for numerous cancers. There is evidence that a sedentary lifestyle may be a more accurate predictor of death than recognized risk factors such as smoking, hypertension, and diabetes. Unfit persons are two to three times more likely to develop acute cardiovascular events or die during follow-up than their more fit counterparts, irrespective of their risk profile, body habitus, or the presence of cardiovascular disease. Because of these facts, all family physicians should assess the level of physical activity of their patients, assess readiness for exercise, motivate and advise physical exercise as the most important measure for the preservation of health, prevention, and treatment of numerous diseases. The ˝Five A's" approach (Ask, Advise, Assess, Assist, and Arrange) should be used in the consultation.

Conclusion All published guidelines encourage 150 minutes or more of cumulative moderate-intensity physical exercise each week. The level of physical activity, the assessment of readiness for change, the prescribed physical activity and the level of compliance should be recorded periodically in the patient's health card.

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Liječenje smijehom? – javite se svojem doktoru!

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Uvod s ciljem: Rječnička definicija smijeha ističe da se radi o glasovnom izrazu uživanja ili podsmijeha, karakteriziranim brzim slijedom inspiracijskih i ekspiracijskih pokreta. Smijeh je ugodan jer služi za oslobađanje napetosti. Grčevit smijeh nalazimo kod nekih psihijatrijskih i neuroloških bolesti, ali takva vrsta smijeha ne služi kao lijek. U psihoanalitičkoj teoriji smijeh se može promatrati kao obrana od plača ili srama. Narodna mudrost glasi da je smijeh najbolji lijek. Humor je generator smijeha i dobra raspoloženja. Duhoviti su ljudi rado viđeni u društvu, smisao za humor ima pozitivan psihološki učinak prilikom suočavanja sa stresom koji prati dijagnosticiranje i liječenje težih akutnih i kroničnih bolesti. Obiteljski doktor, dobro doziranom komunikacijom humorom, poboljšava raspoloženje svojih pacijenata, što pozitivno utječe na suradljivost i vodi boljim zdravstvenim ishodima.

Cilj je rada opisati suvremene teorije humora i mogućnosti implementacije smijeha u svakodnevno liječenje pacijenata.

Rasprava: Istraživači humora dijele teoretske pristupe humoru u tri skupine: 1. teorije nekongruentnosti ili nekonzistentnosti, 2. teorije nadmoći i 3. teorije olakšanja.

Teorije nekongruentnosti su kognitivne teorije u kojima se naglašava korištenje jedne kognitivne sheme, odnosno skripta, u situaciji kad se uobičajeno koristi druga kognitivna shema. Obje situacije imaju nešto zajedničko što omogućuje zamjenu shema. Iznenađenje koje uslijedi kad se zamjena shema prepozna, izaziva smijeh.

Teorije nadmoći bave se humorom u kojemu se naglašava negativan stav prema određenim osobama odnosno društvenim skupinama. Nasuprot duhovitosti koja se temelji na nekongruentnosti, ovaj vid humora bez većih problema razumjet će i osobe bez posebno razvijenog „smisla za humor“, odnosno razumijevanja prenesenog značenja. Neki teoretičari takvu vrstu humora smatraju grubom i manje vrijednom.

Teorije olakšanja su psihodinamske teorije u kojima se naglašava zamjena agresivnog ili tabuiziranog impulsa socijalno prihvatljivijim impulsom.

Najbolji se rezultati postižu ako obiteljski liječnik i medicinska sestra dijele s pacijentom sličan smisao za humor. Budući da obiteljski liječnik dobro poznaje svoje pacijente, može prilagoditi vrstu i dozu humora kojim se koristi u liječenju.

U usporedbi liječenja komunikacijom i liječenja tvarnim lijekovima, humor ima ulogu pomoćnih supstancija koje gorkom lijeku daju ugodniji okus, koji nije nužno sladak, već može biti i osvježavajuće kiselkast. Pacijenti obično bolje upamte savjete koje su dobili na duhovit način.

Zaključak: Smijeh, odnosno korištenje humora u liječenju, poboljšava komunikaciju obiteljskog liječnika i pacijenta, smanjuje stres u pacijenata, ali i u liječnika, uz poboljšanje suradljivosti. Pacijenti bolje pamte savjete koje su dobili korištenjem prenesenog značenja i na duhovit način.

Laughter therapy? − contact your doctor

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Introduction with aim: The dictionary definition of laughter states that it is a vocal expression of enjoyment or derision, characterized by a rapid succession of inspiratory and expiratory movements. Laughter is pleasant because it serves to release tension. Convulsive laughter is found in some psychiatric and neurological diseases, but this kind of laughter does not serve as a cure. In psychoanalytic theory, laughter can be seen as a defense against crying or shame. Folk wisdom says that laughter is the best medicine. Humor is a generator of laughter and good mood. Witty people are welcome in society, a sense of humor has a positive psychological effect when dealing with the stress that accompanies the diagnosis and treatment of severe acute and chronic diseases. The family physician, with well-dosed humor in their communication, improves the mood of his patients, which positively affects cooperation and leads to better health outcomes.

Aim of this paper is to describe contemporary theories of humor and the possibilities of implementing laughter in the daily treatment of patients.

Discussion: Humor researchers divide theoretical approaches to humor into three groups: 1. Incongruence or inconsistency theories, 2. Supremacy theories, and 3. Facilitation theories. First, incongruence theories are cognitive theories that emphasize the use of one cognitive scheme, or script, in a situation where another cognitive scheme is normally used. Both situations have something in common that allows schemas to be swapped. The surprise that follows recognizing the scheme switch is laughable. Next, dominance theories deal with humor in which a negative attitude towards certain people or social groups is emphasized. In contrast to humor based on incongruity, this type of humor will be understood without major problems by people without a particularly developed "sense of humor", i.e. understanding of the conveyed meaning. Some theorists consider this kind of humor crude and less valuable. Finally, relief theories are psychodynamic theories that emphasize the replacement of an aggressive or taboo impulse with a more socially acceptable impulse. The best results are achieved if the family physician and nurse share a similar sense of humor with the patient. Since family physicians know their patients well, they are able to adjust the type and dose of humor used in treatment. If we compare that to the treatment with prescription medicines, humor plays the role of auxiliary substances that give the bitter medicine a more pleasant taste, which is not necessarily sweet, but can also be refreshingly sour. Patients usually better remember the advice given in a humorous way.

Conclusion: Laughter, or the use of humor in treatment, improves communication between the family physician and the patient, reduces stress in patients, but also in the physician, while improving cooperation. Patients better remember the advice they were given received with added meaning and in a humorous way.

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Kvartarna prevencija u ordinaciji liječnika opće/obiteljske medicine

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Uvod: Bolje je biti zdrav nego bolestan i mrtav – to je početak i kraj jednoga realnog argumenta za preventivnu medicinu. Kvartarna prevencija podrazumijeva mjere koje treba poduzeti kako bi se pojedinac zaštitio od medicinskih intervencija koje bi mu nanijele više štete nego koristi. Cilj ovog rada bio je upozoriti liječnike opće/obiteljske medicine na opasnost medikalizacije i uputiti na nužnost racionalnog pristupa u prevenciji i liječenju.

Rasprava: Belgijski liječnik Marc Jaumolle daje novi koncept kvartarne prevencije, koju sagledava i s motrišta liječnika, ali i s motrišta pacijenta, te nalazi da se njihova gledišta često razilaze. Prekretnica u tradicionalnoj prevenciji nastala je kada je prevencija stručno neopravdano komercijalizirana (redoviti sistematski pregledi, opsežne laboratorijske pretrage, određen način života predstavljaju se kao jamstvo dobrog zdravlja). Tomu su pridonijeli i sami liječnici kada su bolestima počeli proglašavati normalne fiziološke procese, blaga i nevažna stanja, osobne i socijalne probleme, rizične čimbenike… Samo promjena u definiciji nekih bolesti dovela je do toga da se broj oboljelih od tih bolesti drastično poveća, nekada i višestruko (hipertenzija, osteoporoza, infarkt miokarda, predijabetes).

Vrlo se često u praksi koristimo laboratorijskim pretragama. Liječnici se njima koriste da bi potvrdili dijagnozu, pratili progresiju bolesti, zato što protokoli tako nalažu, ali i zato što katkada ne znaju što bi drugo, pa tako kupuju vrijeme, a i zato što su takve pretrage lako dostupne. Pacijenti pak često misle da su one odraz njihova zdravstvenog stanja, a služe im i da smanje vlastitu anksioznost.

Sustavan pregled Cochranove baze podataka iz 2019. pokazuje da sistematski zdravstveni pregledi ne smanjuju KV mortalitet, ishemijsku bolest srca ni moždani udar, a efekt na ukupni mortalitet i morbiditet od karcinoma gotovo je zanemariv. Ako se međutim jasno odabrane preventivne mjere primijene na ciljane skupine pacijenata (stratificirane po spolu, dobi, rizičnim čimbenicima), mogu se dobiti znatno bolji rezultati.

Zaključak: Potrebno je pravilno tumačiti procijenjene rizike i ne upadati u zamku medikalizacije. Znanje je najbolje sredstvo u kvartarnoj prevenciji. Nije cilj blatiti nove medicinske tehnologije i napredak, već dati relevantno mišljenje o nužnosti određenih procedura ili lijekova. Kvartarnu prevenciju treba provoditi zajedno s našim pacijentima, a ne usprkos njima.

Quaternary prevention in the GP`s/family physician`s office

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Introduction. It is better to be healthy than ill and dead – it is the beginning and the end of the one real argument for preventive medicine. Quaternary prevention implies undertaking measures to protect a person from medical interventions that could cause him/her more harm than good. We aimed at pointing out to GPs the dangers of medicalization and the necessity of rationalizing prevention and treatment.

Discussion. Dr. Marc Jaumolle, Belgium gave the new concept of quaternary prevention, including doctors` and patients` points of view and he found they were often very different. The turnaround in traditional preventive medicine arose the moment prevention became commercial, which is totally unprofessional (regular physicals, extensive lab analyses and certain lifestyles are presented as a guarantee of longevity). Doctors contributed by declaring some normal physiological processes, less important conditions, personal and social problems, and risk factors, for diseases. The mere change of the definition of some diseases led to multiply increased numbers of the diseased (hypertension, osteoporosis, myocardial infarction, prediabetes).

We often use lab analyses in our everyday practice. Doctors use them to confirm the diagnosis, follow disease progress, because protocols prompt them to do so but also because sometimes they do not know what to do so they are buying time and let us not forget lab analyses are very available. Patients, on the other hand, find they are the confirmation of their good health, ease their anxiety, and some feel compelled by society expectations to do them.

A systemic review of the Cochrane database from 2019 showed physical examinations did not decrease CV mortality, ischemic heart disease, or stroke, and their effect on all-cause mortality and cancer mortality is scarce. But if we take specific preventive measures in certain population groups (stratified by gender, age, risk factors) better results could be achieved.

Conclusion. It is essential to interpret properly evaluated risks and not fall into the medicalization trap. Knowledge is the best tool of quaternary prevention. The aim is not to belittle new medical technologies and progress but give a relevant opinion on the necessity of certain medical interventions and medicines. Quaternary prevention should be practised along with our patients and not in spite of them.

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14. Mladi nastavnici

Pristup bolesniku s kemoterapijom izazvanom perifernom neuropatijom

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Uvod s ciljem: Maligne bolesti značajan su javnozdravstveni problem kako u svijetu, tako i u Hrvatskoj. Broj oboljelih u stalnom je porastu, ali napretkom u onkologiji dolazi do značajnog poboljšanja dugoročnih ishoda u pacijenata koji boluju od raka. Primjena kemoterapijskih lijekova dovodi do brojnih promjena u staničnim strukturama i funkcijama, što uzrokuje progresivne i često trajne toksične nuspojave. Kemoterapijom izazvana periferna neuropatija (engl. *chemotherapy-induced peripheral neuropathy* – CIPN) jedna je od uobičajenih nuspojava nekoliko kemoterapijskih lijekova prve linije koja ima negativan utjecaj na kvalitetu života bolesnika. Cilj je ovoga rada prikazati etiologiju, dijagnostiku te mogući pristup u terapiji i prevenciji CIPN-a, kao i naglasiti ulogu liječnika obiteljske medicine u ranom prepoznavanju simptoma.

Rasprava: CIPN nastaje kao posljedica neurotoksičnosti kemoterapijskih lijekova koji uzrokuju oštećenja perifernih živaca (senzornih, motornih i autonomnih). Iako se razina neurotoksičnosti razlikuje među pojedinim lijekovima, za neke se zna da su povezani s povećanim rizikom CIPN-a, npr. derivati platine, taksani, vinka alkaloidi, eribulin, bortezomib i talidomid. Senzorna živčana vlakna najosjetljivija su na toksičnost tih tvari, a simptomi CIPN-a obično se manifestiraju kao žarenje, trnjenje ili obamrlost u šakama i stopalima. Simptomi obično nestaju sa završetkom kemoterapije, ali ovisno o primijenjenom lijeku oni mogu perzistirati još nekoliko godina ili čak doživotno. Iako točna patogeneza još nije u potpunosti istražena, smatra se da je mehanizam nastanka CIPN-a multifaktorski te uključuje oštećenja aksona, mijelinskih ovojnica živaca i senzornih tjelešaca u ganglijima dorzalnih korijena. Bolesnici s postojećim oštećenjima perifernoga živčanog sustava (npr. radikulopatija, dijabetička polineuropatija) imaju povećan rizik za razvoj CIPN-a. Dijagnoza se postavlja na temelju anamneze i kliničke slike, a u rijetkim slučajevima potvrđuje EMG-om ili biopsijom kože. Prema Američkom društvu za kliničku onkologiju, duloksetin je jedini lijek koji ima dokazano djelovanje na CIPN u randomiziranim kliničkim istraživanjima, a u terapiji se još koriste i ostali SNRI, triciklički antidepresivi, antiepileptici, opioidi te topički pripravci kapsaicina i lidokaina. Za sada ne postoje dokazani konvencionalni načini prevencije nastanka CIPN-a, a pojedini pripravci trenutačno su u fazi pretkliničkih istraživanja.

Zaključak: Liječnik obiteljske medicine skrbi o sve većem broju bolesnika s malignim bolestima pa je nužno poznavanje mogućih nuspojava pojedinih kemoterapijskih lijekova. Potrebno je na vrijeme razmišljati o dijagnozi CIPN-a te primijeniti adekvatnu terapiju kako bi se očuvala kvaliteta života bolesnika oboljelih od malignih bolesti.

Approach to the patient with chemotherapy-induced peripheral neuropathy

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IIntroduction with aim. Malignant diseases are a significant public health problem, both in the world and in Croatia. The number of patients is constantly increasing, but with a progress in oncology, there is a significant improvement in the long-term outcomes for the patients suffering from cancer. The use of chemotherapy drugs leads to numerous changes in cellular structures and functions, which causes progressive and often permanent toxic side effects. Chemotherapy-induced peripheral neuropathy (CIPN) is one of the common side effects of several first-line chemotherapy drugs, which has a negative impact on patients' quality of life. The aim of this paper is to present the etiology, diagnosis and possible approach to the therapy and prevention of CIPN, as well as to emphasize the role of family physicians in the early recognition of symptoms.

Discussion. CIPN occurs as a result of the neurotoxicity of chemotherapy drugs causing damage to the peripheral nerves (sensory, motor and autonomic). Although the level of neurotoxicity varies among individual drugs, some are known to be associated with an increased risk of CIPN, e.g., platinum derivatives, taxanes, vinca alkaloids, eribulin, bortezomib, and thalidomide. Sensory nerve fibers are most sensitive to the toxicity of these substances, and symptoms of CIPN usually manifest as burning, tingling, or numbness in the hands and feet. Symptoms usually disappear after the end of chemotherapy, but depending on the drug used, they can persist for several years or even for life. Although the exact pathogenesis has not yet been fully investigated, it is believed that the mechanism of CIPN is multifactorial and includes damage to axons, the myelin sheaths of nerves and sensory corpuscles in the dorsal root ganglia. Patients with pre-existing damage to the peripheral nervous system (eg, radiculopathy, diabetic polyneuropathy) are at an increased risk of developing CIPN. The diagnosis is made based on history and clinical picture, and in rare cases, it is confirmed by EMG or skin biopsy. According to the American Society of Clinical Oncology, duloxetine is the only drug that has a proven effect on CIPN in randomized clinical trials, and other SNRIs, tricyclic antidepressants, antiepileptics, opioids, and topical preparations of capsaicin and lidocaine are also used in therapy. So far, there are no proven conventional ways to prevent the occurrence of CIPN, and some products are currently in the phase of preclinical research.

Conclusion. A family physician cares for an increasing number of patients with malignant diseases, and it is necessary to know about the possible side effects of certain chemotherapy drugs. It is necessary to think about the diagnosis of CIPN on time and apply adequate therapy in order to preserve the quality of life of the patients suffering from malignant diseases.

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Pristup bolesniku sa sumnjom na plućnu emboliju u ordinaciji obiteljske medicine

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Uvod s ciljem: Plućna embolija (PE) životno je ugrožavajuće stanje. Nastaje zbog okluzije plućne arterije, najčešće krvnim ugruškom, u rjeđim slučajevima masnim embolusom, amnionskom tekućinom, mjehurima zraka, dijelovima tumorskog tkiva. Unatoč napretku u dijagnostici, prevenciji i liječenju posljedica je PE-a znatan morbiditet i mortalitet.

Cilj je rada prikazati ulogu liječnika obiteljske medicine (LOM) u bolesnika sa sumnjom na plućnu emboliju, u ranom prepoznavanju, liječenju i praćenju bolesnika.

Rasprava: Većina PE-a fiziološki je beznačajna i često asimptomatska. Najčešći simptomi temeljem kojih LOM može posumnjati na PE jesu naglo nastala zaduha, pleuritična bol, kašalj, povišena tjelesna temperatura te mišićno-koštana bol koja se mijenja pokretima i položajem tijela i pojačava pri disanju. PE ne mora nastati naglo. Detaljnom anamnezom, fizikalnim pregledom i procjenom hemodinamskog stanja bolesnika potrebno je isključiti hitna za život ugrožavajuća stanja. Tijekom konzultacije ne smiju se zaboraviti predisponirajući čimbenici, kao što je nedavni operativni zahvat, maligna bolest, trudnoća, dugotrajna imobilizacija. Pri procjeni kliničke vjerojatnosti PE-a u svakodnevnoj praksi koriste se klinički bodovni sustavi: revidirani Wellsov bodovni sustav i Ženevski bodovni sustav. Wellsov bodovni sustav uzima u obzir predisponirajuće čimbenike: malignost, dužu imobilizaciju, raniju plućnu emboliju u osobnoj anamnezi, hemoptizu, tahikardiju > 100, kliničke znakove DVT-a te kliničku procjenu. Svaka stavka nosi jedan bod; ako je zbroj manji od dva, radi se o niskoj vjerojatnosti za PE, zbroj veći od šest upućuje na visoku vjerojatnost. Ženevski bodovni sustav obuhvaća dob pacijenta > 65 godina, prethodno preboljelu PE ili DVT, kirurški zahvat unutar četiriju tjedana, aktivnu malignu bolest, hemoptizu, tahikardiju, bol na duboku palpaciju donjih udova, jednostranu bol u donjim udovima. Svaka stavka nosi jedan bod, osim tahikardije: ako je puls > 94, ta stavka nosi dva boda. Ako je ukupni zbroj bodova < 2, nije vjerojatna dijagnoza plućne embolije, ako je zbroj > 3, vjerojatno se radi o plućnoj emboliji. U bolesnika treba pratiti saturaciju kisikom pulsnim oksimetrom. Obvezno je učiniti elektrokardiogram (EKG) koji može biti nespecifičan, ovisi o fazi bolesti, u ranom stadiju često je karakterističan nalaz S1, Q3, T3 te inverzija T-vala u prva 4 odvoda.

Zaključak: Prepoznavanje plućne embolije od strane LOM-a od iznimne je važnosti kako bi se pravodobno postavila dijagnoza i bolesnik uspješno zbrinuo. LOM ima prednost u ovakvim situacijama u odnosu na bolničke liječnike jer u većini slučajeva zbog longitudinalne skrbi može u svojih bolesnika prepoznati promjenu zdravstvenog stanja koje može biti životno ugrožavajuće. Dalje praćenje liječenja bolesnika s PE-om može značajno utjecati na kvalitetu života.

Pulmonary embolism in general family medicine practice

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Introduction with aim. Pulmonary embolism (PE) is one of the life-threatening conditions. It indicates the occlusion of the pulmonary artery, most often by a blood clot with a thrombus, in rare cases, the caused can beby a fat embolus, embolism caused by amniotic fluid, septic, tumor embolism or, air embolism. Despite advances in diagnosisng, prevention and treatment, it still results in significant morbidity and mortality. The most common reason why a patient consults with general practitionera physician is musculoskeletal pain that changes with body movements and position, and often increases when breathing. The most common symptoms associated with pulmonary embolism are sudden shortness of breath, pleuritic pain, cough and elevated body temperature. The picture of pulmonary embolism usually starts suddenly, but it that is not always the casedoesn't have to be like that.

The aim of theis paper is to show the role of genereal praciticefamily medicine practice in the patient with pulmonary embolism in the recognition and diagnosing of the patient with pulmonary embolisms, but also in the patient's further monitoring of the patient.

Discussion Most PEs are small, physiologically insignificant and often asymptomatic. When examining a patient, it is always important to rule out emergencies, i.e. life-threatening conditions, and it is necessary to assess whether the patient is stable or unstable. A physiciangeneral practitioner ought tomust think comprehensively and eliminate the most common causes of chest pain. The most important thing is to take a detailed medical history, and then do conduct a physical examination and assess the patient's hemodynamic condition. The physician General practitioner should also check the patient's state of consciousness, heart rate, measure blood pressure, pay particular attention to hypotension and respiratory rate. When assessing the overall condition, predisposing factors, such as recent surgery, malignant disease, pregnancy, long-term immobilization, should not be forgottendisregarded. Assessment of clinical probability is based on predisposing factors, symptoms and signs recognized in the patient. Clinical probability can be assessed using clinical scoring systems, the revised Geneva scoring system and the Wells scoring system. When approaching a patient suspected of PE, pulse oximetry allows us to monitor saturation. The ECG findings can be non-specific and depend on the stage of the disease, the findings of S1, Q3, T3 and T-wave inversion in the first 4 leads are often characteristic.

Conclusion Recognition of pulmonary embolism by general practitionerthe physician is extremely important in order to recognize diagnose the condition in a timely manner and successfully treat the patient further. The advantage of general practiotinerthe physician in such situations is that in most cases he they have knowsn the patient for a longer period of time and can recognize when the patient is not well or whether it is a life-threatening condition. An important role of the general family practice is in the further monitoring and treatment of the patient and in therapy.

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Liječenje oralnog mukozitisa u ordinacijama obiteljske medicine

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Uvod s ciljem: Oralni mukozitis je upala sluznice usne šupljine koja može rezultirati pojavom ulceroznih lezija, bakterijskih i gljivičnih oboljenja usne šupljine, krvarenja i sistemskih infekcija. Oralni mukozitis česta je nuspojava pri korištenju antineoplastične terapije, poput kemoterapije i radioterapije, ali i pri korištenju metotreksata u nemalignim bolestima. Podjednako zahvaća bolesnike svih životnih dobi. Cilj je ovog izlaganja prezentirati kliničku sliku pet stadija oralnog mukozitisa i objasniti metode prevencije i liječenja mukozitisa u ordinacijama obiteljske medicine.

Rasprava: Dijagnoza oralnog mukozitisa postavlja se na temelju kliničke slike. Kategorizacija kliničkih stadija oralnog mukozitisa nije standardizirana. Postoji više ljestvica koje se bave ovom problematikom, a većinski su namijenjene stomatolozima i onkolozima. Svjetska zdravstvena organizacija definira pet stadija oralnog mukozitisa: 1) bez promjena, 2) bolnost usne šupljine i eritem, 3) prisutne ulceracije uz koje je moguće uzimanje krute hrane, 4) prisutne ulceracije uz koje nije moguće uzimanje krute hrane, ali je moguće uzimanje tekuće hrane, 5) ulcerirana sluznica do te mjere da prehrana na usta nije moguća. Kao što se može zaključiti iz kategorizacije kliničke slike oralnog mukozitisa, zbog nelagode koju uzrokuje bolesnicima, oralni mukozitis nerijetko otežava peroralni unos hrane, tekućine i lijekova. Lezije sluznice pogodno su tlo za razvoj bakterijskih i gljivičnih infekcija, koje se s obzirom na prokrvljenost sluznice krvlju lako mogu diseminirati po organizmu. Protokol zbrinjavanja oralnog mukozitisa još uvijek nije standardiziran. U praksi se mjere prevencije oralnog mukozitisa neadekvatno primjenjuju, a bolesnici ne prijavljuju na vrijeme svojem liječniku pojavu prvih znakova mukozitisa. Navedeno predstavlja velik izazov u liječenju oralnog mukozitisa i dovodi do mogućih komplikacija osnovne bolesti. Mjere njege za prevenciju i liječenje oralnog mukozitisa jesu oralna higijena, ispiranje usta, krioterapija, laserska terapija i nutritivne intervencije. Sve mjere prevencije započinju adekvatnom edukacijom bolesnika koju provodi obiteljski liječnik. Primjerice, oralna higijena mora biti detaljna i temeljita, prilagođena stanju sluznice. Stoga će nekim bolesnicima biti savjetovano četkanje zuba, desni i jezika mekim zubnim četkicama, a nekim bolesnicima tek nježno čišćenje usne šupljine mekom pamučnom krpicom, praćeno ispiranjem usne šupljine individualno prilagođenim pripravcima. Vrlo učinkovitim preventivnim postupkom pokazala se krioterapija, koju bolesnici mogu provoditi sami prema postupku o kojem ih liječnik obiteljske medicine mora educirati. Protektivna sredstva druga su linija u prevenciji mukozitisa i ublažavanju simptoma već prisutnog mukozitisa. Najučinkovitiji mukoprotektiv je sukralfat, koji može biti zamijenjen drugim pripravcima ovisno o liječničkoj procjeni. U terapiji oralnog mukozitisa upotrebljava se i keratinocitni faktor rasta, pri čemu laserska terapija facilitira lokalnu apsorpciju, no u Republici Hrvatskoj takva terapija nije uobičajena.

Zaključak: Oralni mukozitis izazovan je klinički entitet, kako za prevenciju, tako i za liječenje. Niti u Republici Hrvatskoj niti u svijetu postupak za prevenciju i liječenje oralnog mukozitisa nije standardiziran. Posljedično, mjere prevencije se zanemaruju, a tretman često ne započinje na vrijeme. Liječnik obiteljske medicine ima sve mogućnosti prevenirati i liječiti nastali oralni mukozitis u ambulantnim uvjetima.

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Treatment of oral mucositis in family medicine offices

Keywords: oral mucositis, methotrexate, family medicine
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Introduction and aim. Oral mucositis is an inflammation of the mucous membrane of the oral cavity, which can result in the appearance of ulcerative lesions, bacterial and fungal diseases of the oral cavity, bleeding and systemic infections. Oral mucositis is a common side effect in patients subjected to antineoplastic therapy, such as chemotherapy and radiotherapy, as well as methotrexate therapy in non-malignant diseases. The aim of this paper is to present the clinical picture of the 5 stages of oral mucositis and to explain the methods of prevention and treatment of mucositis in family medicine offices.

Discussion. Diagnosis of oral mucositis is based on the clinical presentation of the disease. The categorization of the clinical stages of oral mucositis is not standardized and there are several scales that refer to this issue, most of which are intended for dentists and oncologists. The World Health Organization defines 5 stages of oral mucositis: 1) no changes, 2) soreness of the oral cavity and erythema, 3) ulcerations with which it is possible to take solid food, 4) ulcerations which make it impossible to take solid food, but only liquid food, and 5) ulcerated mucosa to the extent that oral nutrition is not possible. As can be concluded from the categorization of the clinical picture of oral mucositis, due to the discomfort it causes to patients, oral mucositis often makes the oral intake of food, liquids, and medications difficult. In addition, lesions of the mucous membrane are a suitable breeding ground for the development of bacterial and fungal infections, which, given the blood supply of the mucous membrane, can easily spread throughout the body through the blood. The oral mucositis management protocol is still not standardized. Furthermore, in practice, oral mucositis prevention measures are inadequately applied, and patients do not report the occurrence of the first signs of mucositis to their doctor in time. The above represents a great challenge in the treatment of oral mucositis and leads to possible complications of the underlying disease. Care measures for the prevention and treatment of oral mucositis are: oral hygiene, mouth rinsing, cryotherapy, laser therapy and nutritional interventions. All prevention measures begin with adequate education of the patient by the family physician. For example, oral hygiene must be detailed and thorough, but also adapted to the condition of the mucous membrane. Therefore, some patients will be advised to brush their teeth, gums and tongue with soft toothbrushes, while some will only be advised to gently clean their oral cavity with a soft cotton cloth, followed by rinsing it with individually adapted preparations. Cryotherapy has also proven to be a very effective preventive procedure, which patients can carry out on their own, but according to the procedure learnt from the family medicine physician. Mucosal protectors are the second line in the prevention, but also in alleviating the symptoms of already present mucositis. The most effective mucoprotectant is sucralfate, which can be replaced by preparations more accessible to patients, depending on the doctor's assessment. Keratinocyte growth factor is used in the therapy of oral mucositis, whereby laser therapy facilitates local absorption, but such therapy is not common in the Republic of Croatia.

Conclusion. Oral mucositis is a challenging clinical entity, both for prevention and treatment. However, in the Republic of Croatia, as well as in the world, the procedure for the prevention and treatment of oral mucositis is not standardized. As a result, preventive measures are neglected, and treatment is often not started on time, which is why expensive drugs and expensive ways of administering them have been developed. The family medicine physician has all the possibilities to prevent and treat oral mucositis in outpatient settings.

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Kako proaktivno utjecati na kontrolu čimbenika kardiovaskularnih događaja

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Ključne riječi: čimbenici KV rizika, obiteljski liječnik, preventivni rad
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Uvod: Kardiovaskularne bolesti (KVB) i dalje odnose najviše života u Europi. Te bolesti čine 45 % svih uzroka smrti. Minimalno 80 % kardiovaskularnih (KV) događaja moglo je biti spriječeno pravodobnom intervencijom i učinkovitom kontrolom njihovih glavnih čimbenika rizika. Preventivni rad neodvojivi je dio svakodnevnog rada obiteljskog liječnika (LOM). Cilj je rada naglasiti idealnu poziciju LOM-a u kontroli KV čimbenika.

Cilj: Stvoriti registar bolesnika s arterijskom hipertenzijom, otkriti nove bolesnike, otkriti neadekvatno kontrolirane bolesnike te odrediti KV rizik.

Metodologija: U ordinaciji obiteljske medicine koja skrbi o 2100 bolesnika u razdoblju od 1. rujna 2022. do 30. studenoga 2022. svakodnevno je oportunistički pregledano deset bolesnika kojima je medicinska sestra mjerila tjelesnu težinu, visinu, indeks tjelesne mase (ITM), opseg struka i bokova te krvni tlak. Potom je liječnica učinila pregled koji je obuhvaćao anamnezu, klinički status, računanje KV rizika te je ordinirano učiniti laboratorijske nalaze uključujući lipidogram.

Rezultati: U registar je upisano 500 bolesnika, 338 već poznatih hipertoničara te 170 bolesnika koji nemaju dijagnozu arterijske hipertenzije. U skupini hipertoničara 111 bolesnika imalo je tlak veći od 140/90 mmHg (33 % nereguliranih), 16 % uz dijagnozu hipertenzije ima i dijabetes, 77,2 % ima i dislipidemiju, 4,4 % preboljelo je infarkt miokarda, 3,25 % preboljelo je moždani udar. Pretilih s ITM-om > 30 kg/m^2 bilo je 42 % hipertoničara. Visok KV rizik ima 27,5 % bolesnika. Od njih tek 50,54 % ima statin u terapiji. Ciljni LDL < 1,8 ima samo 15 bolesnika. Vrlo visok KV rizik ima 23,37 %, a statin u terapiji ima 37 bolesnika. Ciljni LDL < 1,4 mmol/L postiglo je tek 5,06 % bolesnika. Od 170 bolesnika koji nisu imali dijagnozu arterijske hipertenzije bilo je 12 novootkrivenih hipertoničara. ITM > 30 kg/m^2 ima 15,30 % bolesnika.

Zaključak: Preventivni rad i proaktivno traženje bolesnika s visokim KV rizikom ozbiljan je i zahtjevan posao, koji zahtijeva vrijeme i novac, ali dugoročno najisplativiji. LOM je u poziciji sustavnim pristupom rano otkriti bolesnike s rizičnim čimbenicima te pravovremeno intervenirati i time spriječiti i/ili odgoditi KV incident.

Proactive approach in controlling cardiovascular disease risk factors

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Introduction: Cardiovascular diseases continue to take most lives in Europe − 45% of all causes of death are cardiovascular diseases. At least 80% of cardiovascular (CV) events could have been prevented by timely interventions and effective controls of their main risk factors. Preventive work is an inseparable part of the family physician's daily work.

Aim of this paper is, firstly, to emphasize the ideal position of family physicians to control CV risk factors and secondly, to support creating a register of patients with arterial hypertension, discover new patients and those inadequately controlled, and determine their CV risk,

Methodology: In the family medicine practice, which took care of 2,100 patients in the period from 01 September 2022 until 30 November 2022, 10 patients were opportunistically examined daily. The nurse measured their body weight, height, body mass index (BMI), waist and hip circumference, and blood pressure. Then the physician performed an examination that included their medical history, clinical status, CV risk calculation, and they were referred to laboratory tests, including a lipidogram.

Results: Out of 500 registered patients, 338 had arterial hypertension and 170 were without such diagnosis. Among those with hypertension 33% had RR> 140/90mmhg. 16% had diabetes, 77.2% had dyslipidaemia, 5.5% had myocardial infarction, and 3.25% had stroke while 42% of them were obese with BMI>30 kg/m2. High CV risk was present in 27.5% of patients. Among them, only 50.54% had statins in their therapy and the goal − LDL <1.8 mmol/L was reached by only 15 patients. Very high CV risk was present in 23.37% of patients. Only 37 of these patients had statins in their therapy and the goal of LDL <1.4 mmol/L was present in only 4 patients or 5.06%.

Out of 170 patients without diagnosis of arterial hypertension there were only 12 newly found. In this group 15.30%. of patients were with BMI > 30 kg/m2.

Conclusion: Prevention and proactive searching for patients with high CV risk is serious and difficult work which demands money and time, but in the end, it is most cost-effective. Family physicians, because of their holistic approach, are in the position to early diagnose and treat patients with high CV risk and prevent CV incidents.

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Poteškoće u prepoznavanju latentnog autoimunog dijabetesa u odraslih (LADA) u ordinaciji obiteljske medicine

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Uvod s ciljem: Latentni autoimuni dijabetes u odraslih (LADA) predstavlja podtip šećerne bolesti tipa 1 koji karakterizira postojanje protutijela protiv β-stanica Langerhansovih otočića gušterače. Manifestira se kasnije u životu nego klasični tip 1 uz značajno polaganiji nastup ovisnosti o inzulinu. Brojne su poteškoće u ranom prepoznavanju i upravljanju bolešću u ove skupine bolesnika zbog multiplih čimbenika: širok raspon fenotipske prezentacije, nedostatna edukacija o LADA podtipu, (ne)adekvatan probir na testiranje i ograničen pristup testovima na autoantitijela. Cilj je ovog rada povećati svijest u ambulantnom radu obiteljskog liječnika o ovom podtipu dijabetesa te uputiti na potrebu za integrativnim pristupom u pronalaženju bolesnika s ciljem bolje metaboličke kontrole.

Rasprava: Na globalnoj razini javila se inicijativa kako bi se što ranije postavila sumnja na ovaj podtip dijabetesa u primarnoj zdravstvenoj zaštiti te u skladu s kliničkim smjernicama ranije pristupilo pravilnom liječenju. Globalna prevalencija LADA-e je oko 2 % – 12 % svih osoba s dijagnozom dijabetesa. Ključni kriteriji za postavljanje dijagnoze ovog tipa dijabetesa jesu pojavnost dijabetesa u odrasloj dobi (iznad 30 godina života), prvotno dobar odgovor na oralne antidijabetike i izostanak potrebe za nadomjesnom inzulinskom terapijom u prvih šest mjeseci liječenja, prisutnost citoplazmatskih autoantitijela na otočićima (ICA) i antitijela na glutamatnu dekarboksilazu (antiGAD). Sukladno navedenim kriterijima pri evaluaciji kliničkih i biokemijskih pokazatelja bolesti potrebno je više pažnje usmjeriti na početni terapijski učinak i na antropometrijske mjere; ako se pokaže sklonost prema gubitku tjelesne težine koja je praćena nereguliranom glikemijom, treba razmotriti LADA podtip šećerne bolesti. Od velikog značaja pokazao se i C-peptid, koji se kao nusprodukt proizvodnje inzulina u gušterači može koristiti za praćenje stupnja funkcije beta-stanica.

Zaključak: Pristup u liječenju bolesnicima s LADA podtipom dijabetesa i dalje predstavlja izazov u prepoznavanju sukladno raznolikoj kliničkoj prezentaciji i genetičkoj heterogenosti. S obzirom na to da su liječnici obiteljske medicine prvi kontakt s bolesnicima, važno je prepoznati ovu posebnu skupinu, učiniti svu potrebnu obradu te u konzultaciji s dijabetolozima prilagoditi modalitet liječenja i očuvati metabolički profil.

Difficulties in recognizing latent autoimmune diabetes in adults (LADA) in a family medicine practice

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Key words: LADA, Autoantibodies, Phenotypic heterogeneity, National consensus, CV continuum
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Introduction and Aim: Latent autoimmune diabetes in adults (LADA) is a subtype of type 1 diabetes characterized by the presence of antibodies against the β-cells of the pancreatic islets of Langerhans. It usually manifests later in life than the classical type 1, but with a significantly slower onset of insulin dependence. The global prevalence is around 2% and 12% of all the people diagnosed with diabetes. There are many difficulties in the early recognition and management of this fragile group of patients, especially in primary health care, which arises as a combination of multiple factors: a wide range of phenotypic presentations, insufficient education about the LADA subtype, inadequate screening for testing and limited access to autoantibody tests, as well as long waiting lists for an appointment with a diabetologist consultant. The aim of this work is to increase awareness in outpatient management of this subtype of diabetes, and to point out the need for an integrative approach in the identification of this group of patients aiming at a better metabolic control.

Discussion: There was an initiative at the global level to raise awareness of this subtype of diabetes in primary health care as early as possible, and in accordance with clinical guidelines and the consensus of professional societies, to start proper treatment earlier. Followed by guidelines the key point for the diagnosis of LADA diabetes were: the occurrence of diabetes in adulthood (over 30 years old), an initially good response to oral antidiabetic drugs and the absence of the need for insulin replacement therapy in the first 6 months of treatment, the presence of cytoplasmic autoantibodies in the islets (ICA) and anti GAD2 antibodies. Guided by the aforementioned criteria, in outpatient work, when evaluating clinical and biochemical indicators of the disease, it is necessary to focus more attention on the response to the initial therapy and anthropometric measurements. If a tendency towards catabolism and weight loss is shown, and if it is additionally accompanied by unregulated glycemia, it is certainly also the LADA subtype. C-peptide, which as a by-product of insulin production in the pancreas, used to monitor the level of beta cell function has also proven to be of great importance.

Conclusion: The approach to the treatment of LADA diabetes still presents a lot of controversy at the interface of primary and secondary health care, in accordance with the diverse clinical presentation and genetic heterogeneity. Given that family physicians are the first in contact with patients, it is important to recognize this special group, conduct the necessary treatment and, in consultation with diabetologists, adjust the treatment modality and preserve the metabolic profile.

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Koliko znamo o zdravlju i postupcima liječenja?

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Uvod: National Library of Medicine definira medicinsku pismenost kao razinu do koje pojedinac ima kapacitet primanja, procesiranja i razumijevanja osnovnih informacija o zdravlju i radnji potrebnih za donošenje adekvatnih medicinskih odluka. Medicinska pismenost vezana je uz brojne zdravstvene posljedice poput duljeg razdoblja hospitalizacije, lošijeg korištenja terapije, snižene kvalitete života i većeg mortaliteta. **Cilj** je ovog rada istražiti neke značajke medicinske pismenosti te ispitati razlike u rezultatima po spolu, dobi, obrazovanju i prebivalištu.

Ispitanici i metode: U ovom presječnom istraživanju korišten je prigodan uzorak od 254 ispitanika iz Splita i s otoka Brača. Anonimna *online* anketa popunjena je u vremenu studentskih vježba na Katedri za obiteljsku medicinu Medicinskog fakulteta u Splitu, od 7. listopada do 11. studenoga 2022. Od ukupnog broja ispitanika bilo je 180 žena (70,9 %) i 74 muškarca (29,1 %). Svi ispitanici potpisali su informativni pristanak, prijavili svoje demografske podatke i ispunili anketu načinjenu za ovo istraživanje. Obrađene su tvrdnje koje su se odnosile na općenita znanja o zdravlju, njih osam, te još njih četiri vezane za odnos prema liječniku i zdravstveno ponašanje. Odgovori su pisani prema Likertovoj mjernoj ljestvici od 1 do 5 (uopće se ne slažem, djelomično se ne slažem, niti se slažem niti se ne slažem, djelomično se slažem, u potpunosti se slažem).

Rezultati: U odnosu na ostale, dobna skupina 30 – 65 godina pokazuje bolje opće znanje (P = 0,001), dok populacija starija od 65 godina redovitije uzima terapiju propisanu od liječnika u odnosu na mlađu dobnu skupinu (P = 0,020). Žene u odnosu na muškarce pokazuju bolje opće medicinsko znanje (t = 2,649; P = 0,009) i češće kupuju lijekove u slobodnoj prodaji (t = -3,262; P = 0,001). Prema razini obrazovanja postoje značajne razlike u općem medicinskom znanju (t = 3,523; P = 0,001) i razumijevanju uputa dobivenih od liječnika (t = -2,449; P = 0,015), gdje više obrazovanje pozitivno predviđa ove parametre.

Zaključak: U ispitanika s područja Splita i otoka Brača postoje značajne razlike u medicinskoj pismenosti po spolu, dobi i obrazovanju. Mjesto prebivališta nema utjecaja na medicinsku pismenost.

How much do we know about health and treatment procedures?

Keywords: health literacy, general medical knowledge, adherence to therapy
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Introduction and aim: The National Library of Medicine defines health literacy as the level to which an individual has the capacity to accept, process and understand basic information about health and the actions needed to make adequate medical decisions. Health literacy is tied with a number of health outcomes such as longer hospitalization time, incorrect use of therapy, lower quality of life and increased mortality. **The aim** of this study is to explore health literacy and examine the differences in results by sex, age, education and place of residence.

Methods: A convenient sample of 254 respondents from Split and the island of Brač was used in this cross-sectional study. An anonymous online questionnaire was filled during student exercises at The Department of family medicine of the Medical school in Split from 07 October till 11 November 2022. Out of the total number of respondents, 180 were female (70.9%) and 74 were male (29.1%). All respondents signed an informed consent form, registered their demographic data and filled in the questionnaire for this study. The questionnaire contained statements related to general knowledge about medicine (8 questions), and four more questions related to their relationship with doctors and their health behavior. A Lickert scale was used for answers (completely disagree, partially disagree, neither agree nor disagree, partially agree, completely agree).

Results: Compared to others, the age group 30-65 demonstrated better general knowledge (P=0,001), while the population older than 65 was taking therapy prescribed by their doctor more regularly compared to younger age groups (P=0,020). Compared to men, women showed better general medical knowledge (t=2,649; P=0.009) and bought over-the-counter medicines more often (t=-3,262; P=0,001). According to the level of education there are meaningful differences in general medical knowledge (t=3,523; P=0,001) and the level of understanding of doctor's instructions (t=-2,449; P=0,015) where higher education positively predicts these parameters.

Conclusion: In the group of respondents in Split and the island of Brač significant differences were found in health literacy by sex, age and education. Place of residence did not influence the level of health literacy.

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Inhalacijska terapija i što je bitnije – molekula ili uređaj?

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Ključne riječi: inhaler, inhalacijska tehnika, edukacija bolesnika, obiteljska medicina
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Uvod s ciljem: Više od 60 milijuna ljudi u Europi boluje od astme i kronične opstruktivne bolesti pluća. Kontrola tih bolesti i dalje je nezadovoljavajuća unatoč dostupnoj učinkovitoj terapiji. Glavni su uzroci tomu loša edukacija bolesnika i loša inhalacijska tehnika.

Cilj je ovoga rada prikazati vrste inhalacijskih uređaja i tehnika te naglasiti važnost individualnog pristupa odabiru lijeka i inhalera za svakog bolesnika.

Rasprava: Inhaleri se mogu podijeliti u četiri skupine: inhalatori (atomizatori), raspršivači fiksnih doza (engl. *pressurized metered dose inhaler*, pMDI), inhaleri suhoga praha (engl. *dry powder inhalers*, DPI) i inhaleri fine maglice. Za primjenu putem inhalatora dostupne su otopine ili suspenzije kratkodjelujućeg beta-2 agonista, kratkodjelujućeg antimuskarinika, njihova fiksna kombinacija te otopina kortikosteroida. Najčešće se primjenjuju kod hitnih intervencija. Raspršivač fiksnih doza omogućuje primjenu širokog raspona lijekova, jednostavan je i kompaktan, ima kratko vrijeme primjene, ali postoji problem koordinacije potiska i udaha te bolesnici često prebrzo udahnu. Podvrsta raspršivača fiksnih doza jest autohaler, koji se aktivira udahom te je eliminirana potreba koordinacije inhalacije i aktivacije lijeka. Pri korištenju inhalera suhog praha nema potrebe za koordinacijom udaha i potiska. Većina inhalera ima brojač doza, njegovo vrijeme primjene je kratko te je uređaj malen i jednostavan za korištenje. Međutim, doza lijeka ovisna je o snazi udaha. Neke uređaje treba protresti prije upotrebe, a važna je i brza akceleracija i početak inhalacije. Ako je inhalacija spora, slabija je i isporuka doze lijeka. Posebno je upitna isporuka doze lijeka tijekom egzacerbacija, što nosi velik rizik od orofaringealnih naslaga. Inhaleri fine maglice stvaraju oblak magličasto raspršenog lijeka koji treba udisati polako i duboko, a vrijeme trajanja oblaka jest sekundu i pol.

Najbitnije je izbor inhalatora prilagoditi bolesnikovim potrebama. Dodatno treba provjeriti prirodnu tehniku disanja, upozoriti na moguće nuspojave te detaljno educirati bolesnika o inhalacijskoj tehnici, koju zatim treba provjeravati na svakoj kontroli.

Zaključak: Obiteljski liječnik treba odabrati inhalacijsku terapiju koja je primjerena bolesniku te provoditi edukaciju o inhalacijskoj tehnici kako bi ishodi uspjeha liječenja astme i kronične opstruktivne plućne bolesti bili što bolji.

Inhalation therapy and what is more important - a molecule or a device?

Keywords: inhaler, inhalation technique, patient education, family medicine
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Introduction and aim: More than 60 million people in Europe suffer from asthma and chronic obstructive pulmonary disease. Although effective therapy is available, the control of these diseases remains unsatisfactory. The main causes of this are poor patient education and a poor inhalation technique.

The aim of this paper is to show the types of inhalation devices and techniques and to emphasize the importance of an individual approach to the selection of medicines and the inhaler for each patient.

Discussion: Inhalers can be divided into four groups: inhalers (atomizers), fixed dose sprayers (pressurized metered dose inhaler, pMDI), dry powder inhalers (DPI) and fine mist inhalers. Solutions or suspensions of short-acting beta-2 agonists, short-acting antimuscarinics, their fixed combination, and corticosteroid solutions are available for inhaler administration. They are most often used in emergency interventions. The fixed-dose nebulizer enables the application of a wide range of drugs, it is simple and compact and has a short application time. However, there is a problem of coordination of thrust and inhalation, and patients often inhale too quickly.

A subtype of fixed-dose nebulizer is the autohaler, which is activated by inhalation and eliminates the need to coordinate between the inhalation and drug activation. When using a dry powder inhaler, there is no need to coordinate between the inhalation and exhalation.

Most inhalers have a dose counter, their application time is short, and the device is small and easy to use. However, the dose of the drug depends on the strength of inhalation. Some devices need to be shaken before use, and quick acceleration and start of inhalation is also important. If the inhalation is slow, the delivery of the drug dose is also weaker, that is, the delivery of the drug dose is especially questionable during exacerbations, which carries a high risk of oropharyngeal deposits. Fine mist inhalers create a cloud of mist-sprayed medicine that should be inhaled slowly and deeply, and the duration of the cloud is one and a half seconds.

The most important thing is to adapt the choice of inhaler to the patient's needs. In addition, the natural breathing technique should be assessed, the patient should be warned of potential side effects and educated in detail about the inhalation technique, which should then be assessed at each checkup.

Conclusion: The family physician should choose the inhalation therapy appropriate for the patient and conduct education on the inhalation technique so that the results of successful treatment of asthma and chronic obstructive pulmonary disease are as good as possible.

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Uloga obiteljskog liječnika u dijagnosticiranju i liječenju obiteljske hiperkolesterolemije

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Ključne riječi: obiteljska hiperkolesterolemija, liječnik obiteljske medicine, kardiovaskularne bolesti, statini, PCSK9 inhibitori
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Uvod s ciljem: Obiteljska hiperkolesterolemija (engl. *familial hypercholesterolemia*, FH) jest autosomno dominantna nasljedna bolest uzrokovana mutacijama gena LDLR s posljedično povišenim razinama lipoproteina niske gustoće (engl. *low density lipoproteins*, LDL) u serumu. Oboljeli imaju izrazito povišen rizik za preuranjen razvoj kardiovaskularnih bolesti s potencijalno fatalnim ishodom.

Cilj je ovoga rada prikazati važnost uloge obiteljskog liječnika u ranom otkrivanju bolesti i pravovremenom početku liječenja bolesti.

Prikaz slučaja: Četrdesetogodišnji bolesnik javlja se u ordinaciju obiteljske medicine zbog osjećaja zaduhe i težine u prsima pri većim fizičkim opterećenjima unazad nekoliko godina. Ne uzima kroničnu terapiju, alergije na lijekove negira, a obiteljska anamneza pozitivna je na kardiovaskularne bolesti. Učinjena laboratorijska obrada pokaže vrijednost ukupnog kolesterola 13,8 mmol/L, triglicerida 1,8 mmol/L, HDL-kolesterola 1,4 mmol/L te LDL-kolesterola 11 mmol/L. U elektrokardiogramu prikazuje se srednja električna os, frekvencija 71/min, inkompletni blok desne grane, a vrijednost tlaka iznosi 150/90 mmHg. Bolesnik je upućen na dalju kardiološku obradu uz uvođenje rosuvastatina. Nakon učinjene ergometrije uvodi se nebivolol te se upućuje na koronarografiju i ultrazvuk srca. Verificira se aterosklerotska bolest lijeve i desne koronarne arterije te uvećane dimenzije lijevih kaviteta. Indicira se kardiokirurški zahvat revaskularizacije miokarda te je napravljeno trostruko aortokoronarno premoštenje. Uvodi se rosuvastatin/ezetimib. Daljim praćenjem bolesnika i povećanjem doza hipolipemika zaključuje se da nema primjerenog sniženja vrijednosti lipida te se prema preporuci bolničkog povjerenstva uvodi PCSK inhibitor. Bolesnik je provodio stacionarnu kardiološku rehabilitaciju te je korištenjem PCSK inhibitora postigao uredne vrijednosti lipida.

Rasprava: U Republici Hrvatskoj procjenjuje se da od FH-a boluje oko 20 000 ljudi, a prepoznato je 1 % bolesnika. Dijagnoza FH-a temelji se na kliničkoj slici, obiteljskoj anamnezi i povišenim razinama LDL-kolesterola te se može potvrditi analizom gena LDLR, APOB i PCSK9 [3]. Najčešće korišteni kriteriji za dijagnozu FH-a jesu Dutch Lipid Network. Kriteriji uključuju obiteljsku anamnezu, kliničku sliku, fizikalni pregled, koncentraciju LDL-kolesterola i DNA analizu te su im pridruženi bodovi. Ako pacijent prikupi ≥ 8 bodova, tada se dijagnoza FH-a smatra definitivnom. Prije dalje specijalističke obrade liječnik obiteljske medicine određuje razine Lp(a) te upućuje pacijenta na kolor dopler karotidnih arterija. U bolesnika s heterozigotnim oblikom bolesti intima-medija karotidnih arterija značajno je deblja u odnosu na zdrave pojedince, mogu imati nakupine kolesterola u tetivama, tj. tendinozne ksantome ili prsten rožnice (*arcus corneae*) te kod njih do prvoga kardiovaskularnog događaja dođe 20 godina ranije nego kod zdravih osoba. U bolesnika s homozigotnim oblikom bolesti koncentracije LDL kolesterola najčešće prelaze 13 mmol/L, imaju izražene simptome već u ranom djetinjstvu te ne prežive 30. godinu života bez terapije. Ministarstvo zdravstva Republike Hrvatske pokrenulo je inicijativu za provođenje Nacionalnog programa probira i ranog otkrivanja FH-a. Probir bi trebao započeti u ordinacijama školske medicine od školske godine 2022./2023. Cilj liječenja FH-a jest snižavanje koncentracije LDL-kolesterola, a liječenje se provodi statinima, ezetimibom i PCSK9 inhibitorima.

Zaključak: FH je bolest koja često ostaje neprepoznata. Potrebno je uvesti probir već od najranije dobi radi pravovremene dijagnoze i početka liječenja te tako smanjiti posljedice koje nosi FH. U dijagnosticiranju i liječenju FH-a treba istaknuti iznimno važnu ulogu obiteljskih liječnika koji imaju uvid u laboratorijske nalaze bolesnika, osobnu i obiteljsku anamnezu te pravovremeno uvođenje primjerene terapije.

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The role of the family physician in diagnosing and treating familial hypercholesterolemia

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Introduction and aim: Familial hypercholesterolemia (FH) is an autosomal dominant hereditary disease caused by mutations in the LDLR gene, which results in elevated levels of low-density lipoproteins (LDL) in the serum and early onset of cardiovascular diseases with fatal outcomes.

The aim of this work is to show the importance of timely diagnosis and early treatment of familial hypercholesterolemia and the role of the family physician.

Case report: A 40-year-old patient was presented to the family medicine office due to a feeling of shortness of breath and heaviness in the chest during heavy physical exertion for several years. He has not been taking chronic therapy, he denied drug allergies, and his family history is positive for cardiovascular diseases. The laboratory analysis showed a value of total cholesterol 13.8 mmol/L, triglycerides 1.8 mmol/L, HDL-cholesterol 1.4 mmol/L and LDL-cholesterol 11 mmol/L. The electrocardiogram showed the middle electric axis, frequency 71/min, incomplete right bundle branch block, and the pressure value was 150/90 mmHg. The patient was referred for further cardiac treatment with the introduction of rosuvastatin. After the ergometry, nebivolol was introduced and he was referred for coronary angiography and ultrasound of the heart. Atherosclerotic disease of the left and right coronary arteries and enlarged dimensions of the left cavities were verified. Cardiac surgery for myocardial revascularization was indicated, and a triple aortocoronary bypass was performed. Rosuvastatin/ezetimibe was introduced. After further monitoring of the patient and increasing the doses of hypolipemic drugs, it was concluded that there was no adequate lowering of the lipid values, and according to the recommendation of the hospital committee, a PCSK inhibitor was introduced. The patient undergoing inpatient cardiac rehabilitation achieved normal lipid values using PCSK inhibitors.

Discussion: In the Republic of Croatia, it is estimated that about 20,000 people suffer from FH, and 1% of patients are recognized. The diagnosis of FH is based on the clinical picture, family history and elevated levels of LDL-cholesterol and can be confirmed by an analysis of the LDLR, APOB and PCSK9 genes. The most commonly used criteria for the diagnosis of FH is the Dutch Lipid Network. The criteria include family history, clinical picture, physical examination, LDL-cholesterol concentration and DNA analysis, and points are attached to them. If the patient scores ≥8 points, then the diagnosis of FH is considered definitive. Before further specialist treatment, the family physician determines the levels of Lp(a) and refers the patient to Color Doppler of carotid arteries. In patients with the heterozygous form of the disease, the intima-media of the carotid arteries is significantly thicker compared to healthy individuals, they may have cholesterol deposits in the tendons, i.e. tendinous xanthomas or corneal ring (arcus corneae), and they experience the first cardiovascular event 20 years earlier than healthy people. In patients with the homozygous form of the disease, LDL cholesterol concentrations often exceed 13 mmol/L, they have pronounced symptoms already in early childhood, and they do not survive the age of 30 without therapy. The Ministry of Health of the Republic of Croatia launched an initiative to implement the National Screening and Early Detection Program for FH. Screening should start in school medical offices from the 2022/2023 school year. The goal of FH treatment is to lower the concentration of LDL cholesterol, and the treatment is conducted with statins, ezetimibe and PCSK9 inhibitors.

Conclusion: FH is a disease that often goes unrecognized. It is necessary to introduce screening from an early age in order to set a timely diagnosis and start treatment, thus reducing the consequences of FH. In the diagnosis and treatment of FH, the extremely important role of family physicians who have insight into the patient's laboratory findings, personal and family history and can timely introduce appropriate therapy should be highlighted.

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15. Prikazi slučajeva

Ospice ili majmunske boginje – prikaz slučaja

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Uvod s ciljem: Osipne groznice su skupina bolesti obilježenih temperaturom i pojavom ospica kao trajnog i karakterističnog znaka. Majmunske boginje su bolest uzrokovana virusom majmunskih boginja. To je virusna zoonotska infekcija, što znači da se može prenijeti sa životinja na ljude. Također se može širiti s čovjeka na čovjeka i iz okoline na čovjeka. Cilj ovog rada bio je pokazati da osipne groznice poput majmunskih boginja nije lako dijagnosticirati pri prvom pregledu.

Prikaz slučaja: Bolesnik u dobi 41 godinu, rastavljen, otac jedne kćeri. Na pregled se javlja zbog grlobolje, bolova u kostima i mišićima, malaksalosti, febrilnosti do 38,5 °C i kašlja. Kliničkim pregledom nađena je hiperemija ždrijela i pulmo-vezikularno bronhitično disanje. Iz laboratorijske pretrage vidljivo je da su povišene vrijednosti leukocita, granulocita i C-reaktivnog proteina (55 mg/L). Propisana je terapija klaritromicinom dva puta na dan tijekom deset dana. Tjedan dana nakon toga pacijent dolazi s osipom koji se pojavio u predjelu vrata, a nije bio popraćen temperaturom. Pacijent je prethodnog dana pojeo gljive, što je bio prvi put da ih je jeo, nakon što se pojavio osip. Pregledom se može vidjeti urtikarija u predjelu vrata i trupa. Propisana je terapija sinopenom i urbazonom tri dana te loratadinom navečer prije spavanja. Drugi dan terapije osip se širi po cijelom tijelu, ali se osim urtikarije uočavaju i promjene osipa u obliku medaljona. Bolesnik je upućen na dermatovenerologiju. Postavljena je dijagnoza *Pityriasis rosea* i određene su dvije kortikosteroidne kreme. Osip se nastavio širiti, ali sada su po cijelom tijelu bile vezikule, makule i pustule te je bolesnik ponovno upućen na dermatovenerologiju. Urađeni su testovi na sifilis, gonoreju i HIV, koji su bili negativni. Laboratorijska analiza krvi pokazala je limfopeniju, leukocitozu, trombocitopeniju i visoke vrijednosti interleukina-6 i imunoglobulina E. Biopsija kože pokazala je *pityriasis lichenoides et varioliformis acuta* (PLEVA). Primijenjen je klindamicin tri puta na dan i tri kortikosteroidne kreme. Nakon sedam mjeseci na rutinskoj kontroli u Finskoj, jer je pacijent pilot, otkrivena su antitijela na majmunske boginje.

Rasprava: Prijenos virusa između ljudi putem kontakta s lezijama, tjelesnim tekućinama, respiratornim kapljicama i kontaminiranim materijalima dobro je poznat. Postoji visoka učestalost majmunskih boginja među muškarcima koji imaju spolne odnose s muškarcima, među osobama s više seksualnih partnera i onima koji prakticiraju seks bez kondoma, što upućuje na to da bi sjeme moglo biti još jedan prijenosnik virusa. Iako se ovi nalazi ne mogu smatrati konačnim dokazom zaraznosti, mogli bi upućivati na mogućnost značajnog širenja virusa. Njegova učinkovitost u smislu prijenosa ne može se isključiti.

Zaključak: Prepoznavanje kliničkih i dermatoloških aspekata majmunskih boginja olakšava njihovu dijagnozu i diferencijaciju od drugih virusa koji uzrokuju slične kožne osipe, posebice malih boginja i vodenih kozica.

Measles or Monkey pox –case report

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Introduction and aim. Rash fevers are a group of diseases characterized by elevated body temperature and the occurrence of urticaria as a permanent and characteristic sign. Monkeypox is an illness caused by the monkeypox virus. It is a viral zoonotic infection, meaning that it can spread from animals to humans. It can also spread from humans to other humans and from the environment to humans. The aim of this paper is to show that rash fevers like monkey pox are not easy to diagnose at first glance.

Case report. A 41-year-old patient, divorced, father of one daughter. Comes to the physician's office with sore throat, pain in his bones and muscles, malaise, cough and temperature up to 38.5. On examination, pharyngeal hyperemia and pulmo-vesicular bronchitic breathing are found. Laboratory tests show elevated values of leukocytes and granulocytes. C-reactive protein is 55. Claritromycin therapy is prescribed twice a day for 10 days. A week after, the patient comes with a rash that has occurred on the neck area, without fever. The patient ate some mushrooms the day before. It was the first time he ate them, before the rash occurred. On examination, skin changes which look like urticaria can be seen on his neck and trunk area. Therapy with synopen and urbazone is prescribed for three days and loratadine at night before going to bed. On the second day of therapy, the rash spreads over the whole body, but in addition to urticaria, rash presents in the shape of medallions. The patient is referred to Dermatovenerology. Pityriasis rosea is diagnosed. The dermatologist prescribes two corticosteroids creams. The rash continues to spread but now there are vesicles, macules and pustules all over the body. The patient is referred to Dermatovenerology once again. Tests are done for syphilis, gonorrhea, and HIV which are negative. The laboratory findings show lymphopenia, leukocytosis, thrombocytopenia and high values of Interleukin 6 and Immunoglobulin E (IG E). A skin biopsy shows Pityriasis Lichenoides Et Varioliformis Acuta (PLEVA). Clindamycin three times a day and three corticosteroids creams are prescribed and 7 months later at a routine control in Finland because the patient is a pilot, antibodies to monkeypox are detected.

Discussion. The transmission of the virus between humans through contact with lesions, bodily fluids, respiratory droplets and contaminated materials is well known. There is a high incidence of Monkeypox among men having sex with men, people with multiple sexual partners and those who practice condomless sex, which suggests that semen could be another vehicle for the virus. Although these findings cannot be considered definitive evidence of infectivity, they could indicate the possibility of an important viral shedding. Its efficiency in terms of transmission cannot be ruled out.

Conclusion: Recognition of the clinical and dermatological aspects of monkeypox facilitates its diagnosis and differentiation from other viruses which cause similar skin rashes, particularly Smallpox and Chickenpox.

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Holistički pristup u tretmanu pacijenta s KOPB-om i komorbiditetima – prikaz slučaja

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Uvod s ciljem: Kronična opstruktivna plućna bolest (KOPB) osim dišnih abnormalnosti, donosi i ekstrapulmonalne komplikacije kao posljedicu upalnog procesa koji obuhvaća i druga tkiva i organe te dodatno pogoršava pacijentovu prognozu. Među kroničnim bolestima koje se susreću u pacijenata s KOPB-om jesu kardiovaskularne bolesti, rak pluća, dijabetes, artritis, moždani udar, gastroezofagealna refluksna bolest, bronhiektazije, mišićna slabost, depresivni sindrom, oboljenja bubrega i osteoporoza. Cilj je ovoga rada prikazati ulogu matičnih liječnika u holističkom tretmanu pacijenata s KOPB-om i njegovim komorbiditetima.

Prikaz slučaja: Muškarac, 67 godina, oženjen, umirovljenik, puši 75 kutija cigareta godišnje, iz ekonomskih razloga ponovno radi kao taksist. Obitelj ima 14 članova, živi u kući s četiri sobe, za ogrjev upotrebljava drva. Ambulantu posjećuje sa sljedećim dijagnozama: kronična opstruktivna plućna bolest, hipertenzija, arterioskleroza, cerebrovaskularni inzult, bazocelularni karcinom nosa, depresivno-anksiozni sindrom. KOPB, GOLD2 dijagnosticiran je u 60. godini. Postoje 1 – 2 lakša pogoršanja godišnje koja se liječe ambulantno. mMRC ljestvica dispneje = 2, CAT = 10. Primijenjena je inhalacijska terapija kratkodjelujućim i dugodjelujućim beta-2 antagonistima. Povremeno dolazi u ambulantu radi propisivanja terapije, kada osjeća poteškoće u disanju i kašalj. Pravilno primjenjuje inhalacijsku terapiju, ali se njom ne koristi redovito i ne ide redovito na godišnje kontrole kod pulmologa. Nije spreman prestati pušiti iako se svaka konzultacija koristi kao motivacija za prestanak pušenja. Terapiju za arterijsku hipertenziju također ne uzima redovito, pa u nekoliko navrata dolazi u hitnu ambulantu Kardiologija – Skopje s hipertenzivnim krizama.

Rasprava: Zbrinjavanje pacijenta s KOPB-om često postaje velik izazov, kako zbog kompleksnosti same bolesti, tako i zbog nužnosti tretmana ostalih komorbidnih stanja. Za ove je pacijente iznimno važan holistički pristup u tretmanu uz redoviti pristup i zdravstvenu podršku matičnih liječnika, koji vrše stalne preglede i upravljaju KOPB-om, kao i drugim popratnim kroničnim oboljenjima. Kardiovaskularne bolesti i ateroskleroza također su često prisutni u oboljelih od KOPB-a i imaju iste rizične čimbenike. Oko 25 % svih pacijenata s KOPB-om imaju depresiju kao dijagnozu, a više od dvije trećine njih neredovito uzima terapiju. U pacijenata s KOPB-om komorbiditet je povezan s visokim stupnjem polifarmacije, što može dovesti do interakcije i neželjenog učinka lijekova, smanjene suradljivosti, hospitalizacije i, u najgorem slučaju, prerane smrti.

Zaključak: Matični liječnici koji skrbe o pacijentima s KOPB-om moraju biti svjesni komorbiditeta, rano ih dijagnosticirati i uz holistički pristup na odgovarajući ih način voditi.

Holistic approach in COPD management and comorbidities – case report

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Introducton. Chronic obstructive pulmonary disease (COPD), except pulmonary abnormalities, causes many other extra-pulmonary complications, as a result of an inflammatory process, attacking other tissues and organs which worsens the patient's prognosis. Conditions associated with COPD are cardiovascular disease, lung cancer, diabetes, arthritis, gastro-esophageal reflux disease, bronchiectasis, muscle affection, depression, kidney diseases and osteoporosis. The aim of this paper is to discuss the role of the family physician in the holistic approach to treating COPD and comorbidities

Case report. 67 year old male, married, retired, smokes75 packs per year cigarettes, has started to work as a taxi driver due to economic reasons. His family of 14 members live in a house consisting of 4 rooms and they use wood for heating. He is monitored in the GP practice for the following diagnoses: chronic obstructive pulmonary disease, arterial hypertension, arteriosclerosis, cerebrovascular insult, carcinoma cutis nasi and anxious-depressive disorder. He was diagnosed with COPD, GOLD 2 at the age of 60. There are 1-2 mild exacerbations per year, treated in the clinic, his mMRC =2, CAT=2. The patient is treated with short-acting and long-acting beta 2 agonists. He visits the clinic periodically to get therapy for heavy breathing and cough. He uses inhalation therapy properly, but not regularly and does not do regular year visits to the pulmonologist. He is not ready to stop smoking although every consultation is used for further motivation. He does not take his cardiovascular therapy regularly and he is very often taken to an emergency clinic at the University Hospital for cardiology.

Discussion. The management of the patient with COPD is a big challenge considering the complexity of the disease and the need to treat other comorbidities as well. For these patients, the holistic approach is crucial, with constant support, availability and health care support from their family physicians. They do annual assessment and treatment of COPD and other accompanying chronic diseases. Cardiovascular diseases and arteriosclerosis are very common and share common risk factors with COPD. Around 25% of all COPD patients are diagnosed with depression and over two thirds of them do not receive any antidepressant treatment. COPD patients with comorbidities are related to high level of polypharmacy, which may lead to adverse drug reactions and interactions, hospitalization, and premature death.

Conclusion. Family doctors who treat COPD patients must be aware of comorbidities, and properly treat them following a holistic approach.

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Od dispneje do tamponade srca – važnost ultrazvučne dijagnostike u ordinaciji obiteljske medicine

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Ključne riječi: dispneja, tamponada srca, ultrazvučna dijagnostika
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Uvod s ciljem: Tamponada srca hitno je medicinsko stanje koje nastaje abnormalnim nakupljanjem tekućine u perikardijalnoj šupljini i može dovesti do zatajenja srca. Manifestira se različitim simptomima kao što su zaduha, omaglica i bol u prsima. Dijagnoza se temelji na fizikalnom pregledu i ehokardiografiji. Cilj je ovog rada prikazati značaj ultrazvučne (UZV) dijagnostike u obiteljskoj medicini na primjeru bolesnika s tamponadom srca.

Prikaz slučaja: Bolesnik u dobi 47 godina javlja se u ordinaciju obiteljske medicine zbog dispneje pri blagom fizičkom naporu. Prethodno je bio zdrav i nije uzimao nikakvu kroničnu terapiju. Mjerenjem vitalnih parametara utvrđuje se tahikardija i tahipneja, a auskultacijski nalaz srca i pluća je uredan. Vrijednost krvnog tlaka iznosila je 130/80 mmHg, a saturacija kisikom 98 %. EKG nalaz pokazao je sinusni ritam, 108/min, lijevu električnu os i nekompletni blok desne grane. Zbog sumnje na plućnu emboliju učinjeni su D-dimeri i dodatni laboratorijski nalazi koji su bili unutar referentnih vrijednosti. Bolesnik je upućen na dalju obradu u Objedinjeni hitni bolnički prijam (OHBP). Nakon četiri dana bolesnik ponovno dolazi u ordinaciju u pratnji kćeri zbog mučnine, povraćanja i opće slabosti. Heteroanamnestički se saznaje kako se bolesnik nije javio u OHBP zbog udaljenosti od mjesta stanovanja te zbog neaktivne police dopunskoga zdravstvenog osiguranja. S obzirom na prethodne simptome, pogoršanje kliničkog stanja i stavove bolesnika, učinjena je obrada koja je moguća u okvirima ordinacije obiteljske medicine. Ultrazvučnim pregledom abdomena i orijentacijskim UZV pregledom srca nalazi se povećana količina tekućine u perikardijalnoj šupljini. Zbog životno ugrožavajućeg stanja bolesnika i pratnju informira se o bolesnikovu zdravstvenom stanju, nakon čega se odlučuju na bolničko liječenje gdje se učini perikardiocenteza. Unatoč bolničkom liječenju bolesnik je preminuo od komplikacija.

Rasprava: Simptom dispneje čest je u ordinaciji obiteljske medicine i može upućivati na ozbiljne plućne i srčane bolesti. Točna dijagnoza uz nespecifičnu kliničku sliku predstavlja izazov u ambulantnom radu. UZV pregled koristi se u obiteljskoj medicini uglavnom za pregled abdomena, no svoju primjenu nalazi i pri pregledu drugih organskih sustava. Iako ehokardiografska dijagnoza tamponade srca uključuje kompleksnije nalaze, kao što su dijastolički kolaps desnog ventrikula i sistolički kolaps desnog atrija, sama prisutnost veće količine tekućine u perikardijalnoj šupljini na orijentacijskom UZV pregledu upućuje na ozbiljnost kliničkog stanja.

Zaključak: Korištenje ultrazvučne dijagnostike, kao metode koja nije štetna za bolesnika, u ordinacijama obiteljske medicine pridonosi kvalitetnijoj obradi bolesnikovih tegoba, bržoj dijagnozi i ranijem početku liječenja. Dostupnost UZV pregleda od iznimnog je značaja u ruralnim ambulantama liječnika obiteljske medicine udaljenima od centara sekundarne zdravstvene zaštite, poglavito u obradi hitnih stanja.

From dyspnea to cardiac tamponade – the importance of ultrasonography in a family medicine practice

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Introduction. Cardiac tamponade is a medical emergency caused by an abnormal increase of fluid accumulation in the pericardial sac and can lead to heart failure. It is presented by various symptoms such as shortness of breath, dizziness and chest pain. Diagnosis is based on physical examination and echocardiography. The aim of this paper is to show the importance of ultrasound (US) diagnostics in family medicine using the example of a patient with cardiac tamponade.

Case report. A 47-year-old man reports to the family medicine office due to dyspnea during mild physical exertion. The patient was previously healthy and did not take any chronic therapy. Tachycardia and tachypnea are determined by measuring vital parameters, and auscultation findings of the heart and lungs are normal. His blood pressure is 130/80 mmHg, while the value of oxygen saturation is 98%. ECG findings shows sinus rhythm, 108/min, left electrical axis and incomplete right bundle branch block. Due to the suspicion of pulmonary embolism, D-dimers and laboratory findings are performed, which are within reference values. The patient is reported to Emergency Room. The patient comes again 4 days later, accompanied by his daughter, to the physician's office due to nausea, vomiting and general weakness. Heteroanamnesis reveals that the patient did not report to the Emergency Room because of the distance from his home and because his supplementary health insurance has expired. Taking into account the previous symptoms, deterioration of the clinical condition and the patient's attitude, treatment is conducted which is possible in the family medicine office. An ultrasound examination of the abdomen and an orientational US examination of the heart reveals an increased amount of fluid in the pericardial cavity. Due to the life-threatening condition, the patient and the accompanying person are informed about his health condition, after which they decide to undergo hospital treatment where a pericardiocentesis is performed. Despite the hospital treatment, the patient dies of complications.

Discussion. The symptom of dyspnea is common in the family medicine office and can indicate serious lung and heart diseases. Accurate diagnosis with a non-specific clinical presentation is a challenge in general practice. Ultrasound examination is used in family medicine mainly to examine the abdomen, but it can also be used for other organ systems. Although the echocardiographic diagnosis of cardiac tamponade includes more complex findings such as the diastolic collapse of the right ventricle and systolic collapse of the right atrium, the presence of a large amount of fluid in the pericardial cavity on orientation ultrasound examination indicates the severity of the clinical condition.

Conclusion. The use of ultrasound diagnostics, as a method that is not harmful to the patient, in family medicine offices contributes to better treatment of the patient's complaints - faster diagnosis and earlier start of treatment. The availability of ultrasound examinations is extremely important in a rural office which is far from secondary health care centers, especially in the treatment of emergencies.

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Hipertenzija u postmenopauzi – uloga obiteljskog liječnika

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Ključne riječi: hipertenzija, obiteljska medicina, postmenopauza
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Uvod: Hipertenzija je najčešća kronična bolest u razvijenim zemljama, a zahvaća čak 25 % žena. Predstavlja najvažniji promjenjivi rizični čimbenik kardiovaskularnih bolesti koje su vodeći uzrok smrtnosti u žena. Tijekom fertilnog života žene su uglavnom normotenzivne i hipotenzivne, dok se prevalencija hipertenzije u žena znatno povisuje u postmenopauzi. Kliničke prezentacije u toj dobi raznolike su, a regulacija terapije u postizanju ciljnih vrijednosti krvnog tlaka kompleksna. Cilj je ovog rada prikazati bolesnicu s hipertenzijom u postmenopauzi i ulogu liječnika obiteljske medicine (LOM) u kontroli te kronične bolesti.

Prikaz slučaja: Bolesnica u dobi od 52 godine javlja se u ordinaciju obiteljske medicine zbog osjećaja slabosti, gušenja, vrtoglavice i napadaja vrućine jednom mjesečno u posljednjih pet mjeseci. Osim povišenih vrijednosti krvnog tlaka do 180/100 mmHg, njezin je fizikalni nalaz bez osobitosti. Bolesnica je pušač posljednjih deset godina (2,5 *pack-years*), navodi kako ima sjedilački način života uz subjektivno zdravu prehranu, a indeks tjelesne mase iznosi 32 kg/m^2. Bolesnica boluje od hipertenzije posljednjih osam godina, a kao terapiju uzimala je ramipril 2,5 mg, koji je promijenjen u kombinaciju nebivolola 5 mg i amlodipina 5 mg. Zbog čestih oscilacija krvnog tlaka posljednjih mjeseci unatoč stalnim korekcijama terapije učinjena je laboratorijska obrada, obrada sekundarne hipertenzije te pregled kardiologa. Laboratorijski nalaz bio je unutar referentnih vrijednosti, osim povišenoga ukupnog kolesterola (5,5 mmol/L) i LDL-kolesterola (3,5 mmol/L). Ultrazvuk renalnih arterija, deksametazonski supresijski test, vrijednosti hormona štitnjače, aldosterona i metanefrina u 24-satnom urinu bili su uredni. EKG i ehokardiografija pokazali su uredan morfološki i funkcionalni nalaz srca, a holter tlaka zadovoljavajuće prosječne vrijednosti tlaka i otkucaja s povremenim skokovima tlaka danju do maksimalnih sistoličkih vrijednosti 150 mmHg uz adekvatan noćni pad tlaka. Uz promijenjenu terapiju po preporuci kardiologa, lacidipinom 4 mg i perindoprilom 4 mg te nitroglicerinom kod oscilacija, simptomi bolesnice nisu se poboljšali. Uvođenjem venlafaksina u terapiju zbog anksioznosti, u dozi od 37,5 mg tijekom pet dana, potom 75 mg, skokovi povišenih vrijednosti krvnog tlaka smanjuju se i bolesnica s vremenom prestaje uzimati antidepresive. Ciljne vrijednosti krvnog tlaka sada uspješno održava kombinacijom lacidipina 4 mg, valsartana 80 mg (uveden zbog kašlja uzorkovanog perindoprilom) i diazepama po potrebi.

Rasprava: Predviđa se kako će prevalencija postmenopauzalne hipertenzije sve više rasti zbog modernog načina života. Sniženje razine estrogena i prekomjerna tjelesna težina glavni su čimbenici hipertenzije u postmenopauzi. Manifestacije oscilacija krvnog tlaka često su intenzivne i narušavaju kvalitetu života bolesnica, a pronalazak učinkovite kombinacije antihipertenzivne terapije predstavlja izazov LOM-u. Isključenjem sekundarnih uzroka hipertenzije u bolesnica sa značajnim oscilatornim vrijednostima krvnog tlaka i kardiološkom obradom, liječenje je usmjereno na terapiju antihipertenzivima uz mogućnost kombiniranja s anksioliticima ili antidepresivima. Neki autori ističu kako bi suradnja LOM-a s ginekolozima pridonijela boljem razumijevanju multifaktorske uloge estrogena u hipertenziji te dobi i moguće terapije hormonski nadomjesnom terapijom.

Zaključak: Žene u postmenopauzi zahtijevaju redovitu kontrolu obiteljskog liječnika zbog povećanog ukupnog kardiovaskularnog rizika. Uloga LOM-a uključuje edukaciju bolesnika o prevenciji hipertenzije promjenom životnih navika i strpljivu modifikaciju antihipertenzivne terapije do zadovoljavajućih vrijednosti krvnog tlaka bez značajnijih oscilacija.

Hypertension in postmenopausal women – the role of a family physician

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Introduction. Hypertension is the most common chronic disease in industrialized countries, affecting 25% of women. It represents the major variable cardiovascular risk factor which is the leading cause of death in women. During their fertile life, women are usually normotensive or hypotensive, whereas the prevalence of hypertension is significantly higher in postmenopausal women. Clinical presentations at that age may vary and the regulation of therapy in achieving blood pressure target values are complex. The aim of this paper is to present the patient with postmenopausal hypertension and the role of the family physician in controlling this chronic disease.

Case report. A 52-year-old female patient has been reporting to the family medicine office once a month due to a feeling of weakness, suffocation, dizziness and hot flashes in the past five months. Except for high blood pressure up to 180/100 mmHg, her physical exam is unremarkable. The patient has been a smoker for the past 10 years (2.5 pack-years), states that she has a sedentary lifestyle with a subjectively healthy diet and her body mass index is 32. She was suffering from hypertension for the past 8 years and was taking ramipril 2,5 mg which was changed to a combination of nebivolol and amlodipine in a dose of 5 mg. Due to the frequent oscillations of blood pressure in recent months, laboratory parameters and secondary hypertension were checked, an examination by a cardiologist was conducted. Laboratory findings were within the recommended range except for elevated total cholesterol (5,5 mmol/L) and LDL (3,5 mmol/L). Renal ultrasonography, dexamethasone-suppression test, thyroid hormone levels, plasma aldosterone level and metanephrines in 24-hour urine test were normal. ECG and echocardiography showed normal morphological and functional findings of the heart and 24-hour blood pressure monitoring measured satisfying mean blood pressure and heart rate levels with occasional daily oscillations up to maximum systolic values of 150 mmHg with adequate pressure drop at night. By changing the therapy, as recommended by a cardiologist, to lacidipine 4 mg, perindopril 4 mg and nitroglycerin in oscillations, the patient's symptoms did not improve. With the introduction of venlafaxine, because of anxiety, in a dose of 37.5 mg for 5 days and then 75 mg, oscillations in high pressure values have been decreasing and the patient has eventually stopped taking antidepressants. Now she successfully regulates her blood pressure target values with the combination of lacidipine 4 mg, valsartan 80 mg (introduced due to the cough caused by perindopril) and diazepam as needed.

Discussion. The prevalence of postmenopausal hypertension is predicted to increase because of the modern lifestyle. Estrogen deficiency and increased body mass index are the main causes of hypertension in postmenopause. The presentations of blood pressure oscillations are often intense and impair the quality of life of women in that phase. This represents a challenge to the family physician in finding an effective combination of antihypertensive therapy. By excluding secondary causes of hypertension in patients with significant oscillatory blood pressure values and other cardiac diseases, treatment is focused on antihypertensive therapy with the possibility of combining it with anxiolytics or antidepressants. Some authors point out that collaboration between the family physician and the gynecologists would contribute to a better understanding of the multifactorial role of estrogen in hypertension at that age and a possible introduction of hormone replacement therapy.

Conclusion. Postmenopausal women should be regularly assessed for cardiovascular risk factors by their primary care physician. The role of the family physician includes education about the prevention of hypertension by changing lifestyle habits and patient modification of antihypertensive therapy to satisfactory values without oscillations.

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Kontracepcija kod maloljetnih osoba u ordinaciji obiteljskog liječnika – prikaz slučaja

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Ključne riječi: neželjena trudnoća, kontracepcija, maloljetnici, spolno prenosive bolesti, savjetovanje
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Uvod s ciljem: Nekorištenje kontracepcijskih metoda, kao i njihov loš odabir, osobito kod maloljetnika, dovodi do neželjene trudnoće i spolno prenosivih bolesti. Razlog je tomu nedovoljna educiranost mladih koja bi trebala započeti u obitelji i nastaviti se u odgojno-obrazovnom sustavu, a svakako i u liječničkim ordinacijama. Cilj je ovog rada prikazati individualni pristup pacijentici u skladu s njezinom dobi, sa socijalnim okruženjem i s religijskim uvjerenjima pri izboru kontraceptiva u cilju sprječavanja neželjene trudnoće i zaštite od spolno prenosivih bolesti, a koji uvažava njezine želje i kulturološka poimanja.

Prikaz slučaja: Pacijentica, 17 godina, u izvanbračnoj vezi, nepušač, dolazi u ordinaciju s dvomjesečnim djetetom. U posjet dolazi sa svojom starijom rođakinjom koja joj je podrška u novonastaloj situaciji. Došla je na djetetov prvi pregled i po savjete vezane za dijete koje ima normalni razvoj i hrani se dojenjem. U tijeku pregleda dobila sam informacije vezane za majku. Ona ne ide u školu, financijski je ovisna, nevjenčani partner također je maloljetan, nezaposlen. Nije upućena u mogućnosti zaštite od daljnjih neželjenih trudnoća. Iskoristila sam posjet kako bih dobila više informacija o njoj i o njezinim željama u planiranju obitelji. Na osnovi toga razgovarale smo o mogućnostima kontracepcije, što to uistinu znači za nju, o tome da je zbog isključivog dojenja ona zaštićena od trudnoće 98 % u sljedeća četiri mjeseca. Inzistirala sam da me dobro razumije da to znači pridržavanje satnice dojenja danju na četiri sata i noću ne duže od šest sati. Pacijentici su dani savjeti da je laktacijska amenoreja vremenski ograničena i da se treba odlučiti za druge mogućnosti (druge kontracepcijske metode). U ovom razdoblju poželjno je da se koristi još i prekidom seksualnog odnosa i muškim kondomom.

Rasprava: Metode koje preporučujemo svojim pacijentima trebaju biti prikladne za osobu kojoj su namijenjene. Trebamo biti sigurni da smo dobro objasnili primjenu kontracepcije i pružili informacije o tome da je kontracepcijsko sredstvo dostupno u trgovini, da je ekonomski prihvatljivo te da odgovara vjerskim i kulturnim uvjerenjima. Moramo naglasiti da je kod određenih metoda kontracepcije vrlo značajna odanost, suradnja i povjerenje obaju partnera.

Zaključak. Važno je iskoristiti svaki posjet mladih ljudi, a osobito onih s nižom razinom obrazovanja i onih koji pripadaju vulnerabilnim skupinama, kako bismo ih savjetovali o mogućnostima kontracepcije. Korištenje dobro odabranih kontracepcijskih metoda ne samo što smanjuje rizik od neželjene trudnoće nego i rizik od spolno prenosivih bolesti.

Contraception in adolescents – case report from family physician's office

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Introduction and aim. Non-use as well as a poor selection of contraceptive methods, especially among adolescents, leads to unwanted pregnancies and sexually transmitted diseases. The cause of this is the insufficient education of young people and teenagers, which should start in the family, as well in the education system and with their physicians. The aim of this paper is to show an individual approach to the patient in the selection of contraceptives that prevent unwanted pregnancies and sexually transmitted diseases in accordance with age, social environment, religion, compliance with their wishes and cultural concepts.

Case report. A 17-year-old female patient, in an extramarital relationship, non-smoker, comes to family physician's office with a two-month-old baby. She is accompanied by her older cousin, who is supporting her in the new situation.

She comes for the first clinical examination of the baby and to ask for advice related to the baby, which has normal development and is exclusively breastfed.

Anamnesis: the following data about the mother is obtained: she does not go to school, she is financially dependent, her unmarried partner is also an adolescent and he does not work, she has not knowledge about the possibility of protection against further unwanted pregnancies.

During the consultation the family physician obtains information about her further wishes to forming a family. Based on that, the family physician points out the awareness about the possibility of contraception and what it really means for her, as well as the fact that due to exclusive breastfeeding, she is protected from pregnancy 98% in the next 4 months.

The family physician insists that the following be well understood to maintain a breastfeeding schedule of 4 hours between feeding the baby during the day and no longer than 6 hours at night. The patient is advised that this is time-limited and that she should decide on other possibilities of contraceptive methods besides this lactational amenorrhea. During this period, it is desirable that they use the interruption of sexual intercourse as well as that her partner uses a condom.

Discussion. The methods that are recommended should be individually suitable. The use of contraceptives should be well explained by family physicians. Society should make it possible for contraceptives to be available in stores, to be financially acceptable and to be compatible with religious and cultural beliefs. It should be emphasized that certain contraceptive methods require the commitment, cooperation and trust of both partners.

Conclusion. Every a visit by an adolescent to family physician's office should be used to raise awareness of the possibilities of contraception, especially for those with a low level of education and those from vulnerable groups. The use of a well-chosen method of contraception not only reduces the risk of unwanted pregnancy, but also the risk of sexually transmitted diseases.

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Treatment of patients on anticoagulant therapy in primary care – case report

Keywords: Family physicians, anticoagulant therapy, CHA2Ds-VASc score, HASBLED score
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Introduction. The prevalence of atrial fibrillation (AF) is 2 − 4% in the adult population. The risk of thromboembolic complications is not homogeneous, it depends on the age of the patient and the presence of risk factors. Inadequate anticoagulation further increases the risk of complications such as stroke or thromboembolism. The aim of this paper is to show the management of the patient with anticoagulant therapy, correction and adjustment according to the patient's needs and changes in her health condition.

Case report. The patient is female, aged 77, married, with two children, nonsmoker. Dg. Hipothyreosis, AF and Hypertension. Therapy she uses: telmisartan, metoprolol succinate, levothyroxine, rosuvastatin, acenocoumarin, hydrochlorothiazide (HCT). Score for atrial fibrillation stroke risk (CHA_2DS_2-VASc): C (congestive heart failure), H(Hypertension), A (Age>75), D (Diabetes mellitus), S (Stroke/Transient ischemic attack/Systemic embolism), V (Vascular disease), A (Age 65-74), Sc(Sex/ female) is 4. Score for major bleeding risk (HAS-BLEED): H (Hypertension), A (Abnormal liver or renal function), S (Stroke), B(Bleeding), L (labile International normalized ratio), E (Elderly), D (Drugs and alcohol) is 3. The patient has not been coming for regular controls and international normalized ratio (INR) is between 1.1-1.7 (underdosed because of poor control). In January 2021, the patient was feeling bad with weakness in her body especially on the left side, and also difficulties in speech. CT was without bleeding in the brain and the diagnosis was transient ischemic attack (TIA). CHA_2Ds-VASc score was 6. Because of her poor compliance, non-adherence to the regimen of taking vitamin K antagonists (VKA), she is prescribed non-Vitamin K antagonists NOAK therapy, rivaroxaban 20 mg one tablet daily. In February 2022, she gets COVID-19, the creatinine is 130 and creatinine clearance 59. The NOAK therapy remains the same. Determining whether or not to change therapy depends on creatinine clearance. Control is determined by dividing the value of creatinine clearance by 10 and the value indicates the number of months for control. (59:10= 5,9 about 6 months). After three weeks she comes to the office with INR and it is in the normal range. We do not control the INR when patients are on NOAK.

Discussion. In the period of COVID-19 pandemic because of limited cooperation with specialist, family physicians had to treat patients with anticoagulant therapy, which had not been conducted before.

Conclusion. Risks from complications in patients with AF because of irregular use of anticoagulant therapy is high. Family physicians can successfully treat patients who need anticoagulant therapy if they follow the recommendations of evidence-based medicine.

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Hiperkalijemija nepoznatog uzroka

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Ključne riječi: hiperkalijemija, liječnik obiteljske medicine
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Uvod s ciljem: Hiperkalijemija se definira kao serumska koncentracija kalija veća od 5,1 mmol/L. Poremećaji kalija česti su u bolesnika s bubrežnom bolesti, osobito u bolesnika s tubularnim poremećajima i niskom brzinom glomerularne filtracije. Hiperkalijemija dovodi do promjena na elektrokardiogramu te izaziva simptome koji su povezani s poremećajima ekscitabilnih tkiva, a prezentiraju se kao ascendentna mišićna slabost, mialgija, abdominalna bol i proljev. Cilj rada bio je prikazati tijek dijagnostičkih postupaka i liječenja pacijentice s hiperkalijemijom.

Prikaz slučaja: U travnju 2022. godine, prilikom godišnje rutinske laboratorijske analize krvi, 60-godišnjoj pacijentici nađena je povišena vrijednost kalija u serumu (K 5,5 mmol/l). Unazad desetak godina liječi glaukom primjenom latanoprost kapi, a prilikom UZV pregleda nađena je eutireotična nodularna struma štitnjače bez potrebe za terapijom. Pacijentica je u mirovini, udana, urednih funkcija i navika. Prilikom fizikalnog pregleda nisu nađena patološka odstupanja uz vrijednost krvnog tlaka 107/72 mmHg i pulsa 95/min te indeksa tjelesne mase 22 kg/m^2. Pacijentici je objašnjeno kako se treba pridržavati prehrane siromašne kalijem. U terapiju je uveden furosemid 40 mg dnevno te je naručena na dodatnu obradu i kontrolu. U kontrolnim laboratorijskim nalazima učinjenima od travnja do kolovoza vrijednosti kalija kretale su se od 4,4 do 5,9 mmol/L uz procijenjenu glomerularnu filtraciju (pGFR) 71 – 94 mL/min/1,73 m^2. UZV bubrega bio je bez promjena. Pacijentica je upućena na pregled endokrinologa i nefrologa radi proširene obrade i utvrđivanja uzroka hiperkalijemije (laboratorijska analiza krvi, kortizol u 8 h, reninska aktivnost plazme, aldosteron, paratireoidni hormon, natrij, K, kalcij, magnezij, acidobazni status). Učinjenom obradom i dalje se verificira hiperkalijemija (K 5,3 mmol/l), dok su ostale učinjene pretrage bile bez odstupanja. Iz terapije je izostavljen furosemid te je uveden kalcijev polistirensulfonat. Po preporuci bolničkih specijalista planira se kontrola nakon nekoliko mjeseci s novim laboratorijskim nalazima uz nastavak korištenja kalcijeva polistirensulfonata s pokušajima povremene stanke i odgovarajuće prehrane ako vrijednost kalija u serumu ne bude prelazila 5,5 mmol/l.

Rasprava: Kod bolesnika s hiperkalijemijom trebamo razlikovati akutnu, kroničnu i pseudohiperkalijemiju te ovisno o tome provesti daljnje liječenje i obradu. Na moguću prisutnost pseudohiperkalemije treba posumnjati kada nema vidljivog uzroka hiperkalemije u asimptomatskog bolesnika koji nema elektrokardiografske manifestacije hiperkalijemije.

Zaključak: U slučaju kronične hiperkalijemije liječnik obiteljske medicine mora pokušati naći njezin uzrok uzimajući u obzir detaljnu anamnezu prehrambenih navika, farmakoterapije, primjenu bezreceptnih preparata i slično. Potrebno je objasniti pacijentu kako adekvatno smanjiti unos kalija, ukinuti primjenu lijekova koji dovode do povećanja njegove koncentracije i povećati njegovu ekskreciju diureticima (tiazidni ili diuretici Henleove petlje), natrijevim bikarbonatom ili davanjem kationskih izmjenjivačkih smola.

Hyperkalemia of unknown cause

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Introduction and aim. Hyperkalemia is defined as a serum potassium concentration greater than 5.1 mmol/L. Potassium disorders are common in patients with kidney disease, especially in patients with tubular disorders and low glomerular filtration rate. Hyperkalemia leads to changes in the electrocardiogram and causes symptoms related to disorders of excitable tissues, which are presented as ascending muscle weakness, myalgia, abdominal pain and diarrhea. The aim of this paper is to show the course of diagnostic procedures and treatment of a patient with hyperkalemia

Case report. In April 2022, during the annual routine laboratory analysis of the blood count, a 60-year-old female patient was found to have an elevated value of potassium in the serum (K 5.5 mmol/l). She was treated for glaucoma using latanoprost drops and during an ultrasound examination an euthyreotic nodular goiter of the thyroid gland was found without a need for therapy. The patient was retired, married, with regular functions and habits. During the physical examination, no pathological abnormalities were found, her blood pressure was 107/72 mmHg, pulse 95/min, and body mass index 22 kg/m2. She was explained how to follow a low-potassium diet. Furosemide 40 mg per day was introduced into her therapy and she was ordered for additional treatment and control. In control laboratory findings made from April to August, potassium values ranged from 4.4 to 5.9 mmol/L with an estimated glomerular filtration rate (eGFR) of 71-94 mL/min/1.73m2. Kidney ultrasound was without changes. The patient was referred to an endocrinologist and nephrologist for further treatment and determination of the cause of hyperkalemia (laboratory blood analysis, cortisol at 8 h, plasma renin activity, aldosterone, PTH, Na, K, Ca, Mg, ABS). The performed tests still verified hyperkalemia (K 5.3 mmol/l), while other tests were without deviations. Furosemide was discontinued and calcium polystyrene sulfonate was introduced. According to the recommendation of the hospital specialists, a control is planned in a couple of months with new laboratory findings, with continued use of calcium polystyrene sulfonate, attempts at occasional breaks and adequate nutrition if the value of potassium in the serum does not exceed 5.5 mmol/l.

Discussion. In patients with hyperkalemia, we need to differentiate between acute, chronic, and pseudohyperkalemia, and depending on that, conduct further treatment. A possible presence of pseudohyperkalemia should be suspected when there is no visible cause of hyperkalemia in an asymptomatic patient who does not have electrocardiographic manifestations of hyperkalemia.

Conclusion. In case of chronic hyperkalemia, the family physician has to try to find its cause, taking into account a detailed history of dietary habits, pharmacotherapy, use of OTC preparations, and the like. It is necessary to explain to the patient how to adequately reduce potassium intake, discontinue the use of drugs that lead to an increase in its concentration and increase its excretion with diuretics (thiazide or Henle loop diuretics), sodium bicarbonate or an administration of cation exchange resins.

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Radiation-related risk of basal cell carcinoma: a case report

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Introduction. Skin cancer is a common neoplasm in the European population, with basal cell carcinoma (BCC) accounting for about 80-90% of cases. There are several risk factors that contribute to the development of BCC, such as individual factors (genetics, skin phenotype) and environmental factors (exposure to ultraviolet radiation UV, ionizing radiation, arsenic, radiotherapy, immunosuppressive therapy). Approximately 70% of BCCs occur on the face and may also be present on the trunk and scalp, mainly in areas exposed to solar radiation. The aim of this case report is to highlight the importance of a proper and detailed medical history during primary care consultation, in order to assess a rapid and accurate diagnosis for a suitable referral intervention, as family physicians play an important role in a prompt diagnosis of these injuries.

Case Report. Female, 74 years old, retired from farming, middle class on the Graffar scale, belonging to a nuclear family in phase VIII of the Duvall life cycle. Personal history of *tinea capitis* in childhood, atrial fibrillation and hypothyroidism, with regular medication: bisoprolol 2.5 mg, rivaroxaban 20 mg and levothyroxine sodium 75 mg. The patient comes to the family medicine consultation with a lesion on the scalp that has been previously observed and diagnosed as seborrheic dermatitis. Physical examination of the scalp shows an erythematous, scaly lesion, with a crust, measuring approximately 2 cm, on the right parietal region, in the patient´s skin phototype 1. The patient has a history of exposure to UV radiation and ionizing radiation in the childhood, for the treatment of *tinea capitis*. The patient is referred to a Dermatology appointment with excision of the lesion, with favourable outcome.

Discussion. *Tinea capitis* is a fungal infection common in children and has been a major public health problem. Prior to the introduction of antifungal medicine in the 1950s, X-ray irradiation was generally employed for treating *tinea capitis* and it is estimated that approximately 200.000 children worldwide received X-ray treatment for this cutaneous condition. Previous studies have shown that radiation treatment for children with *tinea capitis* infection was associated with increased rates of skin cancers mainly BCCs, as well as malignancies of the brain, parotid, bone and thyroid. It has been reported that the susceptibility to UV radiation and ionizing radiation is comparable in terms of BCC risk, with an inverse relationship between BCC risk and age at radiation exposure, in addition to BCC development in irradiated scalp skin to be more aggressive and more disposed to recurrence.

Conclusion. Ionizing radiation was used, through superficial irradiation, as a treatment for *tinea capitis*, increasing the risk of BCC. This case report strengthens the importance of family physicians in a proper, early diagnosis and hence, a more successful treatment outcome.

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Disfazija kardiogenog porijekla – prikaz slučaja

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Uvod s ciljem: Pacijenti se liječniku obiteljske medicine često javljaju s različitim neurološkim simptomima. Neki od njih mogu upućivati na tranzitornu ishemijsku ataku (TIA) koja se razlikuje od moždanog udara jer žarišna moždana ishemija koja uzrokuje nagli i prolazni neurološki deficit ne ostavlja trajno oštećenje kao moždani udar. Cilj je ovog rada prikazati slučaj prolaznoga neurološkog deficita koji je bio posljedica kardiogenog uzroka.

Prikaz slučaja: Žena u dobi od 46 godina, kućanica, majka četvero djece. Nedavno se iz Istre preselila u Zadar. U ordinaciju obiteljske medicine javila se u prosincu 2022. s nalazima laboratorijskih pretraga te je spomenula da je prije dvadesetak dana imala epizodu motorne disfazije u smislu da nije mogla djetetu pročitati slikovnicu niti je mogla objasniti mužu u čemu je problem. Uz navedeno, osjećala je i vertiginozne senzacije i utrnuće jezika. Epizoda je trajala oko 45 minuta te potom nije više osjećala nikakve smetnje. Pregledom pacijentice ne nalazi se neuroloških odstupanja, u statusu RR 110/70 mmHg, puls 82/min, ITM 23, te se pacijenticu prioritetno uputi neurologu radi što skorije mogućnosti preporuke magneta mozga da se isključi moždani udar ili drugi uzrok. U osobnoj anamnezi pacijentica ima sklonost sideropeničnoj anemiji zbog metroragije te benigni šum na srcu koji prati od djetinjstva. Na posljednjem ultrazvuku srca 2018. nije pronađeno abnormalnosti. Od obiteljske anamneze značajno je da je otac imao aneurizmu na mozgu. U laboratorijskim nalazima prati se blaga sideropenična anemija, Hgb 112, Fe 6, UIBC 60. Neurolog je preporučio magnetsku rezonanciju mozga, koja nije pokazala ishemijskih žarišta, te je preporučio dalju neurološku obradu i kardiološki pregled. Transezofagealnim ultrazvukom srca dokazalo se postojanje otvorenog foramena ovale (PFO) te se preporučila kardiološka intervencija zatvaranja PFO-a.

Rasprava: U literaturi se navodi da je otvoreni foramen ovale česta anatomska varijanta s prevalencijom od 25 %. Najčešće je asimptomatska, ali može biti i uzrok tranzitornih ishemijskih ataka i moždanih udara. Rezultati istraživanja pokazali su da je liječenje zatvaranjem otvorenog foramena ovale pokazalo bolje rezultate u prevenciji novih ataka od medikamentnog liječenja.

Zaključak: Kod pregleda mlađih pacijenata s neurološkim ispadima u smislu tranzitorne ishemijske atake ili moždanog udara treba misliti na otvoreni foramen ovale kao uzrok koji je vrlo česta anatomska varijanta. U slučaju da se ona i dokaže, pacijentu treba prezentirati terapijske mogućnosti i ograničenja.

Dysphasia of cardiogenic origin – case report

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Introduction with aim Patients often present to family physicians with various neurological symptoms. Some of them may indicate a transient ischemic attack (TIA), which is different from a stroke because it is focal cerebral ischemia causing a sudden and transient neurological deficit but not leaving permanent damage like a stroke. The aim of this paper is to present a case of a transient neurological deficit that was the result of a cardiogenic cause.

Case report. A patient aged 46, housewife, mother of four children, who has recently moved from Istria to Zadar, comes for an examination in December 2022 with the results of laboratory tests and mentions that twenty days before she had an episode of motor dysphasia in the sense that she could not read a picture book to her child and could not explain to her husband what the problem was. In addition, she also felt dizzying sensations with numbness of her tongue. The episode lasted for about 45 minutes, after which she no longer felt any disturbances. An examination of the patient reveals no neurological abnormalities, in status RR 110/70 mmHg, cp 82/min, BMI 23, and the patient is referred to a neurologist as a priority because of the possibility of recommending a brain MR scan as soon as possible to rule out a stroke or other causes. From her personal history, the patient has a tendency to sideropenic anemia due to metrorrhagia and a benign heart murmur followed up since childhood. No abnormalities were found in the last ultrasound of the heart in 2018. From her family history, it is significant that her father had a brain aneurysm. In laboratory results there is sideropenic anemia Hgb 112, Fe 6, UIBC 60. The neurologist recommends a brain MR, which shows no ischemic foci, and recommends further neurological and cardiac examination. Transesophageal ultrasound of the heart proves the existence of an open foramen ovale (PFO), and cardiological intervention to close the PFO is recommended.

Discussion. In literature, it is stated that an open foramen ovale is a common anatomical variant with a prevalence of 25%. It is most often asymptomatic, but it can also be the cause of transient ischemic attacks and strokes. Research has shown that treatment by closing an open foramen ovale has shown better results in preventing new attacks than medication treatment.

Conclusion. When examining younger patients with neurological symptoms in terms of a transient ischemic attack or stroke, an open foramen ovale should be considered as the cause, which is a very common anatomical variant. In the event that it is proven, the patient should be presented with therapeutic possibilities and limitations.

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Narušeno mentalno zdravlje povezano s gubitkom na tjelesnoj težini u atipično stečenom središnjem dijabetesu *insipidus*: prikaz slučaja

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Ključne riječi: mentalno zdravlje, gubitak na težini, središnji dijabetes insipidus
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Uvod s ciljem: Dijabetes *insipidus* predstavlja rijedak metabolički poremećaj niske prevalencije (1 na 25 0000). Razlikujemo dva tipa dijabetesa *insipidus*: središnji i nefrogeni. Karakterizira ga polidipsija, poliurija i stvaranje hipotoničnog urina. Etiologija središnjeg dijabetesa *insipidus* (CDI) jest multifaktorska. Magnetska rezonancija metoda je zlatnog standarda za procjenu zahvaćenosti supraselarne regije hipofize CDI-jem. Debljina zahvaćenosti hipofize CDI-jem može varirati tijekom vremena, ovisno o osnovnom stanju, a mogu biti zahvaćena i druga područja mozga.

Prikaz slučaja: Dječak u dobi od 13 godina pregledan je u ordinaciji obiteljske medicine zbog intenzivne polidipsije, poliurije i gubitka na tjelesnoj težini od osam kilograma u posljednjih šest mjeseci. Rođen je iz uredno vođene trudnoće. Njegova osobna i obiteljska anamneza bile su uredne. Prilikom kliničkog pregleda bio je tjelesne mase 47 kg, visine 161 cm. Mentalni razvoj bio je primjeren za njegovu dob. Učinjeni su prošireni laboratorijski nalazi (KS, DKS, ureja, kreatinin, hepatogram, elektroliti K i Na, sediment urina), koji su bili uredni, no s obzirom na anamnestičke podatke upućen je na Odjel pedijatrije pri Općoj bolnici „Dr. Josip Benčević“ radi proširene obrade. Ispitivana je dodatno bubrežna funkcija, koja je bila uredna, kao i vrijednosti elektrolita u serumu i urinu. Patološko odstupanje nađeno je jedino u gustoći urina (1002 kg/l; 0,085 osmol/kg). Sukladno nalazu hipoosmolarnog urina i sumnji na dijabetes *insipidus*, učinjena je magnetska rezonancija (MR) i analiza kortizola, TSH, fT4 kako bi se utvrdila moguća etiologija bolesti. MR je pokazao zadebljanje u području hipofize te je pacijent predstavljen multidisciplinarnom timu. Nedugo nakon što mu je postavljena dijagnoza, postao je povučen i emocionalno labilan te je razvio gubitak kratkotrajnog pamćenja, lošu koncentraciju i poremećaje spavanja. Kako bi se osigurala kvaliteta života i nastavio uredan tijek razvijanja, u liječenje su uključeni i klinički psiholog, dječji psihijatar te pedijatar gastroenterolog i endokrinolog.

Rasprava: S obzirom na to da je dijabetes *insipidus* složen metabolički poremećaj, zahtijeva multidisciplinarni pristup, pravovremenu dijagnozu i liječenje. Djeca bez jasne etiološke dijagnoze za stečeni oblik CDI-ja zahtijevaju planirano i kontinuirano praćenje. Bolesnici s teškim oblikom poremećaja mogu primati nadomjesnu terapiju sintetskim oblikom vazopresina (dezmopresin) radi kontrole prekomjernog mokrenja i gubitka tjelesne težine. Ovaj prikaz slučaja upućuje na važnost pažljivog praćenja bolesnika s dijagnozom stečenoga središnjeg dijabetesa *insipidus*.

Zaključak: Diferencijalna dijagnoza kod bolesti koje se manifestiraju poliurijom i polidipsijom izazovna je i zahtijeva detaljnu anamnezu, fizikalni pregled, biokemijske pretrage, slikovne metode i, u nekim slučajevima, histološku potvrdu. Liječnici obiteljske medicine imaju ključnu ulogu u davanju odgovarajućih uputa, koordinaciji skrbi, pružanju podrške obiteljima i njihovu povezivanju sa psihosocijalnom i drugom podrškom. Uz sve navedeno, važno je dobro koordinirati proces liječenja i koristiti se svim raspoloživim resursima kako bi se pomoglo pacijentima s rijetkim bolestima kao što je stečeni središnji dijabetes *insipidus*.

Mental health disorder associated with progressive weight loss in uncommon condition of acquired central diabetes insipidus: case report

Keywords: Mental health disorder, weight loss, central diabetes insipidus
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Introduction with aim Diabetes insipidus presents a metabolic disorder with low prevalence of 1 in 25,000. There are two types of diabetes insipidus, central and nephrogenic. It is characterised by polydipsia, polyuria, and a formation of inappropriately hypotonic urine. The etiology of central diabetes insipidus is multifactorial. Magnetic resonance imaging is the gold standard method for evaluating the sellar-suprasellar region in CDI. Pituitary stalk size at presentation is variable and can change over time, depending on the underlying condition, and other brain areas or other organs - in specific diseases - may become involved during follow up.

Case report. 13-year-old male patient is examined by the family physician because of intensive polydipsia, polyuria and a weight loss of 8 kg for the past 6 months. He was born from a properly managed pregnancy. His personal and family history is uneventful. On examination, his body weight is 47 kg and height 161 cm. His mental development is age appropriate. His blood lab results are in normal range (a complete blood count (CBC), renal function tests, liver function test, electrolytes, urine sediment), but due to his anamnesis he is admitted to the Pediatric Department of General Hospital "Dr. Josip Bencević" Slavonski Brod for extended diagnostic procedures. Renal function test results serum and urine electrolyte values are in normal range. Urine density is 1002 kg/l; 0,085osmol/kg. Pituitary magnetic resonance imaging (MRI) examination and analyses of cortisol, TSH, fT4 are performed in order to detect an underlying cause. MRI shows the presence of a thickened pituitary stalk. He is managed by the multidisciplinary team according to his medical condition. After he is diagnosed, he becomes withdrawn and emotionally labile and develops a flat affect, a short-term memory loss, poor concentration, and sleep disturbance. In order to ensure his quality of life and continue an orderly course of development, a clinical psychologist, a child psychiatrist as well as a pediatric gastroenterologist and an endocrinologist are involved in the treatment.

Discussion. This is a complex disorder which requires an early diagnosis and treatment. Children without an aetiological diagnosis for the uncommon condition of acquired CDI require a careful follow-up. Patients with a severe form of the disorder may receive replacement therapy with a synthetic form of vasopressin known as desmopressin, to control excessive urination and body weight loss. Our report emphasizes the necessity of a close follow-up of patients after having been diagnosed with central diabetes insipidus.

Conclusion. The differential diagnosing between diseases presenting with polyuria and polydipsia is challenging and requires a detailed medical history, physical examination, biochemical approach, imaging studies and, in some cases, histological confirmation. Family physicians have a crucial role in making appropriate referrals, coordinating care, supporting families, and linking them with psychosocial and other support. They also require an access to current, relevant resources in order to help patients with rare diseases such as acquired central diabetes insipidus.

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Preko akupunkture i pneumotoraksa do dijagnoze Marfanova sindroma

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Ključne riječi: akupunktura, pneumotoraks, Marfanov sindrom, liječnik opće medicine
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Uvod s ciljem: Akupunktura je poznati oblik komplementarne medicine. Komplikacije akupunkture su rijetke i uglavnom bezopasne. Budući da se radi o invazivnoj medicinskoj intervenciji, mogu se javiti ozbiljne komplikacije poput pneumotoraksa. Marfanov sindrom je bolest fibroznog vezivnog tkiva i može se javiti u svim životnim dobima. Znakovi i simptomi jako variraju u težini, vremenu početka i brzini napredovanja bolesti. Cilj je rada istaknuti ulogu i značaj izabranog liječnika opće medicine u razumijevanju povezanosti kliničke slike pneumotoraksa nakon akupunkture i nedijagnosticiranoga Marfanova sindroma.

Prikaz slučaja: Pacijentica u dobi 41 godinu javlja se liječniku opće medicine s bolovima u lijevoj strani prsišta, otežanim disanjem i nadražajnim kašljem. Bolovi su počeli nakon tretmana akupunkture. Auskultacijom je zabilježeno oslabljeno disanje lijevo. S uputnom dijagnozom, lat. *Dolor pectoralis non specificatus*, upućena je u Urgentni centar, gdje joj je radiografski dijagnosticiran masivni pneumotoraks lijevo s kontralateralnim pomicanjem kardiovaskularne sjene. Hospitalizirana je na Odjelu torakalne kirurgije. Kod izabranog doktora došla je s otpusnicom s dijagnozom lat. *Pneumothorax spontaneus tensionis*. Kontrolni RTG: postignuta potpuna reekspanzija pluća. Izabrani liječnik sagledava cjelovit tijek razvoja kliničke slike pacijentice – žena je izrazito visoka i vitka, dugih ruku, šaka, prstiju, izrazite asimetrije prsnog koša, auskultacijski ritmičnog rada srca, s pojedinačnim ekstrasistolama, grubog sistoličkog šuma lijevo parasternalno. Od pacijentice je dobiven podatak da su svi članovi obitelji niskog i srednjeg rasta, osim djeda po ocu, koji je također bio visok i vitak, te da je od puberteta naglo rasla. Do sada nije imala izabranog liječnika, a rijetke zdravstvene probleme rješavala je odlaskom u specijalističke ordinacije. Zbog problema s kralježnicom i bolova u leđima liječila se kod fizijatra, koristila je nekoliko metoda fizikalne terapije, a kako su tegobe potrajale, išla je na terapiju akupunkture. Ultrazvučnim pregledom srca na koji je upućena dijagnosticirana je dilatacija aorte u razini kvržica i uzlaznog dijela, prolaps mitralne valvule s mitralnom insuficijencijom 2+. Zbog ekstrasistolije kardiolog je propisao terapiju beta-blokatorima te nastavlja pratiti bolesnika zbog prisutnosti kardiovaskularnih komplikacija.

Rasprava: Rezultati prospektivnih studija provedenih u Njemačkoj, Norveškoj i Velikoj Britaniji pokazali su da je incidencija pneumotoraksa uz akupunkturu vrlo niska, ali on može biti potencijalno opasan za život te stoga nije zanemariv. U literaturi su opisani i slučajevi spontanog pneumotoraksa kod nedijagnosticiranoga Marfanova sindroma, iako se u većini slučajeva najčešće javlja nakon dijagnoze tog sindroma, a slučajevi pneumotoraksa kod nedijagnosticiranoga Marfanova sindroma su rijetki. U ovom prikazu sumnju na Marfanov sindrom potaknuli su pacijentov marfanoidni izgled, skolioza s izrazitom asimetrijom prsnog koša, ultrazvuk srca i kompjutorizirana tomografija aorte, kao i genetska predispozicija.

Zaključak: Izabrani liječnik opće medicine u ovom je izlaganju imao ključnu ulogu u prepoznavanju nedijagnosticiranoga Marfanova sindroma, jer bolesnika promatra kao jedinstvenu cjelinu.

Through acupuncture and pneumothorax to the diagnosis of Marfan syndrome

Keywords: acupuncture, pneumothorax, Marfan syndrome, general practitioner
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Introduction and aim. Acupuncture is a well-known form of complementary medicine. Complications of acupuncture are rare and mostly harmless. However, since it is an invasive medical intervention, it can cause serious complications such as pneumothorax. Marfan syndrome is a fibrous connective tissue disease and can occur at all ages. Signs and symptoms vary greatly in severity, onset and speed of disease progression. The aim of this paper is to highlight the role and importance of the chosen general practitioner in understanding the connection between the clinical picture of pneumothorax after acupuncture and undiagnosed Marfan syndrome.

Case presentation. A 41-year-old woman presents to a general practitioner with pain in the left side of the chest, difficulty in breathing and irritating cough.The pain started after an acupuncture treatment. Auscultation revealed weakened breathing on the left. With referral diagnosis lat. Dolor pectoralis non specificatus, she is sent to the Emergency Center, where she is radiographically diagnosed with a massive left pneumothorax with contralateral movement of the cardiovascular shadow. She is hospitalized at Department of Thoracic Surgery. She comes to her chosen physician with a discharge note with a diagnosis of lat. Pneumothorax spontaneous tensionis. Control X-ray: complete lung re-expansion achieved. The physician examines the entire course of development of the patient's clinical picture − the woman is distinctly tall and slender, long arms, hands, fingers, pronounced chest asymmetry, auscultatory rhythmic heart beat, with individual extrasystoles, coarse systolic murmur left parasternal. The patients reports that all her family members are of short and medium height, except for the paternal grandfather, who was tall and slender, and also reported that she had grown rapidly since puberty. So far, she has not had a chosen physician, and she solved her health issues by going to specialist surgeries. She was treated by a physiatrist for spine and back pain, and used several physial therapy methods, and as the complaints persisted, she went to acupuncture therapy. Ultrasound examination of the heart shows a dilatation of the aorta at the level of the cusps and the ascending part, mitral prolapse valves with mitral insufficiency 2+. Because of the extrasystole, the cardiologist prescribes beta blockers and continues to monitor the patient due to the presence of cardiovascular complications.

Discussion. Results of prospective studies conducted in Germany, Norway and Great Britain show that the incidence of pneumothorax after acupuncture is very low, but it may be potentially life-threatening and therefore not negligible. Cases of spontaneous pneumothorax are also described in the literature in undiagnosed Marfan syndrome, although in most cases it most often occurs after diagnosing this syndrome. Cases of pneumothorax in undiagnosed Marfan syndrome are rare. In this presentation, suspicion of Marfan syndrome was raised by the patient's marfanoid appearance, scoliosis with pronounced asymmetry of the chest, ultrasound of the heart and computed tomography of the aorta, as well as genetic predisposition.

Conclusion. In this presentation the selected general practitioner played a key role in recognizing undiagnosed Marfan syndrome, because he sees the patient as a whole unique individual.

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Kronični plućni bolesnik u COVID-19 pandemiji – prikaz slučaja

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Uvod s ciljem: Kronični bolesnici su među najosjetljivijima na virusne infekcije, a posebno plućni, osobito kada je riječ o respiratornim infekcijama. Kako ne bi došlo do trajnih komplikacija ili smrtnog ishoda, moraju se pravilno zaštititi od infekcije ili, ako se i zaraze, trebaju se na vrijeme dijagnosticirati i pravilno liječiti. To se osobito odnosi na pneumonije. Cilj ovog rada bio je prikazati značaj prevencije i liječenja plućnih bolesnika u sklopu COVID-19 infekcije.

Prikaz slučaja: Bolesnik u dobi 64 godine, pretio, nepušač, taksist po zanimanju, javio se liječniku zbog povišene temperature, malaksalosti, bolova u mišićima i kašlja. Dugo boluje od bronhijalne astme. Redovito uzima formoterol/budezonid 320 mcg/9 mcg u spreju i fenoterol/ipratropijum-bromid u spreju po potrebi. Operirao je plućni sekvestar prije 13 godina i kao komplikaciju operacije imao plućnu emboliju. Zbog specifičnosti posla u kontaktu je s mnogo ljudi i redovito nosi zaštitnu masku kao prevenciju od prijenosa respiratornih infekcija. Primio je Sinopharm SARS-CoV-2 cjepivo protiv bolesti COVID-19 u tri navrata. Posljednji je put cijepljen 13. listopada 2021. godine. Prvi put imao je COVID-19 infekciju 19. prosinca 2020., koja je dijagnosticirana PCR testom na SARS-CoV-2 i koja se komplicirala virusnom intersticijalnom bilateralnom pneumonijom. Druga je potvrđena 23. siječnja 2022. brzim antigenskim testom (engl. *Antigen Rapid Test*) na COVID-19. Ona se također komplicirala pneumonijom, parakostalno desno, intenziteta mliječnog stakla, na rendgenskom snimku s pleuralnim izljevom. Oba se puta liječniku javlja 6 – 7 dana nakon pojave simptoma. Liječen je antibiotskom terapijom (prvi put azitromicinom 500 mg šest dana, drugi put levofloksacinom 500 mg 1 x 1 deset dana), koju je propisao dežurni liječnik opće medicine u COVID ambulanti pri domu zdravlja. Od kraja 2022. godine imao je nekoliko puta pogoršanje bronhijale astme, a 6. siječnja 2023. javlja se izabranom liječniku nakon tri dana od početka pojave kašlja i malaksalosti, kada je na brzom antigenskom testu na COVID-19 opet bio pozitivan. Odmah je uvedena antivirusna terapija Favipiravir 200 mg, po shemi, te se COVID-19 infekcija završava bez komplikacija za 5 – 7 dana s obzirom na pravovremeno javljanje izabranom liječniku koji mu je propisao aktualnu terapiju za virusnu infekciju. Bolesnik smatra da je pogoršanjima zdravstvenog stanja pridonijelo i izraženo onečišćenje zraka te se planira preseliti u manju sredinu, gdje je manje onečišćenje zraka.

Rasprava: COVID pandemija je izazov, a u početku se malo znalo o bolesti. Funkcioniranje svih razina zdravstvene zaštite bilo je narušeno, pa i sustav izabranog liječnika opće medicine. Značajan trenutak u Republici Srbiji označilo je donošenje službenih protokola za liječenje COVID-19 infekcije, potom i dostupnost antivirusne terapije i na primarnoj razini zdravstvene zaštite. Pacijenti su naime bili primorani, kako oni s akutnim bolestima, tako i oni s pogoršanjima svojih kroničnih bolesti, javljati se na pregled različitim liječnicima opće medicine zbog angažiranja liječnika na različitim pozicijama u skladu s trenutačnom zdravstvenom situacijom.

Zaključak: Podizanje svijesti o značaju prevencije virusnih infekcija, zaštitna sredstva, npr. maska, cijepljenje što većeg dijela populacije protiv bolesti COVID-19, a posebno kroničnih bolesnika, te njihovo pravovremeno javljanje liječniku bitni su za uspjeh liječenja. Kod dokazane COVID-19 infekcije treba pravovremeno uvesti antivirusnu terapiju. Sve te mjere utječu na smanjenje komplikacija, a posebno kada se radi o kroničnim plućnim bolesnicima.

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A patient with chronic pulmonary disease in COVID 19 pandemic – case report

Keywords: chronic lung patient, COVID-19 infection, vaccination, complications
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Introduction and aim. Patients with chronic diseases are among the most sensitive to viral infections. This is especially true for patients with pulmonary diseases and respiratory infections. In order to avoid complications or lethal outcomes they have to protect themselves against infections or, if they do get infected, to get a timely diagnosis and proper treatment. This is of the utmost importance for pneumonia cases. We aimed at reporting on the importance of the prevention and treatment of patients with chronic pulmonary diseases during the time of the COVID 19 pandemic.

Case report. A male patient, 64, obese, non-smoker, taxi driver, presents at the doctor`s office with fever, malaise, myalgias, and cough. He has been suffering from asthma for a long time. He uses formoterol/budesonide 320mcg/9mcg spray on a regular basis, and fenoterol/ipratropium-bromide spray when needed. He had an operation on a pulmonary sequester 13 years ago and a pulmonary embolism as a consequence of the operation. Due to his line of work, he meets a lot of people every day and he uses a face mask as a prevention against respiratory infections. He received 3 doses of the Sinopharm vaccine against COVID 19. He received the last dose of the vaccine on October 13th, 2021. He first got a COVID infection on December 19th, 2020, diagnosed with a PCR test and there was a complication in the form of bilateral interstitial pneumonia. The second infection happened on January 23rd, 2022 and it was confirmed with a rapid Ag test and there was also a complication in the form of right paracostal pneumonia with pleural effusion (ground-glass intensity on the chest X-ray). On both occasions, he visited a doctor after 6 − 7 days of the symptoms onset. The first time he was treated with azitromycin 500 mg, for 6 days and on the second occasion with levofloxacin 500 mg, for 10 days. Both times medications were prescribed by doctors from COVID outpatient clinics. By the end of 2022, he had two asthma exacerbations and on January 6th, 2023 he presents at his GP`s office with cough and malaise, lasting for 3 days and the rapid Ag test is once again COVID positive. An antiviral, Favipiravir, 200 mg was prescribed and the COVID 19 infection was resolved after 5 − 7 days, without any complications. This was due to his timely visit to a GP who prescribed proper anti-virial therapy. The patient also attributes his exacerbations to air pollution and is planning to move somewhere else where the air is of better quality.

Discussion. The COVID pandemic was a challenge and little was known at the beginning. There were problems at all healthcare levels including the GP level. The important moments in the healthcare system of the Republic of Serbia were the introduction of the guidelines for COVID treatment and later on reducing the availability of anti-virals at the primary healthcare level. Patients with acute and exacerbated chronic diseases had to visit different GPs because doctors were often rotated to different positions, according to the current needs of the healthcare service.

Conclusion. Raising awareness on the prevention of viral infections by using ie. face masks, vaccinating the majority of the population, especially patients with chronic diseases, and timely visits to their GPs are of great importance for successful treatment. In diagnosed COVID 19 infections, anti-virals should be introduced as soon as possible. All of these measures may decrease complications, especially in chronic patients.

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Unaprjeđenje zbrinjavanja oboljele osobe s astmom

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Uvod s ciljem: Astma je jedna od najčešćih kroničnih opstruktivnih plućnih bolesti, veliko je opterećenje za bolesnika i obitelj. Zbog teškoća u dijagnostici i liječenju izdano je više smjernica, a najčešće se primjenjuje Globalna inicijativa za astmu (engl. *Global initiative for Asthma* – GINA). Plućna rehabilitacija sastavni je dio liječenja. Cilj je prikaza slučaja procijeniti uspješnost partnerskog odnosa liječnika i pacijentice oboljele od kronične astme i važnost obostrane odgovornosti za dalje liječenje oboljele osobe.

Prikaz slučaja: Pacijentica u dobi 55 godina, rastavljena, majka jednog sina, dolazi u ordinaciju zbog suhog i podražajnog kašlja koji traje. Unazad 20 godina liječi se zbog astme, ali terapiju ne uzima redovito, već samo salbutamol po potrebi. Ne obavlja redovito kontrole kod pulmologa, posljednji je put bila prije sedam godina, a u ambulantu dolazi samo na aminofilin kad joj se stanje pogorša. Inače nema drugih kroničnih bolesti. Pacijentica je blijeda, otežano diše, koristi se pomoćnom dišnom muskulaturom i hvata dah nakon svake izgovorene riječi. Kliničkim pregledom nađeno je auskultacijski difuzno oslabljeno disanje i ubrzana akcija srca. Protok *peak flow* metrom pokazuje vrlo loš rezultat, ispod 50 % (oko 35 %). Ambulanta nema pulsni oksimetar. Pacijentica je dobila iv. aminofilin i deksametazon kroz 10 – 15 minuta te inhalaciju salbutamola. Nakon terapije pacijentica se odmah bolje osjeća. Ponovno joj je obrazložena ozbiljnost njezina zdravstvenog stanja i važnost redovitog uzimanja propisane terapije. Pokuša joj se uvesti kombinacija inhalacijskog kortikosteroida i bronhodilatatora koju pacijentica nije uzimala. Pacijentici se ponovno izdaje uputnica za RTG pluća te uputnice za pulmologa i spirometriju, s obrazloženjem da su današnje terapije astme odlične i da uz stalni nadzor i redovito korištenje terapije pacijenti žive normalno, bez tegoba. Nakon nekoliko dana javlja da je prihvatila odlazak kod pulmologa. Na učinjenoj spirometriji nađene su opstrukcijske smetnje ventilacije srednjeg stupnja, a bronhodilatacijski test salbutamolom bio je pozitivan. Test izdisaja dušikova oksida (FeNO test) pozitivan, vrijednost 50 ppb. Učinjena je i plinska analiza arterijske krvi i acidobazni status. Zbog svakodnevnih simptoma predložena je terapija niskim dozama inhalacijskog kortikosteroida i dugodjelujućim beta-2 agonistom (ICS + LABA), vježbe disanja i mjerenje vršnog protoka zraka *peak flow* metrom kod kuće. Nakon mjesec dana javlja se u ambulantu obiteljskog liječnika na dogovorenu kontrolu, kada je izjavila da diše bez opterećenja i da se osjeća zadovoljnom s načinom nove terapije i ukupnog liječenja.

Rasprava: Odnos liječnika i pacijenta dio je složenijega međuljudskog odnosa koji implicira potpunu pravnu i etičku jednakost. Čini se da promicanje partnerskog odnosa u kojemu liječnik i pacijent zajednički odlučuju daje liječnikovu djelovanju potpuniji moralni karakter. Na promjenu paternalističkoga prema partnerskome modelu utjecale su globalne tehničko-ekonomske promjene u suvremenoj medicini i rastući pluralizam vrijednosnih sustava. No bitan razlog za promicanje partnerskoga modela jest poštivanje autonomije pacijenta i njegovo uključivanje u proces liječenja, što se pokazalo uspješnim u prikazanom slučaju.

Zaključak: Partnerski odnos i dobra suradnja izabranog liječnika, oboljele osobe i specijalista pulmologa, uz izbor terapije i rehabilitacije prema GINA smjernicama, može unaprijediti liječenje oboljelih s astmom i poboljšati im kvalitetu života.

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Improving the care of a person with asthma

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Introduction and aim. Asthma is one of the most common chronic obstructive lung diseases and a great burden for the patient and their family. Due to diagnostic and treatment difficulties, a number of guidelines have been issued, the most commonly applied one being the Global Initiative for Asthma (GINA). Pulmonary rehabilitation is an integral part of treatment, but is applied unevenly throughout the country. This case presentation aims to assess the degree of success of the partnership relationship between the physician and the patient suffering from chronic asthma and the importance of mutual responsibility for the patient's further treatment.

Case report. A patient comes to the office complaining of a cough. She is 55 years old, divorced, mother of one son. She takes care of her old and seriously ill aunt. The patient is a long-term lung patient. She has been treated for asthma for 20 years but is not taking therapy, except salbutamol for inhalation. She does not perform regular check-ups with a pulmonologist and the last time she saw one was 7 years ago. Otherwise, there are no other chronic diseases. She complains of an irritating, non-productive cough. The patient breathes very hard, uses auxiliary respiratory musculature. She is pale, catching her breath after every spoken word, coughs drily. Clinically, auscultatory diffuse weakened breathing and accelerated heart action are found. The peak flow meter shows a very poor result below 50% (about 35%). The physician's office does not have a pulse oximeter. The patient receives iv. aminophylline and dexamethasone over 10-15 minutes, and inhalation of salbutamol. After therapy, the patient immediately feels better. She is explained again that her condition is dangerous and that one day she will not make it to the clinic for therapy. She only comes for aminophylline when her condition worsens, she never calls emergency when she is sick. It is important for her to have salbutamol at home. She tried to introduce a combination of inhaled corticosteroid and bronchodilator (without performing spirometry, which does not meet the criteria for health insurance), she took the prescription once, but it seems that she did not use the medicine. The patient is again given a referral for a lung X-ray, as well as referrals for a pulmonologist and spirometry, with an explanation that today's asthma therapies are excellent and that with constant monitoring and regular use of therapy, patients live normally, without complaints.

A few days later, she reports that she has agreed to go to a pulmonologist. She informs the pulmonologist that she has shortness of breath on a daily basis and then wakes up at night due to pressure in her chest. Clinical examination detects wheezing. Spirometry: moderate ventilation obstruction, bronchodilation salbutamol test positive. Exhaled nitric oxide test (FeNO test) positive, value 50ppb. Arterial blood gas analysis and acid base status performed. Because of daily symptoms, therapy is suggested according to the GINA guidelines − low doses of inhaled corticosteroid and long-acting beta2-agonist (ICS+ LABA), breathing exercises, and measurement of peak air flow with a peak flow meter at home. If breathing worsens, an additional dose of inhaled beta2-agonist salbutamol or a dose of inhaled corticosteroid and beta2-agonist should be taken. After a month, she comes to her physician's office for a scheduled check-up, and states that she is breathing without strain and has not had a single asthma attack, and that she feels satisfied with the new therapy and overall treatment.

Discussion. The physician-patient relationship is an aspect of the more complex interpersonal relationship that implies full legal and ethic equality. It seems that promoting an equal partnership relationship in which both the physician and the patient are involved in health care decision-making imparts a fuller moral character to physician's actions. This shift from the paternalistic to the partnership model has been prompted by global technical and economic changes in contemporary medicine and a growing pluralism of value systems. Nonetheless, an essential reason for promoting the partnership model is cultivating respect for the patient's autonomy and their inclusion in the treatment process, which has proven successful in the outlined case.

Conclusion. The presented case shows that a good cooperation between the patient and the chosen physician, and in some cases a good cooperation with a specialist pulmonologist, coupled with the right choice of therapy and rehabilitation based on the GINA guidelines, can improve the treatment of patients with asthma.

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Incidentalom nadbubrežne žlijezde kao slučajan nalaz pri LDCT-u prsnog koša u sklopu preventivnog programa – u kojem smjeru dalje?

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Uvod s ciljem: Incidentalom je pojam kojim se opisuju slučajno nađeni tumori nadbubrežne žlijezde otkriveni prilikom izvođenja slikovnih dijagnostičkih pretraga nekoga drugog kliničkog stanja. Prevalencija iznosi od 0,35 % do 1,9 %, a kada se otkrije, od ključnog je značaja razlikovati benignu promjenu od maligne promjene i učiniti procjenu hormonskog statusa. Cilj je ovog rada prikazati postupak s pacijentom kod kojeg je otkriven incidentalom prilikom učinjenog LDCT-a (engl. *Low dose computer tomography*, LDCT) u sklopu nacionalnog programa ranog otkrivanja raka pluća.

Prikaz slučaja: Žena u dobi od 61 godine, zaposlena kao administrator, udana, živi sa suprugom i dva sina. Puši do 20 cigareta dnevno unazad 30 godina, alkohol ne konzumira. Unazad 11 godina boluje od hipertenzije, a od prije deset godina liječi se zbog hipotireoze i osteoartritisa šaka. U kroničnoj terapiji uzima kombinaciju perindopril/amlodipin 5/5 mg, levotiroksin 50 mcg tijekom tjedna i 75 mcg tijekom vikenda te naproksen-natrij 2 x 550 mg. Adipozne građe (indeks tjelesne mase 29 kg/m^2). Javlja se u ordinaciju obiteljske medicine radi obrade kašlja koji traje unazad tri mjeseca. Nakon detaljno uzete anamneze i fizikalnog pregleda učini se proširena obrada s ciljem utvrđivanja etiologije kroničnog kašlja. Učini se laboratorijska kontrola krvi, radiološki snimak pluća u dva smjera, spirometrija, ventolinski i metakolinski test, alergološka obrada te konzultantski pregled otorinolaringologa, pulmologa i gastroenterologa. Budući da je riječ o bolesnici koja je dugogodišnji pušač (30 *pack/years*) i ima pozitivnu obiteljsku anamnezu na malignome pluća, prema smjernicama Nacionalnog programa za otkrivanje raka pluća (NLST) uputi se na LDCT kojim se uz uredan nalaz prsnog koša verificira incidentalom desne nadbubrežne žlijezde. Savjetovana je o važnosti dalje dijagnostičke obrade putem multidisciplinarnog tima s ciljem utvrđivanja veličine, karaktera i hormonskog statusa incidentaloma te educirana o važnosti prestanka pušenja i motivirana na prestanak pušenja. Po krajnjoj obradi i isključenju malignosti, dodatno je upućena u važnost KV kontinuuma i redovitoga ambulantnog praćenja.

Rasprava: Pristup liječenju incidentalomu nadbubrežne žlijezde ovisi o veličini tumora, njegovu karakteru, hormonskom statusu, brzini rasta i daljim radiološkim karakteristikama. Od velikog je značaja učiniti prekonoćni test supresije s 1 mg deksametazona te odrediti koncentracije metanefrina i normetanefrina u plazmi ili njihove količine u urinu, dok se u pacijenata s visokim kardiovaskularnim rizikom treba odrediti i koncentracija renina u plazmi (RAP) i aldosterona u plazmi. Pacijenti s većim brojem komorbiditeta poput kardiovaskularnih bolesti predstavljaju poteškoće u kliničkom pristupu, a liječnik obiteljske medicine ima veliku ulogu u vođenju kontinuiranog nadzora u liječenju.

Zaključak: Zbog porasta broja dijagnostičkih pretraga liječnik obiteljske medicine sve se češće susreće s pojavom incidentaloma u svojih pacijenata te se stoga mora kontinuirano educirati i poznavati kliničke smjernice u njegovoj obradi. Uz sve navedeno, treba voditi i kontinuirani nadzor, od početka liječenja do konačnog ishoda, jer se pravodobnim prepoznavanjem povećava mogućnost petogodišnjeg preživljenja u incidentaloma malignog karaktera i poboljšava kvaliteta života oboljelih. Posebnu pozornost treba obratiti na pacijente s visokim KV rizikom.

Adrenal incidentaloma as accidental finding during LDCT of the chest preventive program - what is our next step ?

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Introduction and aim. Incidental is a term used to describe an accidentally found tumor of the adrenal gland discovered during imaging diagnostic tests not aimed at assessing the adrenal gland. The prevalence is around 0.35% to 1.9%, and when detected, it is of crucial importance to distinguish benign from malignant changes, as well as to assess the hormonal status of incidentalomas. The aim of this paper is to present the procedure with a patient who was discovered incidentally during the Low dose computer tomography (LDCT) as part of the national lung cancer early detection programme.

Case report. A 61 year old woman, working, married, lives with her husband and two sons, smokes up to 20 cigarettes/day for the past 30 years, does not consume alcohol. For the past 11 years she suffers from arterial hypertension, hypothyroidism and osteoarthritis of hands. In chronic therapy, she takes a combination of perindopril/amlodipine 5/5 mg, levothyroxine 50 mcg during the week and 75 mcg during the weekend, and naproxen sodium 550 mg twice a day. Adipose build (body mass index 29 kg/m2. She comes to the family physician in order to treat a chronic cough persisting for the past three months. The treatment of chronic cough is rationally approached and after a detailed history and physical examination, an extended treatment is performed with the aim of determining the etiology of chronic cough. She is examined for laboratory blood test, radiological scan, spirometry, ventolin and methacholine test, allergy treatment, and is consulted by an ENT, pulmonologist and gastroenterologist. According to data of a long-term smoking (30 pack/years), and in addition to a positive family history of lung cancer, according to the guidelines of the National Lung Cancer Detection Program (NLST), she is referred for LDCT, which, along with an orderly finding of the chest verifies incidentaloma of the right adrenal gland. She is advised about the importance of further diagnostic workup by a multidisciplinary team with the aim of determining the size, character and hormonal status of the incidentaloma, and is educated and motivated about the importance of quitting smoking. After the final treatment and the exclusion of malignancy, she is additionally motivated about the importance of CV continuum and regular outpatient follow-up.

Discussion. The approach to the treatment of incidentaloma of the adrenal gland depends on the size of the tumor, its character, hormonal status, growth rate and radiological characteristics. It is very important to perform an overnight suppression test with 1 mg of Dexamethasone and determine the concentrations of metanephrine and normetanephrine in the plasma or their amounts in the urine, and in patients with a high cardiovascular risk, the concentration of renin in the plasma (RAP) and aldosterone in the plasma should be determined. Patients with a greater number of comorbidities such as cardiovascular diseases present difficulties in the clinical approach, and the family physician plays a major role in conducting continuous monitoring during treatment of these patients.

Conclusion. According to the increase in the number of diagnostic tests, family physicians are increasingly encountering incidentalomas in their patients. They should be continuously educated and familiar with clinical guidelines in the treatment of incidentalomas of the adrenal gland. In addition to all of the above, continuous monitoring should be conducted, from the beginning of treatment to the final outcome, because timely recognition increases the possibility of five-year survival in incidentalomas of a malignant nature and improves the quality of life of patients. Special emphasis should be placed on patients with high CV risk.

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16. Slobodne teme

Izazovi liječnika sa psihičkim poteškoćama i problemi u očuvanju psihičkog zdravlja

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Uvod: Učestalost psihičkih poremećaja u općoj populaciji raste, a tome pridonosi svakodnevni stres. Zbog specifičnosti posla koji obavljaju stresu su posebno izloženi liječnici. Sukladno tomu imaju višu prevalenciju psihičkih poremećaja, kao što su depresija, anksioznost i sindrom izgaranja na poslu (engl. *burnout*), te višu stopu suicida od opće populacije (1,1 – 3,4 za liječnike i 2,5 – 5,7 više za liječnice). Znanstvena literatura orijentirana je na mjerenje kvantitativnih podataka o psihičkim poremećajima u liječnika, dok se u prigodnim odnosno neformalnim člancima češće iznose dodatni razlozi za taj rezultat. Administrativni nemedicinski posao, ograničenja u postupku dijagnostike i liječenja koja postavlja osiguravajuće društvo, prekovremeni sati rada, neadekvatni uvjeti rada, agresija bolesnika ili nedostatak potpore poslodavca i okoline dovode do gubitka kontrole u radu i utječu na povišenu razinu stresa u liječnika, dok je pristup adekvatnoj psihičkoj pomoći otežan. Cilj je rada prikazati probleme s kojima se liječnici susreću ako imaju psihičke poteškoće, kao i izazove u očuvanju psihičkog zdravlja liječnika.

Rasprava: Stvorena je percepcija da liječnik ne smije pokazati znakove slabosti ili bolovati od bilo koje bolesti. Psihička bolest i dalje nosi izrazitu stigmu u društvu, a kod liječnika je to još i naglašenije. Osim profesionalne zadrške, javlja se strah od diskriminacije, gubitka dozvole za rad ili vozačke dozvole te takva bolest nosi percepciju priznanja slabosti i nekompetentnosti. U SAD-u i Velikoj Britaniji na obrascima za produženje dozvole za rad liječnik mora navesti je li bio bolestan ili je li se liječio od bilo koje psihičke bolesti što može rezultirati ograničenjem ili odbijanjem produžetka dozvole. Poznato je da su psihičke bolesti raznolike i ne moraju utjecati na radnu sposobnost, pogotovo ako su osobe adekvatno liječene i postigle remisiju. Liječnici sa psihičkom bolesti u Hrvatskoj nemaju izravno i jasno definiranih posljedica za rad koje bi odredila nadležna Komora, no problem predstavlja vozačka sposobnost zbog loše definiranog zakona o utjecaju lijekova i bolesti na sposobnost upravljanja vozilima. Zajednički je problem način dobivanja pomoći za psihičke bolesti. Liječnici najčešće izbjegavaju tražiti pomoć u mjestu rada, često kupuju potrebne lijekove, a neki odluče patiti u tišini i biti samodestruktivni. Prijedlozi za rješenje su različiti. Kako bi se ublažila stigma psihičke bolesti, postoji i prijedlog o preventivnom pregledu psihičkog zdravlja svake godine za svakog liječnika. Kraljevski australski koledž liječnika opće prakse (engl. *The Royal Australian College of General Practitioners*, RACGP) zagovara da nadležni liječnik obiteljske medicine skrbi i o psihičkom stanju. Alternativna mogućnost u Australiji jest i anonimno javljanje u neki od programa pomoći (*GP Support Program* ili *The Doctors' Health Services*) koji pružaju savjetovanje, podršku, edukaciju, pa čak i dalje upućivanje ako je ono potrebno. Prevencija je svakako najbolje rješenje koje su prepoznali Norveška u svojim pilot-projektima *Villa Sana*, SAD (Boston) s programom *Schwartz Rounds*® ili Velika Britanija s *NHS Practitioner Health* projektom gdje je moguće zatražiti *online* konzultaciju i podršku.

Zaključak: Psihička bolest u liječnika i dalje je izrazito velika stigma koja dovodi do osjećaja manje vrijednosti, ali i do toga da okolina takvu osobu doživljava nekompetentnom i slabom. Pomoć mora biti organizirana tako da je lako dostupna i u nekim segmentima anonimna, a trebala bi biti imperativ svakoj državi kojoj zdravstvo predstavlja važan društveni segment.

Challenges faced by doctors with mental disorders and preservation of their mental health

Keywords: mental disorders, doctors, mental health
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Background: The prevalence of mental disorders is rising with everyday stress being a contributor. Doctors are particularly exposed to stress because of the specificity of their work. Accordingly, higher prevalence of mental disorders like depression, anxiety and burnout are found among doctors, with higher suicide rate than in general population (1.1–3.4 for male and 2.5–5.7 for female doctors). Scientific papers are more focused on researching the quantitative data of mental disorders among doctors while in popular or informal articles additional reasons for the results are presented. Administrative work, limitation in diagnostics and treatment imposed by health insurance, working overtime, poor working conditions, aggression from patients or a lack of support from employers and surroundings are leading towards a loss of work control and are influencing a higher stress level in doctors, while access to the psychological help is almost nonexistent. The aim of this paper is to present the problems doctors with mental difficulties are facing as well as the challenges in preserving their mental health.

Discussion: There is a perception that doctors can not show signs of weakness or have any type of disease. Stigma is still associated with mental disorders, even more heavily when doctors are the patients. Apart from professional reasons there is a fear of discrimination, medical or driver's licence suspension and the perception of being weak and incompetent. Licensure in the USA and the United Kingdom has to be backed up with a disclosure of mental disorders which can result in medical licence to be suspended or revoked. Mental disorders are diverse and do not have to influence the working ability especially if the person is being adequately treated and in remission. There are no direct and clearly defined work repercussions for doctors with mental disorders in Croatia but the problem is the driver's licence because of the poorly written law about drugs and disorders influencing it. The problem doctors have in common is getting help for mental disorders. They usually avoid mental counseling in the place of work, they buy drugs they need, and some do not ask for help but show autodestructive behaviours. Suggestions for solutions are various. To alleviate the stigma around mental disorders, there is a proposal for preventive mental health check-up for every doctor due every year. The Royal Australian College of General Practitioners (RACGP) advocates for a trusted GP who will also take care of their mental health. Beyond that, there is also a possibility to anonymously access some of the help services (GP Support Program or The Doctors' Health Services) that provide counseling, support, education, and even referral if needed. Norway with the pilot programme Villa Sana, USA (Boston) with Schwartz Rounds® or United Kingdoms' NHS Practitioner Health project with online consultation and support are recognizing prevention as the best solution.

Conclusion: Mental disorders amongst doctors carry a considerable stigma which leads to feeling degraded, incompetent, and weak. Mental help has to be easy to get, partly anonymous, and an imperative for every country in which the health system represents a vital part of society.

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Mentalno zdravlje liječnika opće prakse i specijalista obiteljske medicine dvije godine nakon početka pandemije COVID-19: rezultati europske ankete

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Ključne riječi: mentalno zdravlje, opća praksa, obiteljska medicina, COVID-19
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Uvod s ciljem: Krizna vremena, kao što je pandemija COVID-19, imaju značajan negativan utjecaj na mentalno zdravlje. Rizik od razvoja anksioznosti, depresije i izgaranja na poslu povećan je kod zdravstvenih djelatnika zbog raznih sociodemografskih čimbenika i onih povezanih sa zanimanjem. Posebice liječnici opće prakse i specijalisti obiteljske medicine moraju se nositi s povećanim stresom na poslu. Cilj ovog istraživanja bio je odrediti razinu anksioznosti, depresije i straha od bolesti COVID-19 te identificirati čimbenike koji utječu na njihov razvoj među liječnicima opće prakse i specijalistima obiteljske medicine u Europi dvije godine nakon početka pandemije.

Ispitanici i metode: Anonimna *online* anketa bila je provedena u 13 europskih zemalja. Anketa se sastoji od nekoliko različitih dijelova: sociodemografskih pitanja, pitanja povezanih s profesionalnim i osobnim iskustvom tijekom pandemije COVID-19 te validiranih upitnika za depresiju (PHQ-9), anksioznost (GAD-7) i strah od bolesti COVID-19 (FCV-19). Deskriptivna statistika i linearna regresija bile su korištene za analizu kvantitativnih podataka. Tematska analiza s induktivnim kodiranjem bila je korištena za kvalitativne podatke.

Rezultati: Od ukupno 1724 ispitanika više od njih tri četvrtine bile su žene. Prosječna dob bila je 47 ±12 godina, većina ih je radila u urbanim sredinama i imala prosječno 17 ±11 godina iskustva. Ispitanici su u prosjeku imali rezultate specifične za blagu depresiju na PHQ-9 testu (6,33 ±5,43), blagu anksioznost na GAD-7 testu (5,4 ±4,76) i 12,84 ±5,29 na FCV-19 testu (min. 7, maks. 35). Najčešće korišten način nošenja s problemima bio je komunikacija s prijateljima i obitelji. Međutim, jedan od deset ispitanika nije učinio ništa kako bi se nosio sa svojim stresom ili s tugom. S druge strane, ispitanici koji su zatražili savjetovanje za poremećaje mentalnog zdravlja tijekom pandemije pokazali su više razine depresije, anksioznosti i straha od bolesti COVID-19.

Zaključak: Pandemija COVID-19 značajno je utjecala na mentalno zdravlje liječnika opće prakse i specijalista obiteljske medicine dvije godine nakon izbijanja pandemije. Poznavanje i razumijevanje čimbenika koji su utjecali na mentalno zdravlje liječnika opće prakse i specijalista obiteljske medicine pomoći će nam da osmislimo odgovarajuće načine da im pomognemo nositi se s tim problemima.

Mental health of general practitioners and family medicine specialists two years after the beginning of the COVID-19 pandemic: results from a European survey

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Introduction and aim: Times of crisis, such as the COVID-19 pandemic, have a significant negative impact on mental health. The risk of developing anxiety, depression and burnout in healthcare personnel are increased due to various sociodemographic and occupational factors. General practitioners (GPs) and family physicians (FPs) in particular, have to deal with increased work-related stress. This research aims to determine the levels of anxiety, depression and fear of COVID-19, and to identify their influencing factors among GPs and FPs in Europe two years after the pandemic started.

Sample and methods: An anonymous online survey was distributed in 13 European countries. The survey consisted of different sections: sociodemographic questions, questions related to the professional and personal experience during COVID-19 and validated questionnaires for depression (PHQ-9), anxiety (GAD-7) and fear of COVID-19 (FCV-19). Descriptive statistics and linear regression were used to analyse the quantitative data. A thematic analysis with inductive coding was used for the qualitative data.

Results: Out of a total of 1,724 participants, over ¾ were female. The average age was 47±12 years, the majority working in urban areas and the average number of years of working experience were 17±11 years. On average, participants scored mild depression on the PHQ-9 (6.33±5.43), mild anxiety on the GAD-7 (5.4±4.76), and 12.84±5.29 on the FCV-19 (min. 7, max. 35). The most used coping mechanism was reaching out to friends and family. However, one in ten did nothing to cope with their stress or sadness. Finally, participants who sought consultation for mental health problems during the pandemic showed higher rates of depression, anxiety and fear of COVID-19.

Conclusion: The COVID-19 pandemic has significantly impacted the mental health of GPs and FPs two years after the beginning of the pandemic. Knowing and understanding the factors that influenced the mental health of GPs and FPs will help us in developing suitable interventions to help them cope with these issues.

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Sindrom iritabilnog crijeva, od simptoma do dijagnoze

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Ključne riječi: sindrom iritabilnog crijeva, dijagnoza, liječenje, mikrobiom
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Uvod: Sindrom iritabilnog crijeva (SIC) jedan je od najčešćih poremećaja probavnog sustava, nerazjašnjene, heterogene etiologije, koji značajno utječe na kvalitetu života i socioekonomsko opterećenje pojedinca. Kako poremećaj nema jasan patološki supstrat, učinak terapije često je nezadovoljavajući. U takvoj situaciji neadekvatan pristup liječnika može voditi pacijenta u somatizaciju i perpetuirane dijagnostičke metode koje ga ostavljaju razočaranim i u konačnici neadekvatno zbrinutim. **Cilj** je ovog rada napraviti sažetak dostupnih preporuka u zbrinjavanju pacijenata sa simptomima SIC-a, važnih za rad obiteljskog liječnika.

Rasprava: Dijagnoza SIC-a postavlja se na temelju Rimskih IV kriterija kada su prisutna dva od triju tipičnih simptoma: rekurentna abdominalna bol udružena s defekacijom uz promjenu u konzistenciji ili frekvenciji stolice koja je prisutna barem jedan dan u tjednu, u trajanju dužem od tri mjeseca. Razlikujemo četiri tipa: SIC-D s predominantno proljevastim stolicama, SIC-C s predominantnom konstipacijom, miješani, SIC-M, gdje se proljevi i konstipacija izmjenjuju te neklasificirani SIC-U. Diferencijalna dijagnoza je široka, od malignoma probavnog sustava, upalnih bolesti crijeva, celijakije, infektivnih uzroka, malapsorpcijskih sindroma, alergijskih reakcija, mikroskopskog kolitisa, sindroma bakterijskog prerastanja do brojnih drugih uzroka. Važno je da za postavljanje dijagnoze nije potrebno isključenje mogućih organskih uzroka tegoba, već izostanak alarmantnih simptoma i znakova. Osnovna obrada uključuje kompletnu krvnu sliku, upalne parametre, fekalni kalprotektin te antitijela na tkivnu transglutaminazu, a prema potrebi se dodaju hemokult i mikrobiološka analiza stolice. Današnje spoznaje o dvosmjernoj komunikaciji središnjega živčanog sustava i crijeva koja je modificirana mikrobiomom, imaju ključnu ulogu u razumijevanju razvoja poremećaja i mogućim terapijskim pristupima. Više od 50 % oboljelih ima pridruženu neku od ekstraintestinalnih manifestacija od kojih su najčešće anksioznost i depresija, sindrom kroničnog umora, kognitivni poremećaji, fibromialgija, poremećaj spavanja, glavobolje, bolovi u leđima, genitourinarne tegobe, endometrioza, zdjelična bol, dispneja, palpitacije i poremećaj temporomandibularnog zgloba. Službene smjernice za sada se ne osvrću na liječenje komorbidnih stanja, no u svakodnevnom radu liječenje se ne provodi prema pojedinim dijagnozama, već se kvalitetna skrb pruža u kontekstu svih zdravstvenih potreba pojedinca. Tako su proizašli dokazi da liječenje depresije poboljšava gastrointestinalne tegobe, dok poboljšanje sastava mikrobioma ima pozitivan utjecaj na simptome depresije. Posljednjih se godina širi paleta lijekova i postupaka koji pomažu u redukciji tegoba. Od antidepresiva, antagonista serotoninskih receptora, lokalnih antibiotika, opioidnih agonista, sekvestratora žučnih kiselina, antihistaminika, antispazmodika, probiotika, do hipnoterapije, kognitivno-bihevioralne terapije i transplantacije fekalne tvari. U gotovo 10 % pacijenata koji zadovoljavaju kriterije za dijagnozu SIC-a u tijeku liječenja iskristalizirat će se organski uzrok tegoba. Provođenje redovitih kontrola na kojima se pruža aktivna potpora pacijentu uz traganje za upozoravajućim simptomima i znakovima na koje se pravovremeno odgovara, ostaje najučinkovitiji pristup.

Zaključak: Specijalist obiteljske medicine treba poznavati sve mogućnosti koje određena simptomatologija sa sobom nosi, ali je preuzimanje odgovornosti za postavljanje pravovremene dijagnoze ključno kako bi se prekinuo začarani krug somatizacije i usmjerenosti na tegobe. Dobar terapijski odnos, uvažavanje tegoba i empatija ključni su da pacijent prihvati dijagnozu, osnaži se za aktivno nošenje s problemom i traženje najboljih rješenja u suradnji sa specijalistom obiteljske medicine, kako bi se ponovno postigla zadovoljavajuća kvaliteta života.

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Irritable bowel syndrome from symptoms to diagnosis

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Introduction and aim: Irritable bowel syndrome (IBS) is a highly prevalent, chronic gastrointestinal disorder that significantly reduces patients' quality of life and causes socioeconomic burden on the individual and the health care system. Its etiology is diverse and remains undetermined. With the absence of clear pathological substrate, the effect of therapeutic measures often remains unsatisfactory. These circumstances, without an adequate response of the physician, may lead a patient into somatization and perpetual diagnostic reevaluation that results in disappointment and poorly managed symptoms. **The aim** of this paper is to provide a summary of available recommendations for the management of patients with IBS symptoms, important for family care practice.

Discussion: Diagnosis of IBS is based on Rome IV criteria with two out of three typical symptoms present: abdominal pain relieved by defecation, altered stool frequency or consistency that are present for at least one day per week over three months period. There are four different types based on stool consistency: IBS-D (diarrhea predominant), IBS-C (constipation predominant), IBS-M (mixed diarrhea and constipation) and IBS-U (unclassified, where symptoms cannot be categorized into one of the above three subtypes). Differential diagnosis ranges from gastrointestinal malignancy, inflammatory bowel disease, celiac disease, infective or malabsorptive syndromes, to allergic reactions, microscopic colitis, syndrome of bacterial overgrowth and many others. It is not neccessary to exclude possible organic causes in order to make a diagnosis, it is sufficient to determine an absence of red flag symptoms Necessary testing consists of complete blood cell count, erythrocyte sedimentation rate or C-reactive protein measurement, tissue transglutaminase antibody testing and fecal calprotectin levels with optional hemoccult and stool culture. Understanding the pathophysiology of IBS as a disorder in the gut-brain axis, mediated by microbiome metabolites, is the ground for novel therapeutic approaches as well as for understanding a broader spectra of symptoms that often accompany the disorder. Over 50% of patients have extraintestinal manifestations such as anxiety, depression, chronic fatigue syndrome, fibromyalgia, sleeping disorders, headaches, chronic back pain, genitourinary disorders, endometriosis, chronic pelvic pain syndrome, dyspnea, palpitations and temporomandibular joint disorder. Official IBS guidelines do not address the treatment of comorbid conditions. Quality medical care provides care in the context of all health care needs, not individual diagnoses. It is important to note that treating depression relieves gastrointestinal symptoms. On the other hand, improving microbiome balance relieves depression symptoms. There are new emerging strategies for the reduction of symptoms. From antidepressants, serotonin receptor antagonists, non-absorbable antibiotics, opioid agonists, bile acid sequestrants, antihistamines, antispasmodics, probiotics, to hypnotherapy, cognitive behavioral therapy and fecal microbiota transplant. In 10% of patients with diagnosed IBS, an organic source of problems will emerge in the course of treatment. Regular consultations which provide patients with adequate support and the physician with timely information suggestive of organic substrate, provide optimal approach to the IBS patient.

Conclusion: The family medicine specialist should be familiar with all the underlying pathology the IBS symptomatology might imply, while assuming responsibility for the timely IBS diagnosis which is the key step in preventing vicious circle of the patient's somatization and helplessness. Good therapeutic approach, empathy, acknowledgement of the impact of symptoms on the patient's every day life and collaborative search for the best solutions are the key factors which enable the patient to actively cope with the issue and find the best solutions to reestablish their quality of life.

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Osip u ordinaciji obiteljske medicine

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Ključne riječi: ordinacija obiteljske medicine, osipna stanja, kožne lezije, topikalni lijekovi
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Uvod: Više od 50 % svih prijavljenih kožnih promjena liječe specijalisti nedermatološke struke, od čega se najveći broj rješava u ordinaciji obiteljske medicine. Od svih kožnih promjena osipna stanja po učestalosti su na trećem mjestu. Trajanje liječničke konzultacije vremenski je ograničeno, što dakako ne bi trebalo utjecati na kvalitetu skrbi.

Cilj: Cilj je podsjetiti se na najčešća osipna stanja s kojima se može susresti na razini primarne skrbi, istaknuti ključne informacije iz anamneze i fizikalnog pregleda koje mogu pomoći u postavljanju dijagnoze te ponoviti dostupne terapijske mogućnosti.

Rasprava: Neka od najčešćih stanja u kojima je osip vodeći simptom jesu kontaktni dermatitis, infektivne kožne bolesti poput dermatofitoza i nekompliciranih herpes infekcija, urtikarija, nuspojava na lijek i druga stanja. Koristan je podatak dob bolesnika jer je kod mlađih od 15 godina najčešći uzrok virusna infekcija, dok će se kod odraslih rjeđe vidjeti bolesti poput vodenih kozica ili šarlaha. Uvođenje novog lijeka u terapiju može izazvati kožnu reakciju, a najčešće se događa uz lijekove iz skupine beta-laktama, sulfonamida, nesteroidnih protuupalnih lijekova te alopurinola. Osip je moguće povezati s lijekom ako se pojavio jedan do četiri tjedna od uvođenja lijeka. Postojanje i dinamika svrbeža može usmjeriti dijagnozu. U slučaju atopijskog dermatitisa svrbež najčešće prethodi kožnim promjenama, dok se kod kontaktnog dermatitisa javlja naknadno, a kod seboroičnog izostaje kao simptom. Dodatni sistemski simptomi, pogotovo vrućica, govore u prilog infektivnoj bolesti. Obavljanje fizikalnog pregleda prije uzimanja detaljne anamneze kontraintuitivni je način rada liječnika obiteljske medicine, ali se upravo takav pristup dijagnosticiranju kožnih promjena pokazao učinkovitim. Vrsta eflorescencija, njihova lokalizacija i dinamika nastajanja imaju dijagnostičku vrijednost. Papule koje se pretvaraju u vezikule, a zatim u kraste, upućuju na varičele ili herpes zoster. Brzonastajući, konfluirajući osip upućuje na urtikariju. Svrab će se prezentirati kao pruritični osip s ekskorijacijama, najčešće smješten u aksilama i preponama. Rijetko je potrebna dodatna dijagnostička obrada. U laboratorijskim nalazima može se vidjeti eozinofilija u slučaju reakcije na lijek ili limfocitoza/limfopenija u slučaju virusnih infekcija. Terapija dostupna bez preporuke specijalista dermatologije dostatna je za liječenje nekompliciranih stanja. Lokalna primjena umirujućih krema s mentolom smanjuje iritaciju i svrbež. Antihistaminici također pomažu kod svrbeža, a temelj su liječenja urtikarije. Najpropisivaniji lijekovi su topikalni kortikosteroidi u obliku krema ili masti. Koriste se primarno u liječenju dermatitisa, a mogu se kombinirati s keratoliticima ako je prisutno ljuskanje lezije ili s antibioticima kod bakterijske superinfekcije. Topikalni kortikosteroidi primjenjuju se jedanput do dvaput na dan tijekom 14 dana, nakon čega je potrebno procijeniti njihov učinak.

Zaključak: Razlikovanjem osipnih stanja na temelju anamneze i fizikalnog pregleda te poznavanjem dostupne terapije skraćuje se vrijeme tijekom kojeg bolesnik nije pod adekvatnom skrbi i smanjuje se upućivanje u sekundarnu zdravstvenu zaštitu.

RASH IN FAMILY MEDICINE OFFICE

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Introduction: Over 50% of all reported dermatological conditions are encountered by nondermatologists, among which most cases are managed by family medicine specialists. Rash is in top three dermatological conditions seen by nondermatologists. Duration of patient visit in family medicine office is limited, but the quality of care is expected to be maintained. **Aim** of this paper is to recall the most common rash conditions seen in primary care, point out key information in patients history and physical examination and revise available therapy options.

Discussion: Some of the most common conditions where rash is the leading symptom are contact dermatitis, infectious skin diseases such as dermatophytosis or uncomplicated cases of herpes infections, urticaria and drug eruptions. Patients' age should be taken in consideration since rashes in children under 15 years of age are usually caused by viral infections, but in adults it is rare to see a case of chickenpox or scarlet fever. Drug eruption is possible with all medications, but is more often seen with penicillins and sulfa drugs among antibiotics, non-steroidal anti-inflammatory drugs and allopurinol. If rash appears in one to four weeks from introducing new medication, those two events might be connected. The patient should be asked about pruritus, because it can help differentiate some conditions from others. For example, atopic and contact dermatitis presents with pruritus, while seborrheic dermatitis in nonpruritic. Systemic symptoms, especially fever, can help narrow the differential diagnosis to infections. It is often helpful to focus on the clinical appearance of the rash after identifying the patient's primary symptom, but before taking a more focused history, although this approach may be counter-intuitive to primary care physicians. Type of lesions, their localization and dynamic of appearance have a diagnostic value. Chickenpox or herpes zoster should be suspected if initial papules change into vesicules and then crusts. Evanescent and confluent lesions are typical for hives. Scabies presents as pruritic rash accompanied with excoriations and localized in axilla and inguinal region. Additional diagnostics are usually not necessary. Lab results can show eosinophilia in drug eruptions or lymphocytosis/lymphopenia in viral infections. Therapy options available to family physicians are usually sufficient to treat uncomplicated conditions. Topical application of soothing skin lotions with menthol can relieve irritation and itching. Antihistamines also help with itching, and are the main treatment for urticaria. Topical corticosteroids make up over a half of all prescribed medications. They are mainly used in dermatitis, and can be combined with keratolytics in presence of scales, or with antibiotics in case of bacterial superinfection of the primary lesion. Topical corticosteroids are applied two times a day for 14 days, after which period their effectiveness should be revised.

Conclusion: Recognising the accurate cause of rash in family medicine office using patient's history and physical examination shortens the period in which the patient is not provided with adequate care and prevents unnecessary referring to secondary care.

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Uloga liječnika obiteljske medicine u prevenciji i liječenju spolno prenosivih bolesti

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Ključne riječi: spolno prenosive infekcije, primarna zdravstvena zaštita, obiteljska medicina, prevencija, liječenje
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Uvod i cilj: Spolno prenosive infekcije (engl. *sexually transmitted infections*, STI) predstavljaju bitan javnozdravstveni problem diljem svijeta jer utječu na kvalitetu života, a mogu uzrokovati ozbiljne bolesti i smrt. Bolesti uzrokovane STI-jem (engl. *sexually transmitted diseases*, STD) utječu na fizičko, mentalno i socijalno zdravlje djece, adolescenata i odraslih osoba. Zdravstvena strategija Svjetske zdravstvene organizacije (engl. *World Health Organization*, WHO) o spolno prenosivim bolestima ima cilj eliminirati STI kao javnozdravstvenu prijetnju do 2030. godine. Temelji strategije WHO-a u eliminaciji STI-ja jesu sprječavanje zaraze ljudi te optimalno liječenje i skrb zaraženih osoba s ciljem sprječavanja daljeg prenošenja STI-ja. Cilj je rada proučiti nove spoznaje i smjernice krovnih zdravstvenih organizacija o liječenju i prevenciji STI-ja, a sve to radi edukacije zdravstvenih djelatnika te posljedično smanjivanja zaraze STI-jem i njezinih posljedica.

Rasprava: Prema posljednjim dostupnim podatcima Europskog centra za prevenciju i kontrolu bolesti (engl. *European Centre for Disease Prevention and Control*, ECDC) iz 2021. godine Republika Hrvatska unazad nekoliko godina bilježi trend smanjivanja zaraze hepatitisom B i C, infekcija virusom humane imunodeficijencije (engl. *human immunodeficiency virus*, HIV) i klamidijskih infekcija. Infekcija *Treponemom pallidum* bilježila je porast prevalencije do 2018. godine, ali je u 2019. godini zabilježen pad slučajeva zaraze (ECDC, 2019. godina), dok je prevalencija infekcije *Neisseriae gonorrhoeae* u porastu od 2014. godine (ECDC, 2019. godina). Prevalencija humanog papiloma virusa (HPV) u Europi iznosila je 14,2 %, a prevalencija u državama istočne Europe 21,4 %. Određene spolno prenosive infekcije (poput klamidije, HPV-a, gonoreje, sifilisa, HIV-a) direktno utječu na reproduktivno zdravlje jer mogu uzrokovati infertilitet, anogenitalne karcinome, nepovoljne ishode trudnoće, kao i na zdravlje djeteta uzrokujući fetalnu abnormalnost i smrt. Neke spolno prenosive infekcije (sifilis, gonoreja, klamidija, trihomonas) povezane su s višestrukim povećanjem rizika od prijenosa ili zaraze HIV-om. Zbog pogrešno dijagnosticiranih ili pogrešno liječenih STI-ja dolazi do ozbiljnih komplikacija i posljedica poput upalne bolesti zdjelice, infertiliteta, ektopične trudnoće, pobačaja, gubitka fetusa i kongenitalnih infekcija, a naposljetku i karcinoma. Zabrinjavajući je globalni porast rezistencije na antimikrobne lijekove, osobito kod *Neisseriae gonorrhoeae*. Stoga postoji potreba za ažuriranjem protokola liječenja koji uzimaju u obzir globalne i lokalne podatke o antimikrobnoj rezistencije zbog sprječavanja širenja i porasta antimikrobne rezistencije. Proširena je visoka rezistencija gonokoka na kinolone (prethodno preporučena prva linija liječenja), a rezistencija na trenutačnu prvu liniju (cefalosporini treće generacije) jest u porastu. Poznata je i rezistencija na azitromicin kod *Treponeme pallidum*, *Neisseriae gonorrhoeae* i *Mycoplasme genitalium*, a zabilježeni su i slučajevi neuspješnog liječenja *Chlamydiae trachomatis* tetraciklinima i makrolidima. Primarna prevencija STI-ja postiže se kvalitetnom edukacijom stanovništva o načinima prijenosa STI-ja i korištenjem zaštite (poput prezervativa) tijekom seksualnih odnosa te cijepljenjem protiv hepatitisa A, hepatitisa B i HPV-a.

Zaključak: Uloga liječnika obiteljske medicine u prevenciji i liječenju STI-ja jest prije svega posumnjati na STI, uzeti cjelovitu anamnezu (uključujući i informacije o seksualnim odnosima), postaviti dijagnozu (idealno korištenjem dijagnostičkih pretraga) te liječiti bolesnika i sve njegove seksualne partnere s ciljem sprječavanja daljeg širenja STI-ja. Nakon provedenog liječenja pacijenta treba educirati o preventivnim mjerama i poticati na primjenu tih mjera uz poželjno dijagnostičko testiranje na ostale spolno prenosive infekcije. Navedenim pristupom liječenju smanjuje se incidencija spolno prenosivih infekcija i njihovih komplikacija.

Role of general practitioners in prevention and treatment of sexually transmitted diseases

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Introduction and aim Sexually transmitted infections (STIs) are an important public health problem worldwide because they can affect the quality of life by causing serious illness and death. Diseases caused by STIs (sexually transmitted diseases, STDs) affect physical, mental and social health of children, adolescents and adults. The health strategy of the World Health Organization (WHO) on STIs aims to eliminate them as a public health threat by the year 2030. The foundations of the STIs elimination are preventing the infections with sexually transmitted diseases, optimal treatment and care of affected persons while aiming at reducing further transmission of STIs. The aim of this paper is to provide new information on the treatment and prevention of STIs, based on international health organizations guidelines, with the ultimate goal of reducing STI and their consequences.

Discussion According to the latest available data from the European Center for Disease Prevention and Control (ECDC) from 2021, the Republic of Croatia has, for the past few years, recorded a decrease in hepatitis B and hepatitis C infections, infections of human immunodeficiency virus (HIV) and chlamydial infections. Infections with Treponema pallidum showed an increase in prevalence until year 2018, and a decrease in 2019 (ECDC, 2019), while the prevalence of gonorrhoea infection has been increasing since 2014 (ECDC, 2019). The prevalence of human papillomavirus (HPV) in Europe was 14.2%, and the prevalence in Eastern European countries was 21.4%. Certain STIs (such as chlamydia, HPV, gonorrhea, syphilis, HIV) directly affect reproductive health because they can cause infertility, anogenital cancers, adverse pregnancy outcomes, and affect the child health by causing fetal abnormalities and death. Some STIs (syphilis, gonorrhea, chlamydia, trichomonas) are associated with a multiple increase in the risk of acquiring HIV infection. Misdiagnosed or mistreated STIs can lead to serious complications and consequences such as pelvic inflammatory disease, infertility, ectopic pregnancy, miscarriage, fetal loss, congenital infections and eventually cancer. The global increase in antimicrobial resistance is concerning, especially with Neisseria gonorrhoeae. Therefore, updating treatment protocols that take into account global and local data on antimicrobial resistance is required, in order to prevent increase in antimicrobial resistance. High gonococcal resistance to quinolones (previously recommended first-line treatment) is widespread, and resistance to the current first-line (third-generation cephalosporins) is rising. Resistance to azithromycin are documented in Treponema pallidum, Neisseriae gonorrhoeae and Mycoplasma genitalium, and also the cases of unsuccessful treatment of Chlamydiae trachomatis with tetracyclines and macrolides have been recorded. The primary prevention of STIs is achieved by increasing health literacy through education about STIs transmission, promoting the use of contraceptive methods (such as condoms) during sexual intercourse and the importance of vaccination against hepatitis A, hepatitis B and HPV.

Conclusion The role of general practitioners, in the prevention and treatment of STIs, is to suspect an STI, take thorough and complete medical history (including information about sexual relations), establish a diagnosis (ideally using diagnostic tests) and provide treatment to the patient and all their sexual partners to stop the further spread of STIs. After the treatment, the patient should be educated about preventive measures and encouraged to apply these measures, preferably along with diagnostic tests for other STIs. This kind of approach reduces the incidence of STIs and their complications.

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Pristupi liječenju simptomatske i asimptomatske bakteriurije

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Uvod s ciljem: Usprkos smjernicama, nepotrebno provođenje biokemijske i mikrobiološke analize urina i uvođenje antibiotske terapije česti su u svakodnevnom radu. Prekomjerna dijagnostika bez indikacije, nepravilno tumačenje rezultata te pritisak od strane pacijenata neki su od uzroka nepotrebnog liječenja antibioticima. Cilj je rada prikazati česte zablude u dijagnostici i liječenju asimptomatske bakteriurije i urinarne infekcije.

Rasprava: Bakteriurija je prisutnost bakterija u urinu, a dijeli se na simptomatsku i asimptomatsku. Asimptomatska bakteriurija (AB) prisutnost je ≥ 10^5 CFU/ml bakterijskih vrsta u uzorku urina u pacijenata bez simptoma i znakova mokraćne infekcije, a neovisna je o piuriji. Pod povećanim su rizikom za razvitak kolonizacije pacijenti stariji od 65 godina s trajnim urinarnim kateterima, neurogenim mjehurom, urinarnom stomom te žene. Smjernice više infektoloških i urooloških društava ne preporučuju rutinsko praćenje i liječenje AB-a. Antibiotska terapija propisuje se već na prvi nalaz AB-a, a propisani antibiotik nerijetko prema smjernicama bude lijek drugog ili trećeg izbora. Odrasle osobe kojima je ustanovljen AB ne bi trebale biti liječene, osim ako je riječ o trudnicama, bolesnicima pred urološke zahvate te imunokompromitiranim bolesnicima. Čest razlog neracionalne primjene antibiotske terapije jest i postojanje različitih simptoma donjega urinarnog sustava koji izazivaju sumnju da se radi o urinarnoj infekciji, iako uzroci zapravo mogu biti neinfektivne prirode (neurološke, ginekološke, endokrinološke i dr.). Nepotrebno liječenje antibioticima može se izbjeći provođenjem analize urina i pravilnim tumačenjem nalaza te provođenjem odgovarajućih daljih pretraga u slučaju isključenja urinarne infekcije kao uzroka simptoma. Simptomatska bakteriurija označava bakterijsko prodiranje u urinarni sustav te se dijagnoza postavlja na osnovi kliničke slike i laboratorijskih nalaza. U simptomatskog pacijenta uz potvrdu analizom urina započinje se empirijska terapija nitrofurantoinom ili fosfomicinom. Analiza urina provodi se u svih pacijenata s klinički postavljenom sumnjom na mokraćnu infekciju, trudnica i pacijenata pred urološke zahvate. Ponovnu analizu urina nakon provedene odgovarajuće antibiotske terapije nije potrebno izvoditi, već samo u slučaju neuspješnog liječenja ili ponavljanja znakova urinarne infekcije. Cefalosporini i fluorokinoloni nisu antibiotici prvog izbora u liječenju urinarnih infekcija, no ipak se propisuju velikom broju bolesnika, osobito preko hitne službe, nakon čega s nalazom dolaze obiteljskom liječniku radi izdavanja recepta. Rezistencija na fluorokinolone u Republici Hrvatskoj (RH) za *E. faecalis* iznosi 23 %, a za *E. faecium* čak 87 %, dok je rezistencija *E. faecalis* na nitrofurantoin manja od 1 %. Slični podatci vide se i za *E. coli*, koja je daleko najčešći uzročnik AB te urinarnih infekcija. Stope rezistencije u RH za *E. coli* iznose: na ko-trimoksazol 26 %, ko-amoksiklav 12 %, cefalosporine oko 10 %, gentamicin 9 %, amikacin 1 %, nitrofurantoin 3 %, fosfomicin 1 %. Iz navedenih podataka jasno je vidljivo zašto su upravo nitrofurantoin i fosfomicin antibiotici prvog izbora u liječenju urinarnih infekcija.

Zaključak: Provođenje analize urina bez indikacije, nepravilno tumačenje rezultata ili oslanjanje isključivo na kliničku sumnju bez potvrde analizom urina jesu najčešći uzroci neprimjerenog liječenja antibioticima u obiteljskoj medicini. Konačni su ishodi neracionalne antibiotske terapije pogoršanje rezistencije bakterija, veća učestalost *C. difficile* infekcija i više nuspojava. Neželjeni rezultati mogu se izbjeći pravilnom edukacijom i pridržavanjem smjernica za dijagnostiku i antimikrobno liječenje urinarnih infekcija.

Management of symptomatic and asymptomatic bacteriuria

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Introduction and aim. Despite guidelines, the unnecessary use of urinalysis urine culture and the introduction of antibiotic therapy are common in daily practice. Excessive diagnostic tests without indications, the incorrect interpretation of results and pressure from patients are some of the causes of unnecessary treatment with antibiotics. The aim of this paper is to present common misconceptions in the diagnosing and treatment of asymptomatic bacteriuria and urinary infection.

Discussion. Bacteriuria is the presence of bacteria in the urine and can be divided into symptomatic and asymptomatic bacteriuria. Asymptomatic bacteriuria (ASB) is the presence of $\geq 10^5$ CFU/ml bacterial species in a urine specimen in patients without symptoms and signs of urinary tract infection (UTI). Pyuria is considered an independent factor in ASB. An increased risk of developing ASB is found in patients older than 65 years with indwelling urinary catheters, neurogenic bladder, urinary stoma, and women. The guidelines made by several medical societies do not recommend routine screening and treatment of ASB. Antibiotic therapy is prescribed at the first finding of bacteriuria, and the prescribed antibiotic is often second or third drug of choice according to the guidelines. Among adult patients diagnosed with ASB only pregnant women, patients before urological procedures and immunocompromised patients should be treated. A frequent reason for the irrational use of antibiotics are various lower urinary tract symptoms, which can raise the suspicion of an UTI, while the causes can often be of a non-infectious nature (neurological, gynecological, endocrinological, etc.). Unnecessary antibiotic treatment can be avoided by performing a urinalysis and correctly interpreting the findings, as well as performing appropriate further tests in case UTI has been eliminated as the cause of the symptoms. Symptomatic bacteriuria is a bacterial infiltration of the urinary tract, and the diagnosis is made based on patient presentation and laboratory findings. Empiric therapy is started in a symptomatic patient upon a confirmation by urinalysis. Antibiotics of choice are nitrofurantoin or fosfomycin. Urinalysis is performed in all patients with clinically suspected UTI, pregnant women and patients undergoing urological procedures. Repeated urinalysis after the appropriate antibiotic therapy is unnecessary and is only required in case of unsuccessful treatment or recurrence of UTI sings. Cephalosporins and fluoroquinolones are not the first-choice antibiotics in the treatment of UTIs, but they are still prescribed to a large number of patients, especially in the emergency department after which the patients go to their family medicine doctor to write a perscription for the drug reccomended earlier. In the Republic of Croatia, the resistance to fluoroquinolones for E. faecalis amounts to 23% and E. faecium as much as 87%, while the resistance of E. faecalis to nitrofurantoin is below 1%. Similar data can be seen for E. coli, which is by far the most common isolate in ASB and UTIs. Resistance rates for E. coli are co-trimoxazole 26%, co-amoxiclav 12%, cephalosporins about 10%, gentamicin 9%, amikacin 1%, nitrofurantoin 3%, fosfomycin 1%. From the data above, it is clear why nitrofurantoin and fosfomycin are the first-choice antibiotics in the treatment of UTIs.

Conclusion. Carrying out urinalysis without an indication, incorrectly interpreting the results or relying solely on clinical suspicion without confirmation by urinalysis are the most common causes of an inappropriate antibiotic treatment in family medicine. The final outcomes of irrational antibiotic therapy are growing bacterial resistance, a higher incidence of C. difficile infections, and more side effects. Unwanted results can be avoided by proper education and adherence to guidelines for the diagnosing and antimicrobial treatment of UTIs.

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Uloga liječnika obiteljske medicine u propisivanju tjelesne aktivnosti na recept – „Zeleni recept“

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Uvod s ciljem: Promicanje tjelesne aktivnosti (TA) u svrhu prevencije razvoja kroničnih nezaraznih bolesti (KNB) važna je zadaća svakog liječnika obiteljske medicine (LOM). Cilj je ovog rada osnažiti i pojasniti ulogu LOM-a u propisivanju tjelesne aktivnosti na recept – tzv. „Zeleni recept“ (ZR).

Rasprava: Pri propisivanju TA-e najvažniju i najzahtjevniju ulogu ima savjetovanje, a jedna od najpoznatijih strategija savjetovanja jest strategija 5P (pitajte, procijenite, potičite, pomažite, pratite). Prvi, nezaobilazan korak procjena je TA-e pomoću dvaju kratkih pitanja: (1) Koliko dana u tjednu, prosječno, provodite umjerenu do intenzivnu tjelesnu aktivnost poput žustrog hodanja? i (2) Koliko minuta, prosječno, tih dana provodite takvu aktivnost? Temeljem odgovora, jednostavnim množenjem frekvencije aktivnosti i duljine trajanja, procjenjuje se razina TA-e pacijenta te uspoređuje s trenutačno važećim međunarodnim preporukama. Zatim slijedi savjetovanje i poticanje pacijenta na tjelesnu aktivnost, koje mora biti individualizirano i prilagođeno pacijentu. Treba savjetovati o učestalosti, intenzitetu, vrsti i trajanju TA-e. Punoljetnim zdravim osobama (uključujući i starije od 65) preporučuje se najmanje 150 minuta aerobne TA-e umjerenog intenziteta ili najmanje 75 minuta aerobne TA-e visokog intenziteta tjedno, ili ekvivalent kombinacije tih aktivnosti. Preporučuje se provoditi vježbe snage najmanje dvaput tjedno, a kod osoba starije životne dobi vježbe ravnoteže barem triput tjedno. Ako se pacijenti zbog zdravstvenih ograničenja ne mogu pridržavati navedenih preporuka, trebali bi biti aktivni onoliko koliko im zdravstveno stanje dopušta. ZR predstavlja pisanu preporuku za tjelesnu aktivnost, a prije propisivanja potrebno je utvrditi zdravstveni rizik korištenjem upitnika PAR-Q (engl. *Physical Activity Readiness Questionnaire*), kratkog upitnika u cilju smanjena rizika od neželjenog kardiovaskularnog (KV) događaja povezanoga s vježbanjem. S obzirom na prisutnost ili odsutnost KV rizičnih čimbenika te znakova, simptoma ili dijagnosticiranih KV, plućnih, bubrežnih ili metaboličkih bolesti pacijente se svrstava u niskorizične, umjereno-rizične i visokorizične. Osobe umjerenog i visokog rizika trebale bi prije uključivanja u program vježbanja obaviti detaljniji liječnički preventivni pregled, koji uključuje fizikalni pregled srca, pluća, abdomena i lokomotornog sustava, mjerenje krvnog tlaka i glukoze u krvi, elektrokardiogram, spirometriju, kompletnu krvnu sliku te osnovna antropometrijska mjerenja. U dogovoru s pacijentom potrebno je postaviti jasne, realne ciljeve te kontinuirano pružati podršku. Dobrobiti redovite tjelesne aktivnosti za prevenciju i kontrolu KNB-a su nedvojbene. Zadatak je LOM-a ohrabrivati i procjenjivati uspješnost implementacije TA-e u svakodnevni život pacijenta. Procjena bi se trebala vršiti nakon propisivanja ZR-a, tijekom, ali i nakon provođenja individualiziranog programa vježbanja, koji bi trebao trajati minimalno tri, a po nekim istraživanjima čak šest ili više mjeseci. Potencijalne prepreke propisivanju TA-e jesu liječnikovo nedostatno znanje i kompetencije o savjetovanju TA-e, otežana komunikacija, pacijentova slabija pismenost, nedostatak motivacije, socijalne podrške ili vremena. Sustavne prepreke su manjak vremena, financijske podrške ili protokola postupanja te gubitak kontinuiteta skrbi zbog čestih promjena liječnika. Rješenje treba tražiti u odvajanju resursa za dodatnu edukaciju i jačanje samopouzdanja liječnika te svakodnevnom javnom promicanju TA-e kao stila života. Time se postiže individualizirano i uspješnije savjetovanje.

Zaključak: Imajući u vidu nezamjenjivu ulogu LOM-a u primarnoj prevenciji, propisivanje TA-e na recept predstavlja neprocjenjiv iskorak naprijed u dodatnoj promociji tjelesne aktivnosti te očuvanju zdravlja populacije općenito. U funkciji dostizanja toga strateškog cilja sustavna i adekvatna edukacija LOM-a od presudne je važnosti.

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The Role of Family Physicians in Prescribing Physical Activity on Prescription – "Green Prescription"

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Introduction: Promoting physical activity (PA) for the purpose of preventing the development of chronic non-communicable diseases (CND), is an important task of every family physician (FP). The aim of this work is to strengthen and clarify the role of FP in prescribing PA on prescription - the so-called Green Prescription (GP).

Discussion: In prescribing PA, counseling plays the most important and demanding role, and one of the best-known counseling strategies is the 5A framework (Assess, Advise, Agree, Assist, and Arrange). The first, essential step is to assess PA using two short questions: (1) " on average, how many days per week do you engage in moderate-to-strenuous (vigorous) exercise? "; and (2) " on average, how many minutes do you engage in exercise at this level?" Based on the answers, by simply multiplying the frequency of the activity and the duration, it is possible to estimate the PA level of the patient and compare it with the currently valid international recommendations. This is followed by counseling and encouraging the patient to engage in PA, which must be individualized and adapted to the patient. The frequency, intensity, type and duration of PA should be advised. For healthy adults (including those over 65), at least 150 minutes of moderate-intensity or at least 75 minutes per week of vigorous-intensity aerobic PA, or an equivalent combination of these activities, is recommended. It is recommended to perform strength exercises at least twice a week, and balance exercises for elderly people at least three times a week. If patients, due to health limitations, cannot adhere to the mentioned recommendations, they should be as active as their health allows. GP represents a written recommendation for PA, and before its issuance, it is necessary to determine the health risk, using the PAR-Q (Physical Activity Readiness Questionnaire), a short questionnaire aimed at reducing the risk of adverse cardiovascular (CV) events associated with exercise. Considering the presence or absence of CV risk factors, and signs, symptoms or diagnosed CV, pulmonary, renal or metabolic diseases, patients are classified as low-risk, moderate-risk and high-risk. People at moderate and high risk should, before joining the exercise program, undergo a more detailed medical preventive examination, which includes a physical examination of the heart, lungs, abdomen and locomotor system, blood pressure and blood glucose measurement, electrocardiogram, spirometry, complete blood count and basic anthropometric measurements. In agreement with the patient, it is necessary to set clear, realistic goals and continuously provide support. Benefits of regular PA in prevention and management of KNB are indisputable. FP's task is to encourage and evaluate the success of PA implementation in patient's daily life. The assessment should be done after prescribing GP, during, but also after the implementation of an individualized exercise program, which should last at least three, and according to some research, even six or more months. Potential barriers to prescribing PA are physician's insufficient knowledge and competence for PA counseling, communication difficulties, patient's poor literacy, a lack of motivation, social support or time. Systemic barriers are a lack of time, financial support or treatment protocols and loss of the continuity of care due to a frequent changes of physicians. The solution should be sought in allocating resources for additional education, strengthening physicians' self-confidence and daily public promotion of PA as a lifestyle. This results in individualized and more successful counseling.

Conclusion: Bearing in mind the irreplaceable role of the FP in primary prevention, the prescription of PA represents an invaluable step forward in the additional promotion od PA and health preservation of the population in general. In order to achieve this strategic goal, systematic and adequate education of the FP is of crucial importance.

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Edukacije simulacijskim treninzima za pružatelje primarne zdravstvene skrbi u gradu Zagrebu

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Ključne riječi: edukacija simulacijom visoke realnosti, primarna zdravstvena zaštita, hitna medicinska skrb
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Uvod s ciljem: Inovativna edukacija o hitnim stanjima na razini primarne zdravstvene zaštite postat će dostupna u Zagrebu zahvaljujući suradnji Medicinskog fakulteta Sveučilišta u Zagrebu, Doma zdravlja Zagreb – Centar, Zdravstvenog doma Ljubljana i Medicinskog fakulteta Sveučilišta sv. Ćirila i Metoda u Skoplju. Cilj je ovoga rada prikazati planiranu metodu edukacije simulacijom visokog stupnja realnosti s pripremom djelatnika primarne zdravstvene zaštite na djelovanje u vitalno ugrožavajućim situacijama.

Rasprava: Suradnja s ljubljanskim Simulacijskim centrom (u nastavku Sim centrom) osigurala je uvjete za usvajanje provjerene i istraživanjem poduprte politike za utemeljenje prvoga Simulacijskog centra u Hrvatskoj. Simulacijski trening koji se u takvim centrima provodi obuhvaća teorijski dio, praktične vještine, prolaženje simulacije i razgovor o simulaciji (što je bilo dobro, što je moglo biti bolje). Posebno konstruirane simulacije omogućuju sudionicima doživljaj hitne situacije u sigurnom okruženju. Visok stupanj realnosti, nužan za simulacijski trening, ostvaren je realističnom opremom, okružjem, mirisima i zvukovima prikladnima simuliranoj situaciji. Cilj je takva pristupa pobuđivanje stvarnih osjećaja straha i stresa koji u pravoj situaciji predstavljaju kočnicu u pružanju hitne pomoći. Edukacija je prvotno planirana za timove obiteljske medicine i pedijatrijske službe Doma zdravlja Zagreb – Centar, s namjerom proširivanja na ostale zdravstvene, a zatim i nezdravstvene djelatnike te druge ustanove. Radi održavanja razina vještina i znanja, simulacijski trening potrebno je održavati u ciklusima od jedne do četiri godine, ovisno o potrebama pojedinih službi.

Ukupno deset zaposlenika Doma zdravlja Zagreb – Centar u Sim Centru u Ljubljani bit će obučeno za instruktore simulacijskog treninga osnovnog i naprednog stupnja te će nastaviti primjenu naučenoga u Simulacijskom centru u Zagrebu. Planirani početak rada Simulacijskog centra u Zagrebu jest jesen 2023.

Zaključak: Opisan četverodijelni sustav učenja omogućuje cjelovitu edukaciju o upravljanju opasnim medicinskim situacijama i njihovu prepoznavanju. Riječ je o trajnom načinu izobrazbe s pomoću simulacija što jamči kontinuiran rad na kvaliteti pružanja zdravstvene skrbi te smanjenje smrtnih ishoda u hitnim situacijama.

Education through simulation training for primary health care providers in the City of Zagreb

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Introduction and aim: Thanks to the cooperation between the Faculty of Medicine of the University of Zagreb, Health Center Zagreb-Centar, Ljubljana Health Center and the Faculty of Medicine of the University of St. Cyril and Methodius in Skopje innovative training in emergency situations at the level of primary health care has become possible in the city of Zagreb. The aim of this paper is to present a planned method of training and learning through simulations with a high degree of realism, preparing primary health care workers to act in life-threatening situations.

Discussion: Cooperation with the Simulation Center in Ljubljana (hereinafter referred to as the Sim Center) has created the conditions for the adoption of a proven and research-based policy for the establishment of the first simulation center in Croatia. Simulation training conducted in such centers includes the theoretical part, practical skills, going through the simulation and debriefing about the simulation (what was good, what could have been better). Especially constructed simulations allow participants to experience an emergency situation in a safe environment. A high degree of reality, necessary for simulation training, is achieved through real equipment, surroundings, smells and sounds appropriate to the simulated situation. The goal of such an approach is to develop legitimate feelings of fear and stress in participants, which in the real world situations represent a dangerous obstacle in providing the quality of emergent care. The training was originally planned for family medicine and pediatric teams of the Health Center Zagreb-Centar, with the intention of extending it to other health and non-health workers, and ultimately other institutions. In order to maintain the level of skills and knowledge, simulation training should be held in cycles of one to four years, depending on the needs of individual teams and services.

A total of 10 employees of the Health Center Zagreb-Centar will be trained as basic and advanced level instructors in the Sim Center in Ljubljana and as such will continue the practice in the newly established simulation center in Zagreb. The start of the training is planned for the fall of 2023.

Conclusion: The described four-part learning system provides a means for comprehensive training in the management and recognition of hazardous medical situations. It is a permanent approach to training through simulation that ensures continuous work on the quality of medical care and the reduction of fatal outcomes in emergency situations.

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Uloga đumbira u liječenju pretilosti i komplikacija pretilosti

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Uvod s ciljem: Prekomjerna tjelesna masa i pretilost definiraju se kao abnormalno ili prekomjerno nakupljanje masti, izraženo indeksom tjelesne mase (ITM) većim od 25 odnosno 30 kg/m^2. Također, predstavljaju značajan rizični čimbenik za razvoj brojnih bolesti, uključujući kardiovaskularne bolesti, dijabetes, metabolički sindrom, osteoartritis, karcinom endometrija, dojke, jajnika, prostate, jetre, žučnog mjehura, bubrega i kolona. Prema podatcima Svjetske zdravstvene organizacije za 2017. godinu, više od četiri milijuna ljudi godišnje umire zbog prekomjerne tjelesne mase (TM) i pretilosti. Ljekovito bilje koristi se diljem svijeta za liječenje brojnih bolesti, kao i za smanjenje TM-a i posljedica pretilosti. Đumbir je jedan od često korištenih začina i ljekovitog bilja. Gingeroli i shogaoli smatraju se glavnim bioaktivnim tvarima svježeg i osušenog đumbira, odnosno njegova korijena. U tradicionalnoj se medicini pripravci korijena đumbira propisuju protiv mučnine, najčešće u trudnoći i vožnji, drugih probavnih smetnja, prehlade, mialgija i artralgija. Cilj je ovog rada prikazati dostupne podatke o utjecaju đumbira na liječenje pretilosti i posljedica pretilosti, a s kojima se zbog sve veće prevalencije pretilosti i korištenja raznih dodataka prehrani susreću i liječnici obiteljske medicine.

Rasprava: Pretraživane su baze podataka PubMed i Scopus korištenjem ključnih riječi *„ginger“*, *„obesity“* i *„treatment“*. U analizu su uključena klinička istraživanja, pregledni radovi, randomizirani kontrolirani pokusi i metaanalize, njih 27, objavljeni od 2006. do 2022. godine. Većina eksperimentalnih istraživanja na životinjama poduprla je učinak ekstrakta ili praha đumbira na smanjenje TM-a, dok rezultati dostupnih kliničkih istraživanja nisu jednoznačni te su pokazali male ili nikakve promjene antropometrijskih mjera i sastava tijela kod osoba s pretilošću. Pretpostavljeni mehanizmi putem kojih đumbir modulira procese povezane s pretilošću uključuju povećanje termogeneze, povećanje lipolize, smanjenje lipogeneze, inhibiciju crijevne apsorpcije masti i kontrolu apetita. I gingeroli i shogaoli pokazuju mnoštvo bioloških učinaka, od antikancerogenih, antioksidativnih, antimikrobnih, protuupalnih i antialergijskih do raznih učinaka na središnji živčani sustav (kontrola boli, antidepresivni učinak, prevencija neurotoksičnosti) i protektivnog djelovanja na gastrointestinalni sustav. Zabilježeni antioksidativni i protuupalni učinci ostvaruju se poboljšanjem enzimske aktivnosti i regulacijom transkripcijskih faktora. Istraživanja su pokazala različite učinke korištenja đumbira. U nekima je đumbir imao pozitivan utjecaj na smanjenje TM-a, opsega struka i bokova, razine glukoze natašte, HbA1c, HOMA indeksa inzulinske rezistencije i povećanje razine HDL-kolesterola, dok u nekima učinak na inzulin, ITM, razine triglicerida, ukupnog i LDL-kolesterola nije zabilježen. Đumbir je pokazao i svoje antidijabetičke učinke povećanjem osjetljivosti/sinteze inzulina, zaštitom β-stanica otočića gušterače, smanjenjem nakupljanja masti, smanjenjem oksidativnog stresa i povećanjem unosa glukoze u tkiva. Uz te učinke, đumbir je također pokazao zaštitne učinke protiv nekoliko komplikacija dijabetesa, osobito nefropatije i dijabetičke katarakte, djelujući kao antioksidans i antiglikant. Međutim, provedena klinička istraživanja kao primarni način liječenja pretilosti i njezinih komplikacija ističu principe suvremene medicine koji se provode pod liječničkim nadzorom. Istraživanja koja su se koristila staničnim kulturama ili životinjskim modelima pokazala su da sastojci đumbira povećavaju sintezu dušikova oksida, smanjuju proliferaciju vaskularnih glatkih mišićnih stanica, potiču izbacivanje kolesterola iz makrofaga, inhibiraju angiogenezu, blokiraju Ca2+ kanale i induciraju autofagiju te imaju pozitivan učinak na krvni tlak i agregaciju trombocita.

Zaključak: Liječenje pretilosti i njezinih komplikacija treba se provoditi prema preporukama i uz nadzor liječnika. Đumbir ima potencijalnu ulogu u liječenju pretilosti i njezinih komplikacija, kao i u liječenju metaboličkog sindroma, no potrebna su dalja klinička istraživanja koja će potvrditi navedene hipoteze.

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The role of ginger in the treatment of obesity and the complications of obesity

Keywords: ginger, metabolic syndrome, obesity
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Introduction with aim: Overweight and obesity are defined as abnormal or excessive accumulation of fat, expressed by a body mass index (BMI) greater than 25 and 30 kg/m2, respectively. They are also a significant risk factor for the development of numerous diseases, including cardiovascular disease, diabetes, metabolic syndrome, osteoarthritis, endometrial, breast, ovarian, prostate, liver, gall bladder, kidney, and colon cancer. According to data from the World Health Organization for 2017, over 4 million people die annually due to excess body weight (BW) and obesity. Medicinal plants are used worldwide to treat numerous diseases, as well as to reduce BW and the consequences of obesity. Ginger is one of the most commonly used spices and medicinal herbs. Gingerols and shogaols are considered the main bioactive substances of fresh and dried ginger, or its root. In traditional medicine, the ginger root is prescribed against nausea, most often during pregnancy and driving, other indigestions, colds, myalgia, and arthralgia.

This paper aims to show the available data on the influence of ginger on obesity treatment and the consequences of obesity, which, due to the increasing prevalence of obesity and the use of various dietary supplements, are also encountered by family medicine practitioners.

Discussion: PubMed and Scopus databases were searched using the keywords: “ginger”, “obesity”, and “treatment.”. The analysis included clinical research, review papers, randomized controlled trials, and meta-analyses, 27 of them, published from 2006 to 2022. Most experimental animal studies support the effect of ginger extract or powder on reducing BW, while the results of available clinical studies are not unambiguous and show little or no changes in anthropometric measures and body composition in people with obesity. The putative mechanisms by which ginger modulates obesity-related processes include increased thermogenesis, increased lipolysis, decreased lipogenesis, inhibition of intestinal fat absorption, and appetite control. Both gingerols and shogaols show a multitude of biological effects, from anticancer, antioxidant, antimicrobial, anti-inflammatory, and antiallergic to various effects on the central nervous system (pain control, antidepressant effect, prevention of neurotoxicity) and protective effects on the gastrointestinal system. Recorded antioxidant and anti-inflammatory effects are achieved by improving enzyme activity and regulating transcription factors. Research shows different effects of using ginger. In some, ginger had a positive effect on reducing BW, waist, and hip circumference, blood glucose level, HbA1c, HOMA index of insulin resistance, and increasing HDL-cholesterol level, while in others, it affected insulin, BMI, triglyceride level, total and LDL - cholesterol was not recorded. Ginger also shows its antidiabetic effects by increasing insulin sensitivity/synthesis, protecting β-cells of pancreatic islets, reducing fat accumulation, reducing oxidative stress, and increasing glucose uptake into tissue. In addition to these effects, ginger exhibits protective effects against several complications of diabetes, particularly nephropathy and diabetic cataracts, acting as an antioxidant and antiglycan. However, the clinical research carried out as the primary method of treating obesity and its complications emphasize the principles of modern medicine, which are carried out under medical supervision. Research using cell cultures or animal models shows that ginger constituents increase nitric oxide synthesis, reduce vascular smooth muscle cell proliferation, stimulate cholesterol efflux from macrophages, inhibit angiogenesis, block Ca2+ channels and induce autophagy, and have a positive effect on blood pressure and aggregation platelets.

Conclusion: Treatment for obesity and its complications should be provided in conjunction with recommendations and under medical supervision. Ginger has a potential role in the treatment of obesity and its complications, as well as in the treatment of metabolic syndrome, but further clinical research is needed to confirm the above hypotheses.

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17. Posteri

The Role of Lifestyle Medicine in Preventing, Treating, and Reversing Chronic Diseases: An Overview of the Six Pillars

Keywords: lifestyle medicine, chronic diseases, health, preventive medicine
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Introduction and aim: Lifestyle medicine is a medical approach that emphasizes the role of lifestyle changes in preventing, treating, and reversing chronic diseases. It is based on the idea that many chronic diseases, such as heart disease, diabetes, and cancer, are caused by poor lifestyle choices, and that these diseases can be prevented or treated by making changes to one's diet, exercise, and other lifestyle habits. The aim of this paper is to present lifestyle medicine as an important contributing factor to public health.

Discussion: Lifestyle medicine has been shown to be effective in preventing, treating, and reversing chronic diseases, and is considered to be a cost-effective and sustainable approach to healthcare. It is also a way of empowering patients to take control of their own health, and it is a more holistic approach to healthcare.

The six pillars of lifestyle medicine are:

1. Nutrition: Eating a diet that is rich in whole, unprocessed foods and low in added sugars, saturated fats, and processed foods is a key aspect of lifestyle medicine.
2. Physical activity: Regular exercise is essential for maintaining a healthy weight, improving cardiovascular health, and reducing the risk of chronic diseases.
3. Sleep: Getting enough sleep is important for maintaining overall health and well-being.
4. Stress management: Managing stress through techniques such as meditation, yoga, or therapy can help to reduce the risk of chronic diseases and improve overall health.
5. Avoiding risky substances: Avoiding the use of tobacco, excessive alcohol, and other harmful substances can help to reduce the risk of chronic diseases and improve overall health.
6. Social support: Having a strong social support network can help to improve overall health and well-being.

One of the main advantage of lifestyle medicine is that it can be tailored to the individual needs and preferences of each patient. For example, some patients may prefer to focus on improving their diet, while others may prefer to focus on increasing their physical activity. This personalized approach can help to increase adherence to the lifestyle changes and ultimately improve health outcomes.

Conclusion: In conclusion, lifestyle medicine is an evidence-based approach that emphasizes the role of lifestyle changes in preventing, treating, and reversing chronic diseases. By focusing on the six pillars of nutrition, physical activity, sleep, stress management, avoiding risky substances, and social support, lifestyle medicine can improve overall health and well-being, prevent chronic diseases, and reduce healthcare costs.

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The Role of Primary Care in Promoting Healthy Eating Habits and Preventing Chronic Diseases

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Introduction and aim: Primary care plays a crucial role in promoting healthy eating habits and preventing chronic diseases. A healthy diet is essential for maintaining good health and preventing chronic diseases such as obesity, heart disease, and diabetes. Eating a diet that is rich in fruits, vegetables, whole grains, and lean proteins, and low in added sugars, saturated fats, and processed foods is important for maintaining good health. The aim of this papier is to present how family physicians can identify patients at risk for chronic diseases and offer them education and support they need to make healthy eating choices.

Discussion: Primary care providers, such as family physicians, nurse practitioners, and physician assistants, are often the first point of contact for patients seeking healthcare services. Primary care providers, being well-positioned to do that, can use a variety of strategies to promote healthy eating in their practice, such as:

1. Incorporating nutrition counseling into routine clinical care, for example, by providing patients with information on healthy eating during their visits.
2. Collaborating with other healthcare professionals, such as dietitians, to provide comprehensive care to patients.
3. Using technology, such as telemedicine and mobile health apps, to deliver nutrition interventions to patients.
4. Primary care providers can also play a key role in promoting healthy eating in the community by:
5. Partnering with community organizations and programs to provide education and support to individuals and families on healthy eating choices.
6. Advocating for policies and programs that promote healthy eating, such as increasing access to healthy food options and promoting nutrition education in schools and workplaces.

In addition, primary care providers can help to prevent chronic diseases by identifying and addressing modifiable risk factors, such as unhealthy eating habits, through lifestyle counseling and education.

Conclusion: In conclusion, Primary care plays a vital role in promoting healthy eating habits and preventing chronic diseases. By incorporating nutrition counseling into routine clinical care, collaborating with other healthcare professionals, and promoting healthy eating in the community, primary care providers can play a key role in preventing and managing chronic diseases.

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Liječenje oralnog mukozitisa uzrokovanog metotreksatom pripravkom alopurinola u ordinaciji obiteljske medicine

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Ključne riječi: alopurinol, metotreksat, obiteljska medicina, oralni mukozitis
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Uvod s ciljem: Oralni mukozitis česta je nuspojava kod pacijenata koji su podvrgnuti antineoplastičnoj terapiji ili su na terapiji metotreksatom. Cilj je ovog postera prikazati mogućnosti liječenja oralnog mukozitisa uzrokovanog metotreksatom pomoću alopurinola.

Rasprava: Jedna od posljedica oralnog mukozitisa jest smanjena sposobnost pacijenata da žvaču i gutaju hranu, tekućinu ili peroralnu medikaciju. Mjere prevencije podrazumijevaju oralnu higijenu, ispiranje usta, krioterapiju, lasersku terapiju i nutritivne intervencije. Ipak, prevencija oralnog mukozitisa ne primjenjuju se dovoljno adekvatno, a sami pacijenti ne prijavljuju svojem liječniku pojavu prvih znakova mukozitisa na vrijeme. Prevencija oralnog mukozitisa iznimno je važna, pogotovo s obzirom na to da je liječenje vrlo izazovno. U ovoj poster-prezentaciji prikazat ćemo dva načina pripravka alopurinola za tretiranje oralnog mukozitisa uzrokovanoga metotreksatom.

Zaključak: Alopurinol je potencijalno dobar terapijski alat za liječenje oralnog mukozitisa uzrokovanog metotreksatom.

Treatment of oral mucositis caused by methotrexate with an allopurinol preparation in family medicine office

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Keywords: allopurinol, family medicine, methotrexate, oral mucositis
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Introduction and aim. Oral mucositis is a common side effect in patients undergoing antineoplastic therapy or on methotrexate therapy. The aim of this poster presentation is to show the treatment possibilities of oral mucositis caused by methotrexate by using allopurinol.

Discussion. One of the consequences of oral mucositis is patient's reduced ability to chew and swallow food, liquid, or oral medication. Prevention measures include oral hygiene, mouth rinsing, cryotherapy, laser therapy and nutritional interventions. However, the prevention of oral mucositis is not implemented sufficiently enough, and the patients themselves do not report the occurrence of the first signs of mucositis to their doctor in time. Prevention of oral mucositis is extremely important, especially considering that treatment is very challenging. In this poster presentation, we will present two ways of preparing allopurinol for the treatment of oral mucositis caused by methotrexate.

Conclusion. Allopurinol is a potentially good therapeutic tool for the treatment of oral mucositis caused by methotrexate.

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Prikaz slučaja: Dugogodišnje praćenje i liječenje pretilog pacijenta s multimorbiditetima u ambulanti liječnika obiteljske medicine

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Uvod s ciljem: Pretilost je kronična metabolička bolest karakterizirana prekomjernim nakupljanjem masnog tkiva u organizmu, a suvremeni način života pridonosi nastanku globalne epidemije koja je postala jedan od vodećih uzroka invaliditeta i smrti. Hrvatska ima najveću prevalenciju preuhranjenosti i debljine u EU. Cilj ovog rada je podsjetiti na važnost uloge liječnika obiteljske medicine u dijagnosticiranju i liječenju pretilosti.

Prikaz slučaja: Pacijent star 51 godinu, živi u inozemstvu. Oženjen, otac jednog djeteta, umirovljenik, po zanimanju radnik u ratarstvu. Prosječne antropološke mjere tijekom godina: visina 186 cm, tjelesna masa 166 kg, ITM ≥ 50 kg/m^2, opseg struka 147 cm. Nepušač, alkohol ne koristi, urednog apetita. Stolica uredna, nikturija (do 3 puta). Iz fizikalnog statusa na donjim ekstremitetima venski varikoziteti i hipostatski dermatitis, uredne periferne pulzacije. Majka bolovala od arterijske hipertenzije, tipa 2 šećerne bolesti, Addisonove bolesti, nefrolitijaze te pretilosti. Preminula u 56. godini. Otac bolovao od arterijske hipertenzije, tipa 2 šećerne bolesti, imao prijelom potkoljenice kompliciran Sudeckovim sindromom. Preminuo s 50-ak godina od iznenadne srčane smrti. Sestra također pretila. Pacijent je od djetinjstva povišene tjelesne mase, liječi se po psihijatru zbog depresije i PTSP-a. Postavljena dijagnoza Pickwick sindroma. S 34 godine, uočena pojava proteinurije i hematurije, dijagnosticirana hipertenzija i tip 2 šećerne bolesti, uključena terapija. S 37 godina dijagnosticiran antifosfolipidni sindrom. Tada prvi puta hospitaliziran, učinjene laboratorijske analize (povišene vrijednosti GUK-a, HbA1c, GGT, ukupnog i LDL kolesterola te triglicerida) te je učinjena radiološka obrada. Sljedećih 5 godina pacijent se nije javljao svom liječniku, osim naručivanja terapije. Hospitaliziran zbog pogoršanja stanja, u 42. godini, korigirana terapija i uveden liraglutid. Verificirana kronična bubrežna bolest. Vrijednosti HbA1c i glukoze natašte u samokontroli bile su zadovoljavajuće, a nakon 5 godina dolazi do pogoršanja glikemije i dodatnog pogoršanja renalne funkcije UZV abdomena pokazao lipemične naslage na jetri, gušterači i bubrezima. Neurolog postavlja dijagnozu dijabetičke polineuropatije. Uz antihipertenzivnu terapiju uključena terapija aspart inzulinom pred obroke, degludek inzulinom navečer; acetilsalicilna kiselina 100 mg, atorvastatin 20 mg, fenofibrat 145 mg. Zbog pozitivnih promjena u privatnom životu, pacijent izrazito promijenio svoje životne navike. U nekoliko godina smršavio oko 30 kg, bilježi se poboljšanje bubrežne funkcije, lipidograma i glikemije. Preporučeno u terapiju uvesti semaglutid, a indicirano je i uvođenje SGLT2 inhibitora zbog kronične bubrežne bolesti i tipa 2 šećerne bolesti. Konzultiraju se endokrinolozi, kardiolozi, nefrolozi, oftalmolozi, psihijatri, a planira se i obrada somnologa.

Rasprava: Pacijentu s debljinom treba pristupiti sveobuhvatno. Važno je debljinu prepoznati putem motivacijskog razgovora, procijeniti razloge debljanja, eventualne postojeće komplikacije koristeći se anamnezom, fizikalnim pregledom, izračunom indeksa tjelesne mase i opsegom struka, laboratorijskim pretragama i daljnjim specijalističkim pregledima, ako su indicirani. Preporučiti treba individaulizirani plan koji uključuje promjenu prehrambenih navika, tjelesnu aktivnost, psihološku pomoć, farmakoterapiju i barijatrijsku kirurgiju uz postavljanje ciljeva i redovito praćenje.

Zaključak: Liječnici obiteljske medicine imaju ključnu ulogu u pružanju podrške i koordiniranju liječenja pretilih pacijenata, a posebno je važna rana dijagnoza, savjetovanje i uvođenje farmakoterapije, ali i upućivanje pacijenata na konzultacije zbog korištenja invazivnih intervencija te praćenju liječenja.

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Case report: Long-term follow-up and treatment of an obese patient with multimorbidity in general practice

Keywords: Comorbidity, Obesity, General Practitioners
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IIntroduction: Obesity is a chronic metabolic disease characterized by excessive accumulation of fat tissue in the body, and the modern way of life contributes to the emergence of a global epidemic that has become one of the leading causes of disability and death. Croatia has the highest prevalence of overnutrition and obesity in the EU. The aim of this case report is to remind about the complexity and the importance of the role of general practitioners in diagnosing and treating of obesity.

Case report: The patient, 51 years old, has been living abroad. Married, father of one child, retired, agricultural worker by profession. Average anthropological measurements over the years: height 186 cm, weight 166 kg, BMI > 50 kg/m2, waist circumference 147 cm. The patient is a non-smoker, does not use alcohol, has good appetite, has regular bowel movements and nocturia (up to 3 times). From the physical status on the lower extremities there were present venous varicosities and hypostatic dermatitis with regular peripheral pulsations. The mother suffered from arterial hypertension, type 2 diabetes, Addison's disease, nephrolithiasis and obesity. She died at the age of 56. The father suffered from arterial hypertension, type 2 diabetes, had a lower leg fracture complicates by Sudeck's syndrome. He died at the age of 50 from a sudden cardiac death. The patients's sister is also obese. The patient has been overweight since childhood and is in a psychiatric treatment because of depression and PTSD. The diagnosis of Pickwick syndrome was also present. At the age of 34, the appearance of proteinuria and hematuria was noticed, hypertension and type 2 diabetes were diagnosed, and therapy was introduced. At the age od 37, antiphospholipid syndrome was diagnosed. Then he was hospitalized for the first time. The laboratory results there were done (values od glucose, HbA1c, GGT, total and LDL cholesterol and triglycerides were high) and radiological treatment was done. For the next 5 years the patient did not contact his general practitioner except for ordering pharmacotherapy via answering machine. He was re-hospitalized, at the age of 42, due to deterioration of his condition. The therapy was corrected and liraglutide was introduced. Chronic kidney disease was verified. The fasting glucose levels in self-monitoring and HbA1c were satisfactory, but after further 5 years there was a worsening of glycemia and renal function. Ultrasound of the abdomen showed lipemic deposits on the liver, pancreas and both kidneys. The neurologist diagnosed diabetic polyneuropathy but no signs of retinopathy were observed. In addition to antihypertensive therapy, therapy with aspart insulin before main meals and therapy with degludec insulin in the evening were introduced. Acetylsalicylic acid a 100 mg, atorvastatin a 20 mg, and fenofibrate a 145 mg were also introduced. Due to positive changes in his private life, the patient changed his lifestyle significantly. So far, in several years, he lost about 30 kg, and there is an improvement in kidney function, lipide profile and glycemia. It was recommended to introduce semaglutide into therapy, and also SGLT2 inhibitors due to chronic kidney disease and type 2 diabetes. Endocrinologists, cardiologists, nephrologists, ophthalmologists and psychiatrists are being consulted, and treatment by a somnologist is also planned.

Discussion: A patient with obesity should be approached comprehensively. It is important to recognize obesity through a motivational interview, assess the reasons for weight gain, possible existing complications using history, physical examination, calculation of body mass index and waist circumference, laboratory tests and further specialist examinations if indicated. An individualized plan should be recommended that includes a change in eating habits, physical activity, psychological help, pharmacotherapy and bariatric surgery with goal setting and regular monitoring.

Conclusion: General practitioners have a key role in providing support and coordinating the treatment of obese patients. They play a special role in early diagnosis, counseling and in the introduction of pharmacotherapy, but also in referring patients to consultation to hospital specialists for the use of invasive interventions and treatment monitoring..

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Marie-Bambergerov sindrom kao prva klinička manifestacija adenokarcinoma pluća

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Ključne riječi: paraneoplastični sindrom, hipertrofična osteoartropatija, Marie-Bambergerov sindrom, batićasti prsti
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Uvod s ciljem: Rijedak klinički sindrom hipertrofičnu osteoartropatiju (HOA) karakteriziraju zadebljani (batićasti) prsti, bolovi i otok stopala, povećanje ekstremiteta te simetrični periostitis dugih kostiju gornjih i donjih ekstremiteta. Cilj je ovoga rada prikazati slučaj pacijentice s HOA-om kao prvom kliničkom manifestacijom adenokarcinoma pluća i uputiti na to da obiteljski liječnik treba razmotriti mogućnost da upalna reumatska bolest može biti simptom maligne bolesti.

Prikaz slučaja: Pacijentica u dobi 66 godina dolazi na pregled jer je primijetila promjene na prstima i noktima posljednjih nekoliko mjeseci u vidu zadebljanja vrhova prstiju šaka, nestanka kuta između prsta i ležišta nokta te hiperpigmentacijske promjene noktiju. Povremeno produktivno kašlje, što pripisuje pušenju. Puši posljednjih 35 godina oko 30 cigareta na dan, *pack/year* 53. Boluje od arterijske hipertenzije, KOPB-a i kroničnog gastritisa zbog čega uzima enalapril 5 mg, rabeprazol 20 mg, umeklidinijev bromid 55 mcg. U fizikalnom statusu uočen je nešto tiši šum disanja desno apikalno i batićasti prsti ruku obostrano. Pacijentica je upućena na uzorkovanje krvi i na rendgensko snimanje prsnih organa. KKS i biokemija bili su uredni izuzev eozinofilije. Rtg snimkom pluća verificirano je homogeno zasjenjenje hiloapikalno desno otvorene etiologije. Po dospijeću nalaza pacijentica je upućena na žurnu pulmološku obradu gdje su spirometrijom nađene opstruktivne smetnje ventilacije blažeg tipa te je preporučen CT toraksa-koji je uputio na ekspanzivan proces u desnom gornjem plućnom režnju uz uznapredovali destruktivni centrilobularni emfizem, sekundarno uvećane limfne čvorove i suspektne lezije nadbubrežne žlijezde. Pulmolog je indicirao bronhoskopiju. Patohistološkom analizom potvrđen je adenokarcinom. Nakon provedenog kirurškog liječenja započet je ciklus kemoterapije po PE protokolu. U bolesnice se promjene na prstima nisu povukle u cijelosti.

Rasprava: HOA je najčešća skeletna manifestacija nemikrocelularnog karcinoma pluća. HOA ima dva oblika: primarna HOA oblik ili pahidermoperiostoza (Touraine-Solente-Goléov sindrom) i sekundarna HOA ili hipertrofična pulmonalna osteoartropatija (Marie-Bambergerov sindrom), koja predstavlja glavnu skeletnu manifestaciju paraneoplastičnog sindroma primarnih nemikrocelularnih karcinoma pluća (80 %), a popratni je fenomen kongenitalnih srčanih i supurativnih plućnih bolesti. U bolesnika koji puše, a imaju određene reumatološke promjene, važno je učiniti pulmološku evaluaciju. Liječenjem osnovne maligne bolesti znaci HOA-e mogu nestati. Batićasti prsti ne moraju se nužno razviti, mogu biti prisutne druge zglobne manifestacije koje mogu prikriti etiologiju bolesti i prolongirati potvrdu dijagnoze. U literaturi su zabilježeni slučajevi HOA-e u mlađih osoba, stoga je bitno kod nejasne slike reumatološke bolesti posumnjati na paraneoplastični sindrom u sklopu karcinoma pluća ili nekog drugog sijela. Iako se promjene često povuku nakon liječenja osnovne bolesti, u naše se bolesnice promjene nisu povukle u cijelosti, što se može pripisati i činjenici da je liječenje u tijeku.

Zaključak: Samo 1 – 5 % bolesnika s karcinomom pluća ima batićaste prste kao samostalan nalaz; bitno je napraviti detaljnu obradu kod novonastale pojave i isključiti malignome kao etiološki čimbenik. Važnu ulogu u tom procesu ima obiteljski liječnik koji treba u svakodnevnom radu posumnjati i prepoznati takve bolesnike kako bi se pravovremeno postavila dijagnoza bolesti i započelo liječenje koje može poboljšati kvalitetu života bolesnika.

Marie-Bamberger Syndrome as the first clinical manifestation of lung adenocarcinoma

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Introduction and aim: The rare clinical syndrome hypertrophic osteoarthropathy is characterized by thickened (clubbed) fingers, pain and swelling of the feet, enlargment of extremities, and symmetrical periostitis of the long bones of the upper and lower extremities. The aim of this work is to present the case of a patient with HOA as the first clinical manifestation of lung adenocarcinoma and to indicate that the family doctor should consider the possibility that inflammatory rheumatic disease can be a symptom of a malignant disease.

Case study: A 66-year-old patient came for an examination because she had noticed changes in her fingers and nails for the past few months, in the form of thickening of the tips of her fingers, the disappearance of the angle between the finger and the nail and hyperpigmentation changes in the nails, She reported occasional productive coughs but attributed this to smoking. She has been smoking for the last 35 years, about 30 cigarettes/day, pack/year 53.

She suffers from arterial hypertension, COPD and chronic gastritis for which she takes: enalapril 5 mg, rabeprazole 20 mg and umeclidinium bromide 55 mcg. In the physical examination, a slightly quieter breathing noise is observed on the right apically and clubbed fingers on both sides. The patient is referred for blood sampling and X-ray imaging of the chest organs. CBC and biochemical tests are normal except for eosinophilia. An X-ray of the lungs verifies a homogenous shadowing of hiloapical right of open etiology. Upon receiving the results, the patient is referred for urgent pulmonology treatment, where spirometry reveals obstructive ventilation disorders of a milder type, and a chest CT scan is recommended, which indicates an expansive process in the right upper lung lobe with advanced, destructive centrilobular emphysema, secondary enlarged lymph nodes and a suspicious lesion of the adrenal gland. The pulmonologist indicates a bronchoscopy. Adenocarcinoma is confirmed by pathocytological analysis. After the surgical treatment, a cycle of chemotherapy is started according to the PE protocol.The changes on the patient's fingers have not completely disappeared.

Discussion: HOA is the most common skeletal manifestation of non-small cell lung cancer. It has two forms: primary HOA form or pachydermoperiostosis (Touraine-Solente-Golé syndrome) and secondary HOA or hypertrophic pulmonary osteoarthropathy (Marie-Bamberger syndrome), which represents the main skeletal manifestation of the paraneoplastic syndrome of primary non-small cell lung cancers (80%), which is accompanied by the phenomenon of congenital heart and suppurative lung diseases. In patients who smoke and have certain rheumatological changes, it is important to perform a pulmonological evaluation. By treating the underlying malignant disease, the signs of HOA may disappear. Club fingers do not necessarily develop. Other articular manifestations may be present that may mask the etiology of the disease and prolong the confirmation of the diagnosis. Cases of HOA in younger people have been recorded in the literature, so it is important to suspect a paraneoplastic syndrome in case of an unclear picture of a rheumatological disease as part of lung cancer or another tumor. Although the changes often disappear after the treatment of the underlying disease, they have not entirely disappeared in our patient, which can also be attributed to the fact that the treatment is still ongoing.

Conclusion: Only 1-5% of patients with lung cancer have club fingers as an independent finding, but it is certainly important to conduct a detailed examination of the new phenomenon and exclude malignancy as etiological factor. An important role in this process is played by the family physician, who should suspect and recognize such patients in their daily work in order to set a timely diagnosis of the disease and start treatment that can improve the patient's quality of life.

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Bol kao simptom u obiteljskoj medicini – od obične boli do vitalne ugroženosti

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Ključne riječi: glavobolja, neurološki pregled, subarahnoidno krvarenje, intrakranijalna aneurizma, hitno stanje
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Uvod s ciljem: Glavobolja je uz križobolju najčešći bolni sindrom. Prema nekim istraživanjima javlja se u 47 % opće populacije i čest je razlog dolaska pacijenata u ordinaciju. Cilj je rada prikazati važnost individualnog pristupa u liječenju glavobolja i pravodobnu reakciju u zbrinjavanju akutne glavobolje koja ugrožava život.

Prikaz slučaja: Pacijent u dobi 60 godina dolazi u ordinaciju obiteljske medicine zbog glavobolje koju je osjetio prije dva dana kada je prilikom dizanja tereta naglo zabacio glavu prema straga. Od tada osjeća bolnost u području PVM cervikalne kralježnice praćenu okcipitalnom glavoboljom s propagacijom prema frontalno uz povremeni osjećaj mučnine. Povratio želučani sadržaj. Negira recentnu traumu, gubitak svijesti, vrtoglavicu ili febrilnost. Nema bolove u prsima, zaduhu ili bolove u abdomenu. Negira motoričku slabost ili parestezije u ekstremitetima. Liječi se od arterijske hipertenzije. Terapiju uzima redovito. U neurološkom statusu pri svijesti, razumije upite i izvršava naloge, urednog govora. Zjenice izokorične, uredno pomicanje očnih jabučica, nema nistagmus, negira dvoslike. Motorika lica uredna. Meningealni znak negativan. U antigravitacijskom položaju simetrično održava ekstremitete, nema ispad osjeta, koordinacija uredna. Romberg stabilan, hod uredan. Funkcije uredne. RR = 140/80 mmHg, cp 74/min, SpO2 98 %, temp. 36,4 °C. Kardiopulmonalno kompenziran. EKG nalaz uredan. Iako se u neurološkom statusu ne nalazi ispada, te je bolesnik bez značajnih tegoba osim mučnine i glavobolje, uputila sam ga na dalju obradu u hitan neurološki prijam. Laboratorijski nalazi i RTG cervikalne kralježnice bili su uredni. Učini se MSCT mozga kojim se verificira SAH. Hitni MSCTA upućuje na sakularno aneurizmatsko proširenje C7 segmenta desne ACI, dorzokranijalnog položaja, širine vrata 3 mm, promjer aneurizme 5 mm. Vertebralne arterije obostrano uredne bez znakova disekcije. Intrakranijalne arterije uredne. Fetalna varijanta desne ACP. Ne nalazi se znakova AVM-a. Pacijent je zaprimljen u Zavod za intenzivno liječenje Klinike za neurologiju radi endovaskularne embolizacije rupturirane aneurizme C7 segmenta desne ACI i posljedičnog SAH-a. Zahvat i liječenje protekli su bez značajnih komplikacija. Kontrolni MSCT mozga prati značajna regresija subarahnoidnog krvarenja bez razvoja hidrocefalusa i akutne ishemije. Pušten na kućno liječenje.

Rasprava: U Hrvatskoj je moždani udar drugi uzrok smrtnosti s udjelom od 8,7 % u ukupnom mortalitetu. Incidencija subarahnoidnog krvarenja je 10 – 15/100 000 stanovnika. To je stanje koje zahtijeva hitno zbrinjavanje u specijalnom centru za moždani udar, te je stoga nužno pravodobno prepoznavanje moždanog udara. Kliničke promjene koje se događaju neposredno nakon krvarenja karakterizira nagli početak najčešće vrlo intenzivne glavobolje s kočenjem šije, vrtoglavice, mučnine i povraćanja. Stanje svijesti može oscilirati, pa čak nalikovati psihotičnoj. Predisponirajući čimbenici za nastanak spontanog subarahnoidnog krvarenja su povišen krvni tlak, pušenje, trudnoća, oralni kontraceptivi i starija životna dob.

Zaključak: Smrtnost bolesnika sa SAH-om kreće se oko 40 – 45 %, a morbiditet oko 60 %. Budući da je glavobolja čest simptom zbog kojeg se pacijenti javljaju u ordinaciju LOM-a, te ih se klasificira više od 300 oblika, posebnu pozornost treba posvetiti dijagnostici i liječenju onih glavobolja koje imaju slične kliničke slike i/ili simptome, a od vitalne su važnosti za pacijenta.

Pain as a symptom in a family medicine - from simple pain to vital threat

Keywords: headache, neurological examination, subarachnoid hemorrhage, intracranial aneurysm, emergency
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Introduction and aim: Headache is the most common pain syndrome along with low back pain. According to some research, it appears in 47% of the general population and is a common reason for patients to come to the doctor's office. The aim of this paper is to show the importance of the individual approach in the treatment of headaches and a timely response in the treatment of acute headaches which endangers life.

Case report: A 60-year-old patient comes to the family medicine office because of a two-day headache that occured when he abruptly tossed his head backwards while he was lifting a load. Since then, he has been feeling soreness in the area of PVM cervical spine accompanied by occipital headache propagating frontally with an occasional feeling of nausea. Vomited stomach contents. He denies recent trauma, loss of consciousness, dizziness or febrility. There is no chest pain, shortness of breath nor abdominal pain. He denies motor weakness or paresthesia in the extremities. He has been treated for arterial hypertension and takes his therapy regularly. In a neurologically conscious state, he understands and executes requests and orders, orderly speech. Isochoric pupils, regular movement of the eyeballs, no nystagmus, negates double images. Fine motor skills of the face. Meningeal sign negative. In an anti-gravity position maintains limbs symmetrically, no loss of sensation, coordination is orderly. Romberg is stable, walk is neat. Functions are neat. RR=140/80 mmHg, cp 74/min, SpO2 98%, temp 36.4 ℃. Cardiopulmonary compensated. ECG findings are normal. Although there are no serious disorders in the neurological status and the patient is without significant complaints except nausea and headache, the patient is referred for further treatment in the neurological admission emergency room. Laboratory findings and X-ray of the cervical spine are normal. MSCT brain verifies subarachnoid hemorrhage (SAH). Emergency MSCTA indicates saccular aneurysmal dilatation of C7 segment of the right ACI, dorsocranial position, neck width 3 mm, aneurysm diameter 5 mm. Vertebral arteries bilaterally orderly without signs of dissection. Intracranial arteries neat. Fetal variant of the right ACP. There are no signs of AVM. The patient is admitted to the Intensive Care Unit of the Clinic for Neurology for endovascular embolization of a ruptured aneurysm of the C7 segment of the right ACI and consequent SAH. The procedure and treatment are without significant complications. Control MSCT of the brain is followed by a significant regression of the subarachnoid hemorrhage without the development of hydrocephalus or acute ischemia. Released for home treatment.

Discussion: In Croatia, stroke is the second cause of mortality with a share of 8.7% in the total mortality. The incidence of subarachnoid hemorrhage is 10-15/100,000 inhabitants. It is a condition that requires urgent treatment in a special stroke center and a timely recognition of stroke is therefore necessary. Clinical changes that occur immediately after bleeding are characterized by a sudden onset of a most often very intense headache with neck stiffness, dizziness, nausea and vomiting. The state of consciousness can oscillate and even resemble psychosis. Predisposing factors for the occurrence of spontaneous subarachnoid hemorrhage are increased blood pressure, smoking, pregnancy, oral contraceptives and old age.

Conclusion: The mortality of patients with SAH is around 40-45%, and the morbidity is around 60%. Since headache is a common symptom for which patients come to physicians' offices, and they are classified in more than 300 forms, special attention should be paid to diagnosing and treatment of those with similar clinical pictures and/or symptoms which are of vital importance to the patient.

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Važnost rada obiteljskog liječnika u promociji zdravlja i zdravijeg načina života

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Ključne riječi: preventivna medicina, promicanje zdravlja, individualni pristup, procjena rizika, nekronične zarazne bolesti
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Uvod s ciljem: Preventivna medicina usmjerena je na suzbijanje bolesti prije njihova kliničkog pojavljivanja pa time može utjecati na kontrolu rizičnih čimbenika. Pregledi i savjetovanje preventivnog karaktera ponajviše se provode na primarnoj razini zdravstvene zaštite, tj. u organizaciji obiteljske medicine i medicine rada. Savjetovanja i pregledi su preventivnog karaktera, usmjereni na identificiranje rizičnih čimbenika, ali i same bolesti, sa svrhom smanjenja morbiditeta i mortaliteta. Cilj je rada osvrnuti se na važnost rada obiteljskog liječnika u promociji zdravlja i zdravijeg načina života.

Rasprava: Malo je dokaza da rutinski pregledi smanjuju morbiditet i mortalitet asimptomatskih pacijenata, a niti onih povezanih s kardiovaskularnim ili malignim bolestima. Uredni rezultati pretraga stvaraju kratkoročni efekt osjećaja zdravlja. Rutinskim pregledima povećava se detekcija čimbenika kardiovaskularnog rizika, novonastale hipertenzije, dislipidemije i šećerne bolesti. Unatoč tomu bilježi se tek umjeren napredak u kontroli rizičnih čimbenika i promjena životnih navika u smislu prehrane i fizičke aktivnosti. Ciljanim i individualnim pristupom prilikom posjeta liječniku koji poznaje pacijenta i obitelj mogu se provoditi preventivni testovi i pretrage u svrhu boljeg utjecaja na samo zdravlje. Pojedinačnim pristupom stvara se povjerenje u odluke liječnika i postiže se bolja suradnja u planu ostvarivosti zajedničkih ciljeva u svrhu ostvarenja zdravlja, prevencije i liječenja. Maligne bolesti predstavljaju jedan od najvećih izazova javnog zdravstva općenito. Jačanje svijesti o ulozi čimbenika rizika poput prekomjerne težine, pušenja, konzumacije alkohola, nepravilne prehrane i smanjene tjelesne aktivnosti za nastanak nezaraznih kroničnih bolesti utjecalo bi i na smanjene pojavnosti raka i drugih kroničnih bolesti. Individualni pristup u ostvarivanju rutinskih pregleda doveo bi do ciljanih testova i pretraga u svrhu poboljšanja zdravlja i edukacije stanovništva. Takav plan i program u promicanju zdravlja iziskuje dodatna znanja i vrijeme, a njime bismo stvorili efikasnije alate u provođenju edukacije svojih pacijenata u svrhu održavanja zdravlja kao društvene odgovornosti svih nas. Time stvaramo zdravije okruženje čime potičemo profesionalnu efikasnost i obiteljski sklad. Uloga obiteljskog liječnika jest da pacijenta potiče na stvaranje navika koje pridonose zdravlju poput uzimanja voća, povrća, redovite tjelesne aktivnosti, ali i upozorava na štetnost pušenja, konzumacije alkohola, tjelesne neaktivnosti. Pojedinac bi trebao biti aktivni sudionik u promicanju zdravlja jer je to njegova društvena odgovornost, a uloga liječnika obiteljske medicine edukativnog je karaktera u svrhu pronalaženja najboljih tehnika promicanja zdravlja.

Zaključak: Obiteljski liječnik ima značajnu ulogu u povećanju znanja i svijesti svojih pacijenata o važnosti prevencije bolesti i promicanju zdravlja. Također je važna njegova uloga u stvaranju programa prevencije nezaraznih bolesti i u promicanju zdravijeg načina života. Promjena sustava organizacije s ostvarenjem primarne uloge obiteljskog liječnika u odnosu sa zdravom populacijom te individualizirano usmjerenom (preventivnom) dijagnostikom osnova je poboljšanja zdravlja nacije i funkcioniranja cjelokupnoga zdravstvenog sustava.

The importance of the family physician's work in promoting health and a healthier lifestyle

Ključne riječi: preventive medicine, health promotion, individual approach, risk evaluation, non-communicable disease
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Introduction with aim: Preventive medicine is aimed at suppressing diseases before their clinical appearance, so it can influence the control of risk factors. Examinations and counseling of a preventive nature are mostly carried out at the primary level of health care, i.e. in the organization of family medicine and occupational medicine. They are directed at identifying risk factors as well as the disease itself, with the purpose of reducing morbidity and mortality. The aim of this paper is to reflect on the importance of the family physician's work in promoting health and a healthier lifestyle.

Discussion: There is little evidence that routine examinations reduce morbidity and mortality in asymptomatic patients, nor those associated with cardiovascular or malignant disease. Neat test results create a short-term effect of feeling healthy. Routine examinations increase the detection of cardiovascular risk factors, new-onset hypertension, dyslipidemia, and diabetes. Despite this, only moderate progress has been recorded in the control of risk factors and changes in lifestyle habits in terms of diet and physical activity. With a targeted and individual approach when visiting a physician who knows the patient and the family, preventive tests and examinations can be carried out in order to have a better impact on health. An individual approach creates trust in the decisions of physicians and better cooperation in the plan of achieving common goals for the purpose of achieving health, prevention and treatment. Malignant diseases represent one of the biggest challenges of public health in general. Increasing awareness of the role of risk factors such as overweight, smoking, alcohol consumption, improper diet and reduced physical activity for the development of non-communicable chronic diseases would also affect the reduced incidence of cancer and other chronic diseases. An individual approach in the implementation of routine examinations would lead to targeted tests and examinations for the purpose of improving the health and education of the population. Such a plan and program in promoting health requires additional knowledge and time to create more efficient tools in the education of our patients for the purpose of maintaining health as a social responsibility of all of us. In this way, we create a healthier environment, which encourages professional efficiency and family harmony. The role of the family physician is to encourage the patient to form habits that contribute to health, such as eating fruits and vegetables, regular physical activity, but also to point out the harmful effects of smoking, alcohol consumption, and physical inactivity. The individual should be an active participant in health promotion because it is their social responsibility, and the role of the family physician is educational in order to find the best techniques for health promotion.

Conclusion: The family physician's perspective is to increase the knowledge and awareness of their patients about the importance of disease prevention and health promotion. Their role is important in the creation of non-communicable disease prevention programs and the improvement of a healthier lifestyle. Changing the organizational system with the realization of the primary role of the family physician in relation to the healthy population and individually directed (preventive) diagnostics is the basis for improving the health of the nation and the functioning of the entire health system.

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Slučajni ultrazvučni nalaz na štitnjači – prikaz slučaja

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Ključne riječi: štitna žlijezda, ultrazvuk, difuzne promjene, Hashimotov tireoiditis
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Uvod: Štitnjača je važan regulator metaboličkih aktivnosti, a poremećaj u njezinu radu može dovesti do različitih oštećenja koja prati i karakteristična simptomatologija. Iako ne postoji opravdanje za ultrazvučni (UZV) pregled štitnjače bez opravdane medicinske indikacije, česti su usputni nalazi fokalnih ili difuznih promjena u pacijenata bez simptoma bolesti. Većina usputno nađenih promjena na štitnjači ne zahtijeva nikakvu dalju dijagnostičku obradu. Zadatak liječnika obiteljske medicine (LOM) jest da intervenira u smislu sprječavanja korištenja UZV-a štitnjače bez jasne medicinske indikacije. Ipak, treba obratiti pažnju kada su u pitanju difuzne promjene parenhima štitnjače koje upućuju na postojanje autoimune bolesti (Hashimotov tireoiditis, HT).

Cilj je rada uputiti na potrebu analiziranja svakog pacijenta posebno, uvažavajući osobnu i obiteljsku anamnezu i eventualne neprimijećene simptome bolesti u pacijenata s difuznim promjenama parenhima štitnjače iako su one otkrivene slučajnim pregledom bez jasne medicinske indikacije.

Prikaz slučaja: Riječ je o pacijentici u dobi 50 godina, bez ranijih oboljenja, bez simptoma bolesti, kojoj su slučajnim ultrazvučnim nalazom štitnjače otkrivene difuzne promjene na parenhimu (hiperehogen, nehomogen, sa znacima pseudolobulacije, fokalna promjena desnog režnja promjera 16 x 14 mm). Pacijentica je negirala bilo kakav simptom bolesti, ali je naknadno navela bezvoljnost, opstipaciju i povremeno otoke na licu. Kći ima HT. Urađena analiza hormonalnog statusa štitnjače, TgAt (tireoglobulinskih antitijela) i TPOAt (antitijela protiv tiroidne peroksidaze) dokazuje povećanje vrijednosti TSH i povećanje vrijednosti antitijela. Postavljena je dijagnoza supkliničke hipotireoze i susp. HT-a. Naknadno je urađena i analiza razine D vitamina koja je uputila na izraženu hipovitaminozu D. Uključena je terapija od supspecijalista nuklearne medicine, vitamin D 4000 ij, selen 1 x 1. Kontrolnim pregledom utvrđeno je normaliziranje TSH i vitamina D te ista razina At uz subjektivno poboljšanje koje je pacijentica navela.

Rasprava: UZV štitnjače ne preporučuje se u probiru bolesti štitnjače te bi liječnici obiteljske medicine trebali intervenirati u smislu kvartarne prevencije. Međutim, ovim prikazom slučaja sugerira se da se ipak neki nalazi trebaju uzeti u obzir i, u skladu s procjenom svih rizičnih čimbenika, treba procijeniti potrebu nastavka dijagnostičke obrade. Prema preporukama svih društava za štitnjaču prvi i najpouzdaniji test za otkrivanje poremećaja funkcije štitnjače jest određivanje razine TSH u serumu, čak i u pacijenata s nespecifičnim simptomima (*case finding*). Pacijenti s HT-om imaju niže vrijednosti D vitamina od zdravih, koji je vezan za višu razinu anti-TPO i TgAt u serumu. Višu razinu selena povezuju s manjim rizikom za razvoj tireoidne autoimunosti. Sukladno navedenomu, u slučaju difuznih promjena parenhima preporučuje se uraditi hormonalni status štitnjače s TPO i TgAt te razinu D vitamina.

Zaključak: UZV pregled štitnjače ne preporučuje se ako ne postoji jasna medicinska indikacija, ali se u nekim slučajevima taj pregled ne smije zanemariti. UZV-om registrirane difuzne promjene parenhima zahtijevaju dalju obradu.

Accidental ultrasound finding on the thyroid - case report

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Introduction and aim: The thyroid gland is an important regulator of metabolic activities, and a disturbance in its work can lead to various damages accompanied by characteristic symptoms. Although there is no justification for an ultrasound (US) examination of the thyroid without a justified medical indication, incidental findings of focal or diffuse changes in patients without symptoms of the disease are common. Most incidental thyroid changes do not require any further diagnostic workup. The task of family physician (FP) is to intervene in terms of preventing the use of thyroid US without a clear medical indication. However, attention should be paid when it comes to diffuse changes in the thyroid parenchyma that suggest the existence of an autoimmune disease (Hashimoto's thyroiditis, HT). This paper aims at pointing out the need to analyze each patient separately, taking into account personal and family history and possible unnoticed symptoms of the disease in patients with diffuse changes in the thyroid parenchyma, even though they are discovered during a random examination without a clear medical indication.

Case report: This is a 50-year-old female patient, with no previous illnesses, and no symptoms of the disease, who is found to have diffuse changes in the parenchyma (hyperechoic, inhomogeneous, with signs of pseudolobulation, focal change in the right lobe with a diameter of 16 x 14 mm). The patient denies any symptoms of the disease but subsequently reports lethargy, constipation, and occasional facial swelling. Her daughter has HT. The performed analysis of the hormonal status of the thyroid, TgAT (thyroglobulin antibodies), and TPOAt (antibodies against thyroid peroxidase) proves an increase in the value of TSH and an increase in the value of antibodies. A diagnosis of subclinical hypothyroidism is made. Subsequently, an analysis of the level of vitamin D is conducted, which indicates pronounced hypovitaminosis D. Therapy prescribed by a nuclear medicine subspecialist, Vitamin D 4000 ij, Selenium 1x1, is included. The control examination reveals the normalization of TSH and vitamin D, the same level of AT and the subjective improvement reported by the patient.

Discussion: US of the thyroid is not recommended in the screening of thyroid diseases, and the FP should intervene in terms of quaternary prevention. However, this case report suggests that some findings should be taken into account and, in conjunction with the assessment of all risk factors, the need for further diagnostic work-up should be considered. According to the recommendations of all thyroid societies, the first and most reliable test for detecting thyroid function disorders is the determination of the level of serum TSH, even in patients with non-specific symptoms, "case finding". Patients with HT have lower values of vitamin D than the healthy ones, which is related to higher levels of anti-TPO and TgAt in the serum. Higher levels of selenium are associated with a lower risk of developing thyroid autoimmunity. Accordingly, in the case of diffuse changes in the parenchyma, it is suggested to perform the hormonal status of the thyroid with TPO and TgAt, and vitamin D level.

Conclusion: US examination of the thyroid gland is not recommended unless there is a clear medical indication, but in some cases, it should not be ignored. Diffuse parenchyma changes registered by US require further processing

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Dijeta i statini kao oblici intervencije u liječenju hiperkolesterolemije

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Uvod s ciljem: Hiperkolesterolemija označava povišenu vrijednost plazmatskih koncentracija kolesterola (> 5 mmol/L) te je jedan od najvažnijih čimbenika rizika za nastanak kardiovaskularnih (KV) bolesti (1 % redukcija LDL-kolesterola = 1 % manji rizik za veliki koronarni događaj). Oportunistički probir vrsta je preventivne aktivnosti pri kojoj inicijativu provedbe započinju pacijent na individualnoj razini ili zdravstveni djelatnik u trenutku dolaska pacijenta u ordinaciju u cilju otkrivanja bolesti u ranoj (asimptomatskoj) fazi kako bi se moglo započeti s intervencijom. Cilj istraživanja jest utvrditi mogu li se pridržavanjem rigorozne dijete i promjene načina života u mjesec dana uspješno sniziti razine kolesterola u odnosu na primjenu statina.

Materijali i metode: Oportunističkim probirom nalaza kolesterola u krvi u razdoblju od 1. studenoga do 1. prosinca 2022. hiperlipidemija je pronađena u 26 bolesnika (18 ih je uključeno u studiju). Prema izračunanom SCORE2 (*Systematic cardiovascular risk evaluation* 2) riziku, svi uključeni bolesnici pripadali su skupini umjerenog i visokog KV rizika te do tada nisu doživjeli niti jedan KV događaj. Kod polovice bolesnika (9 ispitanika) s LDL-kolesterolom > 4 mmol/L ordinirana je promjena životnih navika i dijetna prehrana, a drugoj polovici ispitanika uvedena je terapija visokopotentnim statinom (atorvastatin ili rosuvastatin). Mjesec dana nakon početka intervencije provedena je prva laboratorijska kontrola. U statističkoj obradi korišteni su Sign test i metode deskriptivne statistike u programu Statistica v.12.0.

Rezultati: Odgovor na intervenciju promjenom životnih navika u bolesnika na rigoroznoj dijeti nije bio zadovoljavajući (medijan 7,20 vs. 7,05 mmol/L nakon mjesec dana; 5,4 % promjena; p = 0,11). U bolesnika koji su započeli terapiju statinom došlo je do 44,7 % sniženja kolesterola u odnosu na početnu vrijednost (medijan 7,8 vs. 4,2 mmol/L nakon mjesec dana; p < 0,001). Medijan SCORE2 rizika iznosio je 11, dok je skupina ispitanika kojima je savjetovana dijeta imala značajno niži KV rizik (9,7 vs. 12,2; p = 0,02). U samo tri bolesnika s visokim KV rizikom postignuta je razina LDL-kolesterola < 1,8 mmol/L.

Zaključak: Dijeta i promjena načina života radi liječenja hiperkolesterolemije nisu dovoljne metode u postizanju ciljnih koncentracija kolesterola u cilju prevencije KV događaja. Treba raditi na pravovremenom prepoznavanju i liječenju hiperkolesterolemije u bolesnika s visokim KV rizikom visokopotentnim statinima te na edukaciji bolesnika o važnosti njihove primjene.

Diet and statins as types of intervention in treating hypercholesterolemia

Keywords: hypercholesterolemia, opportunistic screening, prevention
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Introduction with aim: Hypercholesterolemia is defined as an elevated value of plasma cholesterol concentrations (>5mmol/L) and is one of the most important risk factors for the development of cardiovascular (CV) diseases (1% reduction of LDL cholesterol = 1% lower risk of a major coronary event). Opportunistic screening is a type of preventive activity in which the initiative is taken individually by the patient or a healthcare professional at the time of arrival at the physician's office in order to detect the disease in an early (asymptomatic) phase so that an intervention can be started. The aim of this research was to determine whether adherence to a rigorous diet and lifestyle changes in one month could successfully lower cholesterol levels compared to the use of statins.

Materials and methods: By opportunistic screening of blood cholesterol findings in the period from November 1 to December 1, 2022, hyperlipidemia was found in 26 patients and out of that number, 18 were included in the study. According to the calculated SCORE2 (Systematic cardiovascular risk evaluation 2) risk, all included patients had moderate or high CV risk and had not experienced a single CV event. Half of the patients (9 subjects) with LDL cholesterol >4 mmol/L were prescribed a change in lifestyle and diet, and the other half were prescribed high-potency statin (atorvastatin or rosuvastatin). The first laboratory control was performed after one month. In statistical analysis the Sign test and methods of descriptive statistics were used in the program Statistica v.12.0.

Results: The response to the intervention by changing life habits in patients on a rigorous diet was not satisfactory (median 7.20 vs. 7.05 mmol/L after one month; 5.4% change; p=0.11). In patients who started statin therapy, there was a 44.7% decrease in cholesterol compared to the initial value (median 7.8 vs 4.2 mmol/L after one month; p<0.001). Median SCORE 2 risk was 11, while the group of subjects to whom a diet was advised initially had a significantly lower CV risk (9.7 vs. 12.2; p=0.02). In only 3 patients with high CV risk, the level of LDL cholesterol <1.8 mmol/L was achieved.

Conclusion: Diet and lifestyle changes in order to treat hypercholesterolemia are not sufficient to achieve target cholesterol concentrations in order to prevent CV events. We should insist on the timely recognition and treatment of hypercholesterolemia in patients with high CV risk with highly potent statins and patient education on the importance of their use.

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Izvori informacija o cijepljenju protiv virusa SARS-CoV-2 i odluka o cijepljenju pacijenta u skrbi obiteljskog liječnika

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Ključne riječi: bolest COVID-19, cijepljenje, informiranost, obiteljska medicina
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Uvod s ciljem: Analizirati što utječe na povjerenje u izvore informacija o cijepljenju protiv virusa SARS-CoV-2 te kako različiti izvori (javnopolitički, profesionalni i alternativni) utječu na odluku o cijepljenju.

Ispitanici i metode: Uzorak je činilo 184 ispitanika, pacijenata pet ordinacija obiteljske medicine iz Rijeke, u dobi 18 – 87 godina (medijan 48 godina, interkvartilni raspon 35 – 66; 50 % žena). Podatci su prikupljeni upitnikom i analizirani Mann-Whitneyjevim, Kruskal-Wallisovim, $\chi 2$ i Fischerovim testom te Spearmanovom korelacijom.

Rezultati: Povjerenje u izvore informacija nije ovisilo o spolu. Osobe starije od 50 godina više su vjerovale svim izvorima nego mlađi ($p \leq 0,022$). Osobe višeg stupnja obrazovanja više su vjerovale javnopolitičkim izvorima (poput medija, kriznog stožera i Ministarstva zdravstva) i zdravstvenim profesionalcima (liječnicima obiteljske medicine, zavoda za javno zdravstvo, stručnim člancima i rezultatima istraživanja) nego niže obrazovani ($p \leq 0,012$). Kroničari više vjeruju zdravstvenim profesionalcima kao izvorima informacija o cijepljenju protiv virusa SARS-CoV-2 nego nekroničari, posebice liječnicima obiteljske medicine ($p \leq 0,021$). Odluka o cijepljenju protiv bolesti COVID-19, opće mišljenje o cijepljenju, povjerenje u sigurnost i učinkovitost cjepiva te mišljenje da cijepljenje nije pokušaj kontrole populacije bilo je više povezano s povjerenjem u javnopolitičke izvore ($r = 0,370$-$0,478$; $p < 0,001$) nego u zdravstvene profesionalce ($r = 0,298$-$0,449$; $p < 0,001$). Nije povezano s vjerom u alternativne izvore informacija (društvene mreže, prijatelji nezdravstvene struke).

Zaključak: Povjerenje u izvore informacija nije ovisilo o spolu, ali jest o dobi, stupnju obrazovanja i prisutnosti kronične bolesti. Odluka o cijepljenju protiv bolesti COVID-19 bila je više povezana s povjerenjem u javnopolitičke izvore nego u zdravstvene profesionalce.

Sources of information on vaccination against the SARS-COV-2 virus and the decision on vaccination of patients under the care of family physicians

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Introduction and aim: This paper aims at analyzing what influenced trust in the sources of information about vaccination against SARS-CoV-2 and how different sources (public media, government, healthcare providers, social networks) influenced the decision to get vaccinated.

Subjects and methods: The sample consisted of 184 subjects, patients of five family medicine practices from Rijeka, aged 18 − 87 years (median 48 years, interquartile range 35-66; 50% women). Data were collected by a questionnaire and analyzed by Mann-Whitney, Kruskal-Wallis, $\chi 2$ and Fischer tests, and Spearman's correlation.

Results: Trust in information sources did not depend on gender. People over 50 trusted all sources more than younger people ($p \leq 0.022$). People with a higher level of education trusted the public media and the government institutions (Crisis Headquarters and the Ministry of Health) and healthcare professionals (family physicians, public health institutes, professional articles and research results) more than people with lower education ($p \leq 0.012$). Patients with chronic diseases trusted health professionals (especially family medicine practitioners) as sources of information about vaccination against SARS-CoV-2 more than those without chronic diseases ($p \leq 0.021$). The decision to get vaccinated against COVID-19, the general opinion about vaccination, confidence in the safety and effectiveness of vaccines, and the opinion that vaccination is not an attempt to control the population were more closely related to trust in the public media and the government institutions ($r=0.370$-0.478; $p<0.001$) than in health professionals ($r=0.298$-0.449; $p<0.001$). It was not related to trust in alternative sources of information (social networks, friends).

Conclusion: Trust in information sources did not depend on gender, but it did depend on age, level of education and the presence of a chronic disease. The decision to get vaccinated against COVID-19 was more related to trust in the public media and the government than to health professionals.

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B-stanični ne-Hodgkinov limfom tankog crijeva

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Uvod: Tumori tankoga crijeva čine samo 3 – 6 % svih gastrointestinalnih tumora. Primarni limfom gastrointestinalnog sustava čini 30 – 50 % svih ekstranodalnih limfoma, od kojih je samo njih 10 – 15 % ne-Hodgkinovih limfoma. Terminalni ileum najčešće je mjesto B-staničnih limfoma.

Cilj je rada prikazati važnost redovitog obavljanja preporučenih kontrolnih pretraga i pregleda.

Prikaz slučaja: Pacijent u dobi od 53 godine javio se u ordinaciju liječnika obiteljske medicine radi tumačenja nalaza sistematskog pregleda i radi savjeta o potrebi obavljanja kontrolne kolonoskopije. Iz obiteljske anamneze doznali smo da je otac imao karcinom kolona. Uvidom u medicinsku dokumentaciju i karton pacijenta bilo je vidljivo da je inicijalnu kolonoskopiju učinio prije devet godina te da su tada pronađeni polipi kolona. Posljednju kolonoskopiju učinio je prije nešto više od pet godina, bila je uredna te je preporučena kontrolna kolonoskopija za tri godine. U sklopu sistematskog pregleda, nalaze kojega donosi na uvid, vidljivo je da su učinjeni laboratorijski nalazi urednih parametara, uredan RTG S/P, a UZV abdomena pokazuje dvije jetrene ciste – LJR 7 mm i DJR 20 mm uz preostali uredan nalaz UZV abdomena. Pacijentu je izdana uputnica za kontrolnu kolonoskopiju te je posavjetovan učiniti ju. Na kolonoskopiji je na ulazu u terminalni ileum pronađen sesilni polip promjera 12 mm te je uzet PHD uzorak koji je suspektan na B-stanični ne-Hodgkinov limfom niskog gradusa; u uzorcima su nađene limfatične nakupine koje su imunohistokemijski pozitivne na CD20, BCL2, BCL8, C10, pronađeni su limfociti T fenotipa CD3+ i CD5+. Napomenuto je kako uzorci nisu dostatni za konačnu dijagnozu te se preporučuje CT abdomena i kontrolna endoskopija uz potpunu resekciju polipa za tri mjeseca. Pacijenta smo s uputnim pismom uputili u hematološku dnevnu bolnicu gdje je već sljedećeg dana započeo s daljom žurnom obradom. Učinjeni su UZV perifernih limfnih čvorova, biokemijski nalazi te CT toraksa i zdjelice, koji su bili uredni. CT abdomena potvrdio je prethodno UZV-om dokazane ciste na jetri uz preostali uredan nalaz. Trenutačno učinjenom obradom nisu pronađeni znakovi limfadenopatije, a pacijent je bez izraženih B simptoma te ne uzima nikakvu terapiju. Čeka se kontrolna kolonoskopija i resekcija polipa te ponavljanje PHD uzorka.

Zaključak: Iako tanko crijevo predstavlja najduži dio gastrointestinalnog sustava, rijetko je mjesto nastanka tumora. Neoplazme tankog crijeva, a osobito ne-Hodgkinovi limfomi, imaju malu incidenciju i nespecifične simptome, što pridonosi odgođenoj dijagnozi. Potrebno je redovito provoditi preporučene kontrolne kolonoskopije, osobito u osoba koje u obiteljskoj anamnezi imaju članove obitelji koji boluju od novotvorina probavnog sustava. Rano otkrivanje novotvorina ključ je uspješnijeg liječenja pacijenata.

B-cell non-Hodgkin's lymphoma of the small intestine

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Introduction and aim: Only 3-6% of gastrointestinal tumors are small intestine tumors. Primary lymphoma of gastrointestinal tract accounts for 30-50% of all extranodal lymphomas, of which only 10-15% are non-Hodgkin's lymphomas. Terminal ileum is the most common place where B-cellular lymphomas are found.

The aim of this paper is to show the importance of regularly performing the recommended control tests and examinations.

Case report: Patient, aged 53, comes to his family physician's office for the interpretation of the findings of a systemic examination and for advice on the need to perform a follow-up colonoscopy. From family history we find out that his father had colon cancer. Upon inspection of the patient's medical documentation and chart, it is evident that the initial colonoscopy was performed 9 years ago and that colon polyps were found. He had his last colonoscopy a little over 5 years ago, and it was fine. A follow-up colonoscopy in 3 years was recommended. As part of the systematic examination, it was evident that laboratory findings showed normal parameters, the X-ray of the heart and lungs was normal, and the ultrasound of the abdomen showed 2 liver cysts - LLL 7mm and RLL 20mm, while the remaining findings of the abdominal ultrasound were regular. The patient is referred for a follow-up colonoscopy. During the colonoscopy, a sessile polyp with a diameter of 12 mm is found at the entrance to the terminal ileum, and a pathohistological sample is taken, which is suspect for low-grade B non-Hodgkin's lymphoma. In the samples, lymphatic clusters are found which are immunohistochemically positive for CD20, BCL2, BCL8, C10, T lymphocytes of the CD3+ and CD5+ phenotype. It is noted that the samples are not sufficient for a final diagnosis and that a CT scan of the abdomen and a control endoscopy with complete resection of the polyp in 3 months are recommended. With a referral letter, we refer the patient to the hematology day hospital, where he starts with urgent further treatment the very next day. Ultrasound scans of the peripheral lymph nodes, biochemical findings and CT of the thorax and pelvis are performed, which are normal. Abdominal CT confirms the previously ultrasound proven cysts on the liver while the remaining findings are normal. No signs of lymphadenopathy are found with the treatment currently performed, the patient has no pronounced B symptoms and is not taking any therapy. A follow-up colonoscopy and resection of the polyp and repetition of the pathological sample are expected.

Conclusion: Although the small intestine is the longest part of the gastrointestinal tract, it is rarely the site of tumor formation. Neoplasms of the small intestine, and especially non-Hodgkin's lymphomas, have a low incidence and non-specific symptoms, which contributes to delayed diagnoses. It is necessary to carry out the recommended control colonoscopies regularly, especially in the individuals with a family history of family members suffering from neoplasms of the digestive system. Early detection of neoplasms is the key to more successful treatment of patients.

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Prepoznavanje depresije kod osoba oboljelih od šećerne bolesti tipa 2 u timovima obiteljske medicine

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Uvod: Diabetes mellitus (DM) jedna je od najrasprostranjenijih bolesti u svijetu. Prevalencija te bolesti u stalnom je porastu. U 2021. godini DM je bio odgovoran za 6,7 milijuna smrtnih slučajeva. Izazvao je najmanje 966 milijarda dolara zdravstvenih izdataka, što je povećanje za 316 % u posljednjih 15 godina (1). DM je glavni uzrok sljepoće, zatajenja bubrega, srčanih udara, moždanog udara i amputacije donjih ekstremiteta. Depresija je najčešći psihijatrijski poremećaj ne samo u klasifikaciji poremećaja raspoloženja nego i poremećaja općenito. Od depresije u svijetu pati 280 milijuna ljudi. Prema podatcima Zavoda za javno zdravstvo Federacije Bosne i Hercegovine (FBiH) iz 2021. godine među vodećim uzrocima smrtnosti u FBiH na sedmom je mjestu DM, a u Kantonu Sarajevo (KS) na petome. Broj oboljelih od DM-a u FBiH je u porastu, kao i u svijetu; u 2019. godini ukupan broj oboljelih bio je 64 594, a 2021. godine taj broj iznosi 93 942 (2). Prema podatcima Međunarodne dijabetološke federacije (IDF) i Svjetske zdravstvene organizacije (SZO), u BiH je na 1000 stanovnika 270 oboljelih od DM-a. Vjerojatnost da osobe oboljele od DM-a razviju depresiju, u odnosu na druge osobe veća je za 24 %. Pacijenti oboljeli od depresije imaju 65 % povećan rizik da će oboljeti od DM-a (3). Prevalencija depresije kod pacijenata s DM-om može varirati ovisno o vrsti DM-a, spolu i uvjetima života (4).

Metodologija: Istraživanje je provedeno u sedam timova obiteljske medicine u Edukacijskom centru obiteljske medicine pri JU Dom zdravlja Kantona Sarajevo. Pritom je analiziran broj oboljelih od DM-a, broj oboljelih od depresije i broj pacijenata koji istovremeno imaju obje bolesti.

Cilj: Analiza zastupljenosti DM-a i depresije u timovima obiteljske medicine.

Rezultati: Od ukupno 12 343 pacijenta dijagnozu DM-a ima njih 829, dijagnozu depresije njih 156, a obje bolesti istovremeno imaju 54 pacijenta.

Zaključak: Zbog sve veće povezanosti depresije i DM-a potrebno je u timovima obiteljske medicine provoditi probir na depresiju u osoba s DM-om pri prvom posjetu. Depresija je još uvijek u velikoj mjeri neprepoznata kod pacijenata oboljelih od DM-a. Rano otkrivanje depresije poboljšat će kvalitetu života osoba oboljelih od DM-a i ujedno smanjiti troškove liječenja.

Recognizing depression in people with type 2 diabetes mellitus in family medicine teams

Key words: diabetes mellitus, depression, screening, family medicine
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Introduction and aim: Diabetes mellitus (DM) is one of the most common diseases in the world. The prevalence of DM is constantly increasing. In 2021, DM was responsible for 6.7 million deaths. It has caused at least $966 billion in health care expenditures, an increase of 316% over the past 15 years.[1] DM is the leading cause of blindness, kidney failure, heart attacks, strokes, and lower limb amputations. Depression is the most common psychiatric disorder, not only in the classification of mood disorders, but disorders in general with280 million people worldwide suffering from depression. According to data from the Institute for Public Health of the Federation of Bosnia and Herzegovina (FB and H) from 2021, among the leading causes of mortality in the FB and H, DM is in 7th place, and in Sarajevo Canton (SC) it is in fifth place. The number of DM patients in FB and H is increasing, as well as in the world. In 2019, the total number of patients was 64,594, and in 2021, that number was 93,942.[2] According to the data of the International Diabetes Federation (IDF) and the World Health Organization (WHO)), in Bosnia and Herzegovina there are 270 DM patients per 1,000 inhabitants. The probability that a person suffering from DM will develop depression is 24% higher than in other people. Patients suffering from depression have a 65% increased risk of developing DM.[3] The prevalence of depression in patients with DM can vary depending on the type of DM, gender and living conditions.[4] **The aim** of this paper was an analysis of the prevalence of DM and depression in patients in the care of family medicine teams.

Methodology: This research was conducted in seven family medicine teams at the Family Medicine Education Center at the Sarajevo Canton Health Center, analyzing the number of DM patients, the number of depression patients, and the number of patients with both diseases at the same time.

Results: Out of a total of 12,343 patients, 829 patients were diagnosed with DM, 156 patients were diagnosed with depression, and 54 patients had both diseases at the same time.

Conclusion: Depression is still largely unrecognized in DM patients. Due to the growing association between depression and DM, it is necessary to screen for depression in people with DM at the first visit to family medicine teams.. It would contribute to an early detection of a reduced quality of life of DM patients and, at the same time, cut treatment costs.

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Menadžment pacijenata nakon moždanog udara u obiteljskoj medicini

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Uvod: Moždani udar vodeći je uzrok invaliditeta i kognitivnih deficita, a čini 5,2 % svih smrtnih slučajeva širom svijeta (1). Prema definiciji Svjetske zdravstvene organizacije moždani udar je klinički sindrom koji se prezentira kao naglo nastali fokalni ili, rjeđe, globalni neurološki deficit u trajanju dužem od 24 sata, ili koji za posljedicu ima smrt koja se može objasniti samo cerebrovaskularnim poremećajem (2). Zdravstvena njega za pacijente s moždanim udarom započinje u bolnici, a nastavlja se u zajednici, gdje oporavak i održavanje funkcionalnog statusa osiguravaju timovi obiteljske medicine. Obiteljski liječnik pruža sveobuhvatnu zdravstvenu zaštitu za pacijente s naglaskom na promociji zdravlja, prevenciji bolesti i zbrinjavanju kroničnih bolesti i trebao bi igrati ključnu ulogu u praćenju pacijenata koji su doživjeli moždani udar. U tipičnoj ordinaciji primarne zdravstvene zaštite, od 2000 odraslih osoba njih 100 imat će povijest moždanog udara, a njih 5 do 10 novi moždani udar svake godine (3). Efikasna sekundarna prevencija može pružiti značajne dobitke u vidu smanjenja invaliditeta i smrtnosti (4). Potrebe ovih pacijenata mogu biti složene u skladu s vremenskom fazom njihove bolesti, uzrokom i težinu moždanog udara te ovisne o prisutnim komorbiditetima.

Metode: Pregled izvještaja prijavljenih kroničnih bolesti u sedam timova obiteljske medicine u Edukacijskom centru obiteljske medicine u JU Dom zdravlja Kantona Sarajevo i analiza protokola kućnih posjeta u razdoblju od siječnja do prosinca 2022. godine.

Cilj: Određivanje postotka pacijenata s moždanim udarom u timu obiteljske medicine i analiza zastupljenosti kućnih posjeta organiziranih s ciljem procjene funkcionalnog stanja pacijenata nakon moždanog udara u timovima obiteljske medicine.

Rezultati: U sedam timova obiteljske medicine u Edukacijskom centru obiteljske medicine liječi se 12 343 pacijenta. Od tog su broja, prema izvještajima kroničnih oboljenja, evidentirana 383 pacijenta s moždanim udarom. U razdoblju od siječnja do prosinca 2022. godine od ukupno 67 kućnih posjeta za pacijente s moždanim udarom organizirano je i realizirano 12 kućnih posjeta timova obiteljske medicine.

Zaključak: Pacijenti nakon moždanog udara trebaju visokokvalitetnu primarnu zdravstvenu njegu kako bi se odgovorilo na nove potrebe, spriječio recidiv, sanirale komplikacije i optimizirala kvaliteta života. Primarna zdravstvena zaštita različito je razvijena, organizirana i financirana širom svijeta, ali su potrebe pacijenata s ovom bolesti univerzalne. Timovi obiteljske medicine imaju značajnu ulogu u cijelom razdoblju nakon bolničkog liječenja i rehabilitacije, a zahvaljujući kompetencijama i principima ove kliničke discipline, dostupnost timova obiteljske medicine za pacijente s posljedicama moždanog udara organiziranjem kućnih posjeta od velikog je značaja. S obzirom na dostupne podatke u fokusu zdravstvene zaštite još uvijek nije praćenje pacijenata s ovim morbiditetom.

Management of patients after stroke in family medicine

Keywords: post-stroke patients, family medicine, home visits
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Introduction and aim: Stroke is the leading cause of disability and cognitive deficits, accounting for 5.2% of all deaths worldwide[1]. According to the definition of the World Health Organization, a stroke is a clinical syndrome that presents as a sudden focal or, more rarely, a global neurological deficit lasting more than 24 hours, or that results in death which can only be explained by a cerebrovascular disorder[2]. Health care for stroke patients begins in the hospital and continues in the community, where recovery and maintenance of functional status is ensured by family medicine teams. The family physician provides comprehensive health care for patients with an emphasis on health promotion, disease prevention, and chronic disease management and should play a key role in the follow-up of patients who have experienced a stroke. In a typical primary care practice of 2,000 adults, 100 will have a history of stroke and 5 to 10 will have a stroke each year[3]. Effective secondary prevention can provide significant gains in the form of reduced disability and mortality[4]. The needs of these patients can be complex in accordance with the time phase of their illness, the cause and severity of the stroke, and depending on the comorbidities present. **The aim** of this study was to determine the percentage of patients with stroke in the family medicine team and analysis of the presented of home visits organized aiming at assessing the functional state of patients after stroke in family medicine teams.

Methods: Review of chronic diseases reports in 7 family medicine teams at the Education Center of Family Medicine at the Public Institution Health Center of Canton Sarajevo and analysis of home visit protocols in the period January − December 2022.

Results: Family medicine physicians in seven family medicine teams at the Education Center of Family Medicine treated 12,343 patients. Out of this number, according to reports of chronic diseases, 383 patients with stroke were identified. In the period January − December 2022, out of a total of 67 home visits, 12 home visits by family medicine teams were organized and conducted for stroke patients.

Conclusion: Post-stroke patients need high-quality primary health care to respond to their new needs, prevent relapse, remediate complications and optimize their quality of life. Primary health care is developed, organized and financed differently around the world, but the needs of patients with this disease are universal. Family medicine teams play a significant role in the entire period of post-hospital treatment and rehabilitation, and thanks to the competencies and principles of this clinical discipline, the availability of family medicine teams for patients with the consequences of a stroke through the organization of home visits is of great importance. Considering the available data, monitoring the patients with this morbidity is still not the focus of health care.

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Stres kod zdravstvenih radnika

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Uvod: Stres je rastući javno-zdravstveni problem sa negativnim utjeicajem na kvalitetu života i razvoj određenih bolestioboljenja i stanja, a studije su pokazale povezanost stresa i sociodemografskih čimbenikafaktora. Jedan od tih čimbenikafaktora jest i radno mjesto, pri čemu podatci iz studija sugerirajušu da je zdravstvena djelatnost jedna od stresu najizloženijih profesija zdravstveni radnici zbog trajne ili učestale emocionalne opterećenosti zdravstvenih radnika, nastale u svezi suslijed intenzivnome skrbibrige za život i zdravlje drugih osoba. Pravovremena identifikacija izloženosti stresu na radnom mjestu zdravstvenih radnika, predstavlja značajnu toačku u prevenciji nastanka mentalnih, ali i drugih bolestioboljenja kod ove populacije.

U literaturi je prisutan veliki broj alata za identifikaciju razinenivoa stresa. Jedan je od njihalate je i LjestvicaSkala percipiranog stresa (PSS) razvijena unutar teorijskog okvira transakcijskonog modela stresa, koja naglašavajući interakciju između stresnih događaja i individualne procjene raspoloživih resursa za suočavanje s takvim događajima. Originalna ljestvicaskala se sastojala se od 14 stavkia, a pored originalne ljestviceskale, razvijene su i skraćene koje sadrže četiri i deset stavkia. U istraživanju se najčešće koristi inačicaverzija PSS–-10, zbog svoje kratkoće, jednostavne administracije, razumljivih stavkia i povoljnih psihometrijskih svojstava.

Metodologija: Istraživanje je provedeno među zdravstvenim radnicima u srpnju i kolovozu period juli-avgust 2022. godine, popunjavanjem *online* upitnika u Google forms, koji je sadržavao sociodemografske podatke, podatke o radom mjestu i pitanja iz inačice PSS-10. U ovom radu će biti prikazani su preliminarni rezultati istraživanja koji će biti korišteni u svrhu validacije prijevoda upitnika PSS-10.

Cilj: Prezentiranjeovanje dijela preliminarnih rezultata dobivjenih istraživanjem provedenim u svrhu identificiranja razinenivoa stresa kod zdravstvenih radnika i validiranja prijevoda upitnika PSS-10.

Rezultati: Od 252 ispitanika, njih 85,6 % su bile su žene, a 14,4 % muškarci. Među ispitanicima njih 41 % su bile su medicinske sestre/tehničari, a 59 % doktori medicine. Prema nivourazini edukacije 28 % ispitanika je imalo je nivo srednjue stručnue spremeu, 29 % fakultet, a 43 % specijalizaciju. Najviše ispitanika, njih 42,5 %, ima u prosjeku ima 30 -– 50 pacijenata dnevno, a njih 14 % više od 70 pacijenata dnevno. 30,9% ispitanika je Razinunivo stresa na radu 30,9 % ispitanika ocijenilo je kao umjeren stres, 36,1 % kao izražen stres, a 18,5 % kao veoma izražen stres.

Zaključak: Zdravstvena struka spada u profesije s najvišim intenzitetom stresa zbog velike odgovornosti prema poslu i izloženosti mnogim stresnim situacijama. S obzirom na učestalost posljedica stresa kod zdravstvenih radnika, nužnonephodno je iznalaženje metoda za rano otkrivanje percipiranog stresa kako bi se moglo omogućiloti spruječavanje nastanka psiholoških i drugih posljedica, te smanjila pojava preszentizma i apsentizma, a unaprijedili kvaliteta života, zdravstveni benefiti i kvaliteta zdravstvene zaštite.

Stress among healthcare workers

Keywords: occupational stress, healthcare workers, perceived stress, PSS-10
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Introduction: Stress is a growing public health problem with a negative impact on the quality of life and the development of certain diseases and conditions, and studies have shown the connection between stress and sociodemographic factors. One of these factors is the workplace. Data from the study suggest that one of the most exposed professions is healthcare workers due to permanent or frequent emotional stress, caused by taking care of the life and health of other people. Timely identification of exposure to stress at the workplace of healthcare workers is a significant point in the prevention of mental and other diseases among this population.

There are a large number of tools for identifying stress levels in the literature. One of the tools is the Perceived Stress Scale (PSS) developed within the theoretical framework of the transactional model of stress, emphasizing the interaction between stressful events and individual assessment of available coping resources. The original scale consisted of 14 items, and in addition to the original scale, shortened ones containing four and ten items were developed. The PSS-10 version is most often used in research, due to its brevity, simple administration, comprehensible items, and favorable psychometric properties.

Methodology: The research was conducted among health workers in the period July-August 2022, filling out a questionnaire in Google forms, which contained socio-demographic data, data on the place of work and questions from PSS-10. This paper will present the preliminary results of the research that will be used for the purpose of validating the translation of the PSS-10 questionnaire.

Objective: Presenting part of the preliminary results obtained from the research conducted for the purpose of identifying the stress level of health workers and validating the PSS-10 translation.

Results: Out of 252 respondents, 85.6% were women and 14.4% were men. Among the respondents, 41% were nurses/technicians, 59% were medical doctors. According to the level of education, 28% of respondents had a high school diploma, 29% had a university degree, and 43% had a specialization. Most respondents, 42.5%, have an average of 30-50 patients per day, and 14% more than 70 patients per day. 30.9% of the respondents rated the level of stress at work as moderate stress, 36.1% as severe stress, and 18.5% as very severe stress.

Conclusion: The health profession is one of the professions with the highest intensity of stress due to the great responsibility towards work and exposure to many stressful situations. Considering the frequency of the consequences of stress among healthcare workers, it is necessary to find methods for the early detection of perceived stress in order to prevent the occurrence of psychological and other consequences, reduce the occurrence of presenteeism and absenteeism, and improve the quality of life, health benefits and the quality of health care.

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Spirometrija u obiteljskoj medicini

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Uvod: Spirometrija je metoda procjene plućne funkcije mjerenjem kapaciteta pluća i brzine protoka zraka kroz dišne puteve. Indeksi izvedeni iz manevra forsiranog ekspirija najprecizniji su i najpouzdaniji način potvrde dijagnoze kronične opstruktivne plućne bolesti (KOPB). Usporedbom ovih vrijednosti s predviđenima na temelju dobi, visine, spola i etničke pripadnosti utvrđuje se ozbiljnost opstrukcije dišnih puteva. Spirometrija predstavlja zlatni standard i temeljni kamen dijagnoze KOPB-a, a odgovarajuće i pravovremeno testiranje može smanjiti broj neotkrivenih slučajeva i pogrešnu dijagnostičku klasifikaciju.

Cilj: Prikazati značaj i mogućnosti provođenja spirometrije u timovima obiteljske medicine.

Rasprava: Čak ni u zemljama s veoma razvijenim zdravstvenim sustavom nije moguće sve rizične osobe uputiti na spirometriju na višim razinama zdravstvene zaštite. Zbog toga je posvećena značajna pažnja razmatranju i drugih mogućnosti, kao što je provođenje spirometrijskog testiranja u timovima obiteljske medicine. Određeni broj studija analizira mogućnost da obučeno osoblje u obiteljskoj medicini provodi spirometriju i identificira trajno ograničenje protoka zraka s ciljem poboljšanja odgovarajuće i pravovremene dijagnoze KOPB-a. Pouzdanost spirometrijskih uređaja preduvjet je njihove upotrebe kao dijagnostičkog instrumenta, kako iz perspektive bolesnika, tako i u epidemiološke svrhe, te je značajno ispitivanje pouzdanosti i prikladnosti primjene novih prenosivih elektroničkih spirometrijskih uređaja. Određeni broj studija uspoređuje točnost laboratorijskog uređaja temeljenoga na pneumotahografu s konvencionalnim spirometrom volumenskog pomaka, koji se koristi u ordinacijama obiteljske medicine. Podatci pokazuju da su mjerenja dobivena pneumotahografom usko povezana s onima dobivenima spirometrijom volumenskog pomaka i da se prenosivi uređaj u ordinacijama obiteljske medicine može koristiti u kliničkoj praksi. Rezultati spirometrijskog testiranja provedenoga u primarnoj zdravstvenoj zaštiti pokazuju da su vrijednosti izmjerene spirometrijom provedenom za probir KOPB-a bile zadovoljavajuće u usporedbi sa spirometrijom provedenom u referentnom laboratoriju za plućnu funkciju.

Edukacijski centar obiteljske medicine pri JU Dom zdravlja Kantona Sarajevo posjeduje uređaj SpiroLab III Micro Medical Spiro USB, sa softverom Spida 5, a korišten je za edukaciju liječnika o primjeni spirometrije, za istraživanja s ciljem izrade specijalizantskih i studentskih istraživačkih projekata, za probir, postavljanje dijagnoze i praćenje efikasnosti ordinirane terapije.

Zaključak: KOPB predstavlja značajan javnozdravstveni problem, a pravovremeno dijagnosticiranje ključno je za adekvatan menadžment. S obzirom na to da spirometrija predstavlja zlatni standard za postavljanje dijagnoze, pružajući objektivne podatke i mogućnost praćenja uspješnosti primijenjene terapije, pristupačnost spirometrijskog testiranja ključna je za ove ciljeve. Timovi obiteljske medicine predstavljaju mjesto prvoga i posljednjeg kontakta u zdravstvenom sustavu. Samo ta činjenica, uz jedan od temeljnih principa obiteljske medicine – kontinuitet zdravstvene njege, predstavlja opravdan razlog za primjenu ove metode u timovima obiteljske medicine.

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Spirometry in family medicine

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Introduction and aim: Spirometry is a method of assessing lung function by measuring lung capacity and air flow rate through the airways. Indexes derived from the forced expiration maneuver are the most precise and reliable way to confirm the diagnosis of chronic obstructive pulmonary disease (COPD). By comparing these values with those predicted based on age, height, gender and ethnicity, the severity of airway obstruction is determined. Spirometry is the gold standard and cornerstone of COPD diagnosis, and appropriate and timely testing can reduce the number of undetected cases as well as misdiagnoses. **The aim** of this paper is to show the importance and possibilities of conducting spirometry in family medicine teams.

Discussion: Even in the countries with a highly developed healthcare system, it is not possible to refer all at-risk persons to spirometry at higher levels of healthcare. For this reason, significant attention has been devoted to considering other possibilities, such as conducting spirometric testing in family medicine teams. A number of studies analyze the possibility that trained staff in family medicine offices can perform spirometry and identify a persistent airflow limitation, with the aim of improving a proper and timely diagnosis of COPD. The reliability of spirometric devices is a prerequisite for their use as a diagnostic instrument, both from the perspective of the patient and for epidemiological purposes, and it is important to test the reliability and suitability of the application of new, portable electronic spirometric devices. Studies compared the accuracy of a laboratory device based on a pneumotachograph with a conventional volume displacement spirometer used in family medicine practices. The data suggest that measurements obtained by pneumotachograph are closely related to those obtained by volume displacement spirometry and that portable devices in family medicine offices can be used in clinical practice. The results of screening the spirometry testing performed in primary health care show that the values measured by the spirometry performed for COPD screening were satisfactory compared to the spirometry performed in a reference laboratory for pulmonary function.

The family medicine educational center at The Public Institution Sarajevo Canton Health Centre has a SpiroLab III Micro Medical Spiro USB device, with Spida 5 software, and it was used for education as well as for a certain number of studies with the aim of creating residency and student research projects, screening, establishing a diagnosis and monitoring the effectiveness of prescribed therapy.

Conclusion: COPD represents a significant public health problem, and timely diagnosis is of key importance for adequate management. Given that spirometry represents the gold standard for diagnosis, providing objective data as well as the possibility of monitoring the success of applied therapy, the accessibility of spirometric testing is crucial for these goals. Family medicine teams represent the point of first and last contact in the health care system. This fact, along with one of the fundamental principles of family medicine, i.e. the continuity of health care, represent a justified reason for the application of this method in family medicine teams.

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Prikaz slučaja: Od plućne embolije do heterozigotne mutacije gena za faktor V Leiden

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Ključne riječi: faktor V Leiden, heterozigotna mutacija, plućna embolija
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Uvod s ciljem: Plućna embolija (PE) treći je po redu uzrok kardiovaskularne smrti u svijetu nakon moždanog udara i infarkta miokarda. Dio je spektra koji nazivamo venska tromboembolija (VTE), a koji uključuje i duboku vensku trombozu (DVT). DVT podrazumijeva pojavu ugruška u dubokim venama, najčešće donjih ekstremiteta. Kada se dio ugruška otkine, odlazi u plućnu cirkulaciju koju opstruira dovodeći do kliničke slike plućne embolije. Razlikujemo nasljedne i stečene čimbenike rizika za VTE. Cilj ovoga rada bio je svratiti veću pozornost LOM-a na nasljedne čimbenika rizika za PE. Iako s manjom pojavnošću od stečenih, oni mogu biti od velikog značenja za usmjerivanje dalje dijagnostike, liječenja i prevencije kod takvih pacijenata.

Prikaz slučaja: Muškarac u dobi 38 godina javio se na OHBP zbog izrazite slabosti, netolerancije fizičkog napora, tahikardije, dispneje, pritiska u prsima, zimice te oslabljenog apetita unazad tri dana. U bolesnikovoj obitelji do tada nije bilo tromboembolijskih incidenata. U bolesnikovoj osobnoj anamnezi zabilježeni su nefrolitijaza, bronhalna astma, apendektomija te obrada po kardiologu prije godinu dana zbog sumnje na HLV. Povremeno puši, a alkohol konzumira prigodno. Od lijekova u redovitoj terapiji ne uzima ništa. Fizikalni je pregled bio uredan. RR je iznosio 164/99 mmHg, a $Sp0_2$ je bio 92 %. Upućen je na hitnu CT angiografiju koja je pokazala defekte punjena u vidu masivne plućne embolije. Iz laboratorijskih nalaza izdvajamo povišene D-dimere te nešto viši CRP. Bolesnik je prebačen na Zavod za bolesti srca i krvnih žila. Od kardiologa uveden je Clexane 2 x 90 mg. Učinjen je CDI vena donjih ekstremiteta koji je pokazao duboku vensku insuficijenciju obiju vena *femoralis communis*. UZV srca bio je uredan, dok je UZV abdomena pokazao prostatolite unutar prostate. Pregledan je konzilijarno od transfuziologa koji je preporučio uvođenje Xarelta 2 x 15 mg prva tri tjedna, potom 1 x 20 mg trajno, te dodatne pretrage koje su pokazale heterozigotnu mutaciju gena za faktor V Leiden (FVL) uz povišenu aktivnost koagulacijskog faktora VIII. Bolesnik je otpušten kući uz preporuku suzdržavanja od psihofizičkih napora te mjerenje tlaka i pulsa. Od tada se redovito kontrolira po transfuziologu. Iste se godine u još dva navrata javio na OHBP zbog sličnih smetnja pri čemu su isključena akutna koronarna zbivanja. Često mjeri granično povišene vrijednosti krvnoga tlaka te mu je od LOM-a preporučena terapija Prilenom 1 x 2,5 mg, koju bolesnik ne uzima redovito.

Rasprava: Mutacija gena za FVL točkasta je mutacija koja dovodi do gubitka mjesta cijepanja na faktoru V što povećava njegovo prokoagulacijsko djelovanje. Heterozigotna mutacija FVL najčešća je nasljedna trombofilija općenito, kao i u osoba s VTE-om. Nužan je multidisciplinarni pristup liječenju jer mnogim bolesnicima s laboratorijski dokazanom mutacijom ipak neće biti potrebna terapija. Samo bolesnici s anamnezom VTE-a zahtijevaju liječenje. VTE u bolesnika s FVL-om treba liječiti na isti način kao i kod ostale populacije, ali oni s rekurentnim VTE-om ili trombozom na neuobičajenim mjestima mogu zahtijevati dugotrajnu terapiju.

Zaključak: Faktor V Leiden nije čest poremećaj, ali s obzirom na to da postoji rizik od razvoja VTE-a, liječnici obiteljske medicine trebali bi biti svjesni ovog poremećaja, uz pažljivo i multidisciplinarno praćenje i liječenje bolesnika koje uključuje suradnju s transfuziolozima, internistima i ginekolozima.

Case report: From pulmonary embolism to heterozygous factor V Leiden gene mutation

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Introduction with aim: Pulmonary embolism (PE) is the third leading cause of cardiovascular death worldwide after stroke and myocardial infarction. It is part of the spectrum called venous thromboembolism (VTE), which also includes deep vein thrombosis (DVT). DVT implies the appearance of a clot in the deep veins, most often in the lower extremities. When a part of the clot breaks off, it goes into the pulmonary circulation, which obstructs, leading to the clinical picture of PE. There are genetic and acquired risk factors for VTE. This work aims at drawing more GPs attention to genetic risk factors for PE. Although with a lower incidence than the acquired ones, they can be of great importance for guiding further diagnostics, treatment, and prevention in such patients.

Case report: A 38-year-old man presents to the ED because of severe weakness, intolerance to physical exertion, tachycardia, dyspnea, chest pressure, chills, and decreased appetite for the past three days. No thromboembolic incidents have been present in the patient's family. The patient's medical history includes nephrolithiasis, bronchial asthma, appendectomy, and treatment by a cardiologist a year earlier due to suspicion of HLV. He occasionally smokes and consumes alcohol. He does not use any medication. The physical examination is unremarkable. BP is164/99 mmHg, and $Sp0_2$ is92 %. He is sent to an urgent CT angiography, which shows filling defects in the form of a massive PE. The laboratory findings show elevated D-dimers and a slightly higher CRP. The patient is transferred to the Department of Cardiovascular Diseases. Clexane 2 x 90 mg are introduced by the cardiologist. A CDI of the lower extremities veins show deep venous insufficiency of both common femoral veins. The heart ultrasound is unremarkable, while the abdominal ultrasound shows prostatoliths in the prostate. He is examined by a transfusion specialist who recommends the introduction of Xarelto 2 x 15 mg for the first three weeks, and after that 1 x 20 mg permanently, and also additional tests that show a heterozygous mutation of the factor V Leiden (FVL) gene with increased activity of coagulation factor VIII. The patient is discharged with the recommendation to refrain from psychophysical efforts and to measure his BP and pulse. Since then, he regularly goes for check-ups with a transfusion specialist. He visits the ED two more times in the same year due to similar symptoms, whereby acute coronary events are excluded. He often measures borderline elevated BP values, so the GP recommends the introduction of Prilen 1 x 2,5 mg, which the patient does not take regularly.

Discussion: The FVL gene mutation is a point mutation that leads to the loss of a factor V cleavage site, which increases its procoagulant activity. Heterozygous FVL mutation is the most common inherited thrombophilia in general, as well as in the individuals with VTE. A multidisciplinary approach to treatment is necessary because many patients with a laboratory-proven mutation may not require therapy. Only patients with a history of VTE require treatment. VTE in patients with FVL should be treated in the same way as the rest of the population, but those with recurrent VTE or thrombosis in unusual places may require long-term therapy.

Conclusion: Factor V Leiden is not a common disorder, but since there is a risk of developing VTE, GPs should be aware of this disorder, with careful and multidisciplinary patient monitoring and treatment that includes collaboration with transfusion specialists, internists, and gynecologists.

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Prikaz slučaja iz obiteljske medicine prema LACT modelu – burzitis lakta

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1. Akcija: Pacijent u dobi 65 godina. Umirovljenik, živi sa suprugom. Roditelji umrli u starosti, nepoznatog uzroka. Dugogodišnji hipertoničar, na terapiji amlodipinom 5 mg, dobro kontroliran. Ne puši, ne pije, pije šalicu kave dnevno, dosta se kreće, šeta i vozi bicikl. Dolazi u ordinaciju jer je unazad pet dana na lijevom laktu primijetio izraslinu veličine jajeta. Ne žali se na bolove. Negira traumatski događaj. U području lijevog lakta oteklina, mekana na dodir, bezbolna, bez znakova upale. Kliničkim pregledom utvrđeno je da se radi o neinflamiranom burzitisu lakta te se ambulantno odluči učiniti aspiracija sadržaja. Nakon dezinfekcije područja lakta (jodom) pristupi se aspiraciji iglom. Dobije se oko 6 ml seroznog sadržaja. Pacijentu se savjetuje nošenje elastičnog zavoja tijekom dva dana, poštedni položaj lakta (blaga fleksija) te mirovanje. U slučaju bolova po potrebi popiti neki od nesteroidnih antireumatika.

2. Osvrt na učinjeno: Pacijent se javio u ordinaciju zbog otekline u području lijevog lakta. Nije bilo traume. Oteklina je mekana na dodir, bez izražene bolnosti. Ambulantno se učini aspiracija sadržaja.

3. Edukativna korist iz primjera: Kronična upala burza nastaje dugotrajnim mehaničkim nadražajem burze, ponovljenim udarcima, pritiskom, trenjem, ponavljanim pokretima, taloženjem metaboličkih produkata ili kombinacijom navedenoga. Najčešće nastaje u području lakatnog i koljenog zgloba. U slučaju evidentne, intenzivnije traume bolest može početi akutno i prijeći u kroničnu fazu ako se iritacija burze nastavi. Češće, oboljenje ima od početka kroničan tijek izazvan mikrotraumama. Inflamacija zahvaća sinovijalnu membranu burze. Dolazi do izljeva serozne tekućine u burzu. Burza se povećava, njezini zidovi zadebljaju uz pojavu otoka i bolova pri krajnjim amplitudama pokreta. Klinička slika je karakterizirana bolnom osjetljivosti burze, nerijetko edemom, a kod upalnih crvenilom kože i toplinom.

Fluktuacija unutar otekline govori o kroničnoj traumi. Potvrdu dijagnoze kod upalnih burzitisa može nam dati laboratorijski nalaz – ubrzana sedimentacija, povišeni leukociti s neutrofilijom. RTG snimka je obvezna radi isključenja traumatskih promjena ili kalcifikacijskog tendinitisa. Od ostalih pretraga može se raditi pregled punktata mikrobiološki ili druge analize koje će pokazati taloženje urata. Kod aseptičkog burzitisa liječenje obuhvaća mirovanje i poštedu od fizičkih aktivnosti, izbjegavati izravan pritisak na zahvaćeni zglob, te primjenu leda u prvih 24 – 48 sati radi smirivanja upale i otekline. Punkcija uz instiliranje kortikosteroida s lokalnim anestetikom i evakuacija sadržaja česta je procedura.

4. Oblikovanje alternativnih puteva djelovanja: Burzitis može recidivirati. U tom bi slučaju bilo uputno u potpunosti odstraniti burzu koja izaziva tegobe. Kirurški zahvat obavlja se u bolničkim uvjetima.

Zaključak: Kada se radi o neinflamiranom burzitisu, bez bolova, LOM ima kompetencije i mogućnosti obaviti aspiraciju burze. Nije potrebno pacijente uputiti bolničkom specijalistu. Češće izvođenje zahvata male kirurgije u ambulanti OM-a može bitno unaprijediti stručnu razinu i skrb o pacijentima, te se predlaže što češća primjena. Uvođenje MKZ-a prihvatljivo je i za pacijente i za LOM-a, a istovremeno kao ishod ima bolju skrb o pacijentima. Preduvjet za izvođenje MKZ-a jest dostatna edukacija i dostatna materijalna opremljenost.

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Report of cases from family medicine according to the lact model – bursitis of the elbow

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I1. Action: A retired, 65-year-old patient lives with his wife. Parents died in old age, of unknown causes. Long-term hypertensive, on amlodipine 5mg therapy, well controlled. He does not smoke, nor drink. He has a cup of coffee a day, he is active, walks and rides a bike. He comes to the physician's office because 5 days before that, he noticed a growth on his left elbow the size of an egg. He does not complain of pain and denies a traumatic event. In the area of his left elbow, there is a swelling, soft to the touch, painless, without signs of inflammation. The clinical examination determines that it is a non-inflamed bursitis of the elbow, and it is decided to perform an aspiration of the contents on an outpatient basis. After disinfecting the elbow area (with iodine), an aspiration with a needle is performed. About 6ml of serous content is obtained. The patient is advised to wear an elastic bandage for two days, keeping his elbow in slight flexion, and rest. In case of pain, if necessary, he is advised to take one of the non-steroidal antirheumatic drugs.

2. Review of what has been done: The patient comes to the physician's office because of a swelling in the area of his left elbow. The swelling is not due to trauma, it is soft to the touch, and without pronounced pain. Aspiration of contents is performed on an outpatient basis.

3. Educational benefit from the example: Chronic inflammation of the bursa may be caused by long-term mechanical stimulation of the bursa, repeated blows, pressure, friction, repeated movements, deposition of metabolic products or a combination of the above. It most often occurs in the area of the elbow and knee joints. In the case of evident, more intense trauma, the disease may begin acutely and get into a chronic phase if the irritation of the bursa continues. More often, the disease has a chronic course from the beginning caused by microtraumas. Inflammation affects the synovial membrane of the bursa. There is an effusion of serous fluid into the bursa. The bursa increases, its walls thicken with the appearance of swelling and pain at extreme range of motion. The clinical picture is characterized by painful tenderness of the bursa, often edema, and in inflammatory cases by redness of the skin and warmth to the touch. Fluctuation within the swelling indicates chronic trauma. Laboratory findings can confirm the diagnosis of inflammatory bursitis − accelerated SE, elevated L with neutrophilia. An X-ray is mandatory to rule out traumatic changes or calcification tendinitis. Among other tests, a microbiological examination of the punctate or other analyses can be performed that will show the deposition of urate. In case of aseptic bursitis, treatment includes rest and avoiding physical activities and a direct pressure on the affected joint, while also applying ice in the first 24-48 hours to reduce the inflammation and swelling. Injecting corticosteroids with local anesthetic and evacuating the contents is a common procedure.

4. Alternative action: Bursitis can recur. In that case, it would be advisable to completely remove the bursa. The surgical procedure is performed in hospital conditions.

Conclusion: When it comes to non-inflamed bursitis, without pain, the family physician has the competence and the ability to perform the bursa aspiration. It is not necessary to refer patients to a hospital specialist. More frequent minor surgery procedures in the FM outpatient clinics can significantly improve the professional level and care of patients, and it is suggested to perform them as often as possible. The introduction of MSPs is acceptable to both the patients and the FPs, and at the same time it results in better patient care. A prerequisite for performing MSP is sufficient education and equipment.

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Na vrijeme otkrivena plućna embolija

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Uvod: Plućna embolija je okluzija plućne arterije trombom ili embolusom. Simptomi i znakovi plućne embolije su nespecifični. Najčešće su to nagla pojava kašlja, hemoptize, dispneje, pleuralne boli, tahipneje, tahikardije, hipotenzije ili kardiorespiracijski zastoj. Dijagnoza se postavlja pomoću CT angiografije. Plućna embolija liječi se antikoagulansima, sistemskim trombolitičima ili se uklanja kirurški.

Prikaz slučaja: Pacijentica u dobi od 56 godina javila se u ordinaciju obiteljske medicine zbog bolova i ukočenosti u vratnoj kralježnici sa širenjem u lijevo rame te boli u području lijeve strane prsnog koša, srednje aksilarne linije, razine 4. – 6. rebra sa širenjem pod lijevu lopaticu pri pomicanju prsnog koša. Druge je tegobe negirala. Kompletnim fizikalnim pregledom uočen je diskretno smanjen opseg pokreta u vratnoj kralježnici, napeta cervikalna paravertebralna muskulatura te je pokrete u ramenu izvodila u punom opsegu. Auskultacijski na srcu se uočila tahikardija, nad plućima lijevo bazalno nešto slabije čujan disajni šum, u EKG-u sinus tahikardija sa 110 otkucaja u minuti, ekstremiteti bez edema, uredno palpabilne periferne pulsacije, tlak 135/85 mmHg, saturacija 96 %. S obzirom na simptome i sumnjiv fizikalni nalaz pacijentica je upućena na OHBP. Nakon fizikalnog pregleda na hitnom prijmu, bez dalje dijagnostičke obrade, pacijentici je ordinirana intramuskularna terapija Dexamethason, Naklofen, Normabel. Pacijentica je sljedeći dan ujutro zvala da je počela iskašljavati male količine krvi, bol u vratnoj kralježnici ostala je i dalje prisutna uz blagu bol u prsištu, kao dan ranije. Upućena je opet na OHBP, što je odbila, pa je poslana na hitno vađenje krvi i RTG srca i pluća u Dom zdravlja, gdje je specijalist radiologije odmah očitao nalaz te je uočeno lijevo bazalno parakardijalno zasjenjenje plućnog parenhima prvenstveno po tipu pneumoničnog infiltrata. Na nalazu krvi CRP je porastao do 70, a leukociti 10,4. Pacijentica je bila kontaktirana telefonski i ponovno upućena na OHBP, odakle su je poslali kući s internom uputnicom za pulmološki pregled sljedećeg dana. Na pregledu pulmologa postavljena je sumnja na PTE te je bila zaprimljena na Zavod za bolesti srca i krvnih žila, gdje je učinjena hitna CT angiografija plućnih arterija. Nalaz s defektima punjenja uz izostanak opacifikacije segmentnog ogranka za gornji režanj te s rubnim defektima punjenja preostalih segmentnih ogranaka za donji lijevi režanj govorio je u prilog plućne embolije u fazi rekanalizacije te infarktu u lateralnom segmentu gdje su opisani areali konsolidacije plućnog parenhima. Na bolničkom liječenju obavljena je obrada, pri čemu su isključeni tumorski procesi, no kasnije je dokazana trombofilija. Uveden je roteas 1 x 60 mg doživotno.

Zaključak: Preklapanje kliničke slike, neadekvatno i brzo pregledavanje pacijenta te pacijentovo neadekvatno davanje anamnestičkih podataka može uzrokovati da pregled i dijagnostika pacijentova stanja dovedu do brzopletog i krivog zaključka te krive terapije. Katkad je potrebno uz pažljivo slušanje i ispitivanje pacijenta napraviti kompletan pregled te se osloniti na vlastiti liječnički instinkt.

Timely diagnosis of pulmonary embolism

Keywords: CT angiography, hemoptysis, pulmonary embolism, thrombophilia.
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Introduction: Pulmonary embolism is the occlusion of the pulmonary artery by a thrombus or embolus. The symptoms and signs of pulmonary embolism are non-specific. Most commonly, they include sudden onset of cough, hemoptysis, dyspnea, pleural pain, tachypnea, tachycardia, hypotension, or cardiorespiratory arrest. It is diagnosed by CT angiography. Pulmonary embolism is treated with anticoagulants, systemic thrombolytics, or surgical removal.

Case report: A 56-year-old female visits her general practitioner because of pain and stiffness in the cervical spine spreading to her left shoulder, and pain in the left side of the chest, mid-axillary line, at the height of 4-6th rib with expansion under the left scapula when she moves the chest. She does not report any other symptoms. A complete physical examination reveals a discrete limited range of motion of the cervical spine and tight cervical paravertebral musculature. She performs full shoulder movements. Auscultation of the heart reveals tachycardia, a slightly fainter audible breath murmur over her lungs on the left basal side, ECG reveals sinus tachycardia at 110 beats per minute, extremities without edema, neat palpable peripheral pulsations, pressure 135/85 mmHg, saturation 96%. Considering the symptoms and suspect physical findings, the patient is referred to the Unified emergency hospital admission (UEHA). After the physical examination at the UEHA, the patient is prescribed intramuscular therapy with dexamethasone, naclofen, and Normabel. No further diagnostic processing is done. The following morning, the patient calls to report that she has started coughing up small amounts of blood, the cervical pain is still present with mild chest pain as the day before. She is referred to the UEHA, which she refuses, so she is admitted to the health center for an urgent blood draw and a cardiac and pulmonary x-ray, where the radiology specialist immediately reads the findings and observes a left basal paracardial shadowing of the lung parenchyma, primarily due to the nature of the pneumonic infiltrate. In blood work, the CRP is 70 and the leukocyte count 10.4. The patient is contacted by telephone and referred to UEHA, from where she is sent home with an internal referral for a pulmonary examination the following day. On examination by the pulmonologist, PTE is suspected, and she is referred to the Department for Heart and Vascular Diseases, where an urgent CT angiography of the pulmonary arteries is performed. The findings of filling defects with absent opacification of the segmental branch for the upper lobe and marginal filling defects of the remaining segmental branches for the left lower lobe are suggestive of pulmonary embolism in the recanalization phase and infarction in the lateral segment, where areas of consolidation of the pulmonary parenchyma are described. The patient receives treatment in the hospital, tumor processes are excluded, but thrombophilia is subsequently detected. Roteas 1x60 mg for life is introduced.

Conclusion: Overlapping syndromes, inadequate and rapid examination of the patient, and inadequate reporting of anamnestic data by the patient may cause the examination and diagnosis of the patient's condition to lead to hasty and incorrect conclusions and inadequate therapy. Sometimes it is necessary to perform a complete examination with careful listening and questioning of the patient and rely on one's medical instincts.

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Sinkopa – neurološki ili kardiovaskularni poremećaj?

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Ključne riječi: sinkopa, epileptički napadaj, sick sinus sindrom
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Uvod: Sinkopa je iznenadni, kratkotrajni gubitak svijesti s gubitkom položajnog tonusa, nakon kojeg slijedi spontani oporavak. Konvulzije mogu uzrokovati iznenadni gubitak svijesti, ali se ne smatraju sinkopom. One se uzimaju u obzir kod bolesnika koji dolazi zbog jasne sinkope, a s nejasnom anamnezom, jer neke konvulzije ne uzrokuju toničko-kloničke grčeve. *Sick sinus* sindrom je nesposobnost sinusnog čvora da normalno stvara podražaje. Očituje se kao sinusna bradikardija ili sinusni arest s posljedičnim gubitkom svijesti.

Cilj je rada prikazati važnost dobre anamneze prilikom pregleda kako bi se simptomi koji se javljaju u više poremećaja pravilno prepoznali kao pokazatelj disfunkcije određenog sustava te pravovremeno započelo ispravno liječenje.

Prikaz slučaja: Muškarac u dobi 48 godina, bez kroničnih bolesti, javlja se u ordinaciju obiteljske medicine zbog epizode sinkope. Prvu epizodu sinkope imao je prije pet godina, a od tada je imao sinkopu u šest navrata, svaki put prilikom napora, zbog čega je započeo kardiološku obradu. EKG-om nije zabilježena aritmija. Učinjen mu je UZV srca i koronarografija, nalazi bez patologije. Zbog ponavljanih sinkopa implantiran mu je ugradbeni srčani monitor (engl. *implantable loop recorder*) koji redovito kontrolira, svaki put bez zabilježene patologije. Prije tri godine za vrijeme ergometrije izgubio je svijest na deset minuta, bio je bez pulsa, s kardiorespiratornim arestom. Nakon reanimacije došlo je do oporavka, a pregledom ugradbenog srčanog monitora nije bilo zabilježene aritmije. S obzirom na to da je za vrijeme aresta imao grčenje mišića, započeo je neurološku obradu pod sumnjom na epilepsiju. Od neurološke obrade učinjen je CT i MR mozga, koji su bili uredni, te EEG, koji je pokazao difuzno dizritmički promijenjen nalaz s lateralizacijom desno centrotemporoparijetalno, bez paroksizama; s obzirom na anamnestički podatak da je sinkopa bila praćena trzanjem mišića, uvedena mu je antiepileptička terapija, no gubitci svijesti su se nastavili. Kod sljedećeg gubitka svijesti pregledom ugradbenog srčanog monitora zabilježeno je nekoliko pojedinačnih VES i VES u paru, a u 12 navrata zabilježena je tahikardija frekvencije 150 – 160/min. Zbog toga je indicirana elektrofiziološka studija. Prilikom ispitivanja nije zabilježena klinička tahikardija. Pacijent nedugo zatim ponovno ima gubitak svijesti zbog čega dolazi na pregled u ambulantu u pratnji supruge. Detaljnom anamnezom ustanovljeno je da sinkopa nije imala obilježja epileptičkog napadaja te je od obiteljskog liječnika upućen na kontrolu kardiologu na očitanje ugradbenog srčanog monitora. U vrijeme sinkope uočena je asistolična stanka u trajanju duljem od 10 sekunda zbog čega je pacijent hitno hospitaliziran i indicirana je ugradnja trajnog elektrostimulatora. Nakon zahvata pacijent je otpušten s dijagnozom sindroma bolesnog sinusnog čvora s ugrađenim trajnim elektrostimulatorom. Redovito se kardiološki kontrolira, a prilikom kontrola u ambulanti navodi da se dobro osjeća i da se epizode sinkope nisu ponavljale.

Zaključak: Medicina je posebna po tome što isti simptomi mogu biti znakovi poremećaja različitih organskih sustava. Ponekad su simptomi toliko slični da ih je teško razlikovati i dovoljno dobro opisati da bi na temelju opisa bila jasna dijagnoza. Zbog toga je važna dobra i temeljita anamneza, dobra suradnja bolesnika i njegove obitelji s obiteljskim liječnikom te dobra suradnja primarne i sekundarne zdravstvene zaštite kako bi se što prije jasno utvrdila dijagnoza i započelo liječenje.

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Syncope – neurological or cardiovascular disorder?

Keywords: Syncope, Convulsion, Sick sinus syndrom
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Introduction: Syncope is a sudden, short-term loss of consciousness with a loss of postural tone, followed by spontaneous recovery. Convulsions can cause a sudden loss of consciousness, but are not considered syncope. They are taken into account in a patient who comes for clear syncope, but with an unclear anamnesis, because some convulsions do not cause tonic-clonic spasms. Sick sinus syndrome is the inability of the sinus node to generate puls normally. It manifests as sinus bradycardia or sinus arrest with a consequent loss of consciousness.

The aim of this study is to show the importance of a good medical anamnesis during the examination, so that the symptoms that occur in several disorders can be properly recognized as indicators of a certain system dysfunction, and that the proper treatment can be started.

Case report: A 48-year-old patient, without chronic diseases, reports to the family physician because of an episode of syncope. He had the first episode of syncope 5 years before that, and since then he has had syncope 6 times, each time during exertion, which is why he started a cardiological procedure. No arrhythmia was recorded by ECG. He had an ultrasound of the heart and a coronary angiography, which found no pathology. Due to repeated syncopes, he was implanted with a loop recorder, which he monitored regularly, each time without recorded pathology. Three years ago, during ergometry, he lost consciousness for 10 minutes, had no pulse, and had a cardiorespiratory arrest. After resuscitation there was a recovery, and no arrhythmia was recorded when examining the loop recorder. Given that he had muscle spasms during the arrest, he began a neurological procedure under the suspicion of epilepsy. As for neurological examination, a CT and MRI recordings of the brain were performed, which were normal.An ECG recording was also performed and it showed a diffusely dysrhythmically altered finding with right centrotemporoparietal lateralization, without paroxysms; given the anamnestic information that the syncope was accompanied by muscle twitching, he started with antiepileptic therapy, but the losses of consciousness continued. At the next loss of consciousness, several individual VES and VES in pairs were recorded by examining the loop recorder, and on 12 occasions tachycardia with a frequency of 150-160/min was recorded. Therefore, an electrophysiological study was indicated. No clinical tachycardia was noted during the examination. Not long after, the patient lost consciousness again, which is why he came to the infirmary accompanied by his wife. A detailed anamnesis revealed that the syncope had no epileptic features, and the family physician referred him to a cardiologist for a loop recorder reading; an asystolic pause lasting more than 10 seconds was observed during the syncope, for which the patient was urgently hospitalized with indications to have a permanent electrostimulator installed. After the procedure, the patient was discharged with a diagnosis of sick sinus syndrome with an implanted permanent electrostimulator. He is regularly monitored cardiologically and during check-ups in the infirmary he states that he feels well and that episodes of syncope have not recurred.

Conclusion: Medicine is special for the fact that the same symptoms can be signs of disorders of different organ systems. Sometimes the symptoms are so similar that it is difficult to distinguish between them and describe them well enough to make a clear diagnosis based on the description. This is why it is important to take a good and thorough medical history, to have a good cooperation between the patient and their family and the family physician, and a good cooperation between primary and secondary health care in order to establish a clear diagnosis and start the treatment.

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Fitofotodermatitis – možemo li predvidjeti tijek bolesti? Javite se svom liječniku na vrijeme!

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Ključne riječi: fitofotodermatitis, komplikacija, anamneza, dijagnoza, psoralen
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Uvod: Fitofotodermatitis je neimunološka fototoksična kožna erupcija uzrokovana izlaganjem fotosenzibilizirajućim tvarima furokumarinima (psoralen) prisutnima u agrumima, celeru, divljem pastrnjaku, vrtnoj mrkvi itd. i izlaganjem Sunčevoj svjetlosti (osobito ultraljubičastim A zrakama, 320 – 400 nm) (2). Ovo izlaganje dovodi do erupcija kože otprilike nakon 24 sata. Reakcija fitofotodermatitisa vrlo je varijabilna. Karakteristike osipa mogu varirati od jednostavnog eritema do vezikula ili bula (3). Posljedična hiperpigmentacija uzrokovana psoralenom stimuliranom hiperprodukcijom melanina može trajati tjednima do mjesecima. Varijabilnost ovisi o količini fotosenzibilizirajućeg sredstva, duljini izlaganja, vrsti tvari koja sadrži psoralen i načinu kontakta (1).

Cilj: Svratiti pozornost na ovo stanje, na važnost postavljanja dijagnoze i pravovremenog započinjanja odgovarajuće terapije.

Prikaz slučaja: Bolesnik u dobi 57 godina javio se s obostranim edemom stopala koji se širio na potkoljenice, eritematoznim promjenama nepravilnog oblika, diseminiranima i ponekad konfluentnima. Veće promjene uzrokuju eroziju s tamnosmeđom do crnom korom, jako slijepljenom, koja krvari kada je pokušate ukloniti. Promjene na koži počele su prije dva tjedna s eritemom, mjehurićima i edemom te se bolesnik, misleći da je posrijedi alergija, liječio antihistaminicima, ali se stanje samo pogoršalo. Nakon detaljne anamneze (nije imao osobnu ili obiteljsku anamnezu fotosenzitivnosti i, što je najvažnije – radio je u svojem vrtu) i analize krvi, koja je pokazala tek blago povišenje bijelih krvnih zrnaca, odmah smo započeli sustavnu terapiju steroidima, sustavnu i lokalnu antibakterijsku terapiju tijekom 14 dana. Stanje se nije poboljšalo, pa je pacijent poslan dermatologu na dalje pretrage. Rezultati testa krvi, brisa rane i serologije na hepatitis bili su normalni, a biopsija kože pokazala je livedoidni vaskulitis. Liječen je sustavnom terapijom kortikosteroidima, pentoksifilinom, lokalnim antibioticima i steroidnom terapijom mjesec dana uz značajno lokalno poboljšanje.

Rasprava: Vrlo je važno da liječnici budu svjesni fitofotodermatitisa jer su karakteristike osipa vrlo varijabilne, a dijagnoza je povremeno teška jer eritem i vezikule u fitofotodermatitisu mogu oponašati atopijski dermatitis, reakciju preosjetljivosti tipa IV ili kemijske opekline. Obično osip ne izaziva svrbež; svrbež bi trebao potaknuti razmatranje drugih dijagnoza. Komplikacije su rijetke (2). U većini slučajeva ključ za postavljanje dijagnoze jest dobro uzeta detaljna anamneza.

Zaključak: Obiteljski liječnici trebali bi biti upoznati s ovim osipom i biti sigurni u postavljanju dijagnoze kada su pacijenti prisutni u jedinici primarne zdravstvene zaštite. Vrlo je važno postaviti dijagnozu i započeti liječenje kako bi se spriječile komplikacije kao u našem slučaju.

Phytophotodermatitis – can we predict the course of the disease? Call your doctor on time

Key words: phytophotodermatitis, complication, anamnesis, diagnosis, psoralen
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Introduction and aim Phytophotodermatitis is a nonimmunological phototoxic cutaneous eruption caused by an exposure to photosensitizing substances, furocoumarins (psoralen) present in citrus fruits, celery, wild parsnip, garden carrots, etc and sunlight (especially ultraviolet A rays, 320-400 nm)[2]. This exposure leads to skin eruptions approximately after 24 hours. The phytophotodermatitis reaction is highly variable. Rash characteristics can range from simple erythema to vesicles, or bullae[3]. Ensuing hyperpigmentation caused by psoralen-stimulated melanin hyperproduction, can last weeks to months. The variability is dependent on the quantity of photosensitizing agent, the length of exposure, the type of the psoralen-containing substance and the method of contact[1]. **The aim_** of this paper is to bring attention to this condition and to the importance of making the diagnosis and starting proper therapy on time.

Case report A 57 years old male patient presents with bilateral edema of his feet spreading to the lower legs, erythematous changes with irregular shape, disseminated and sometimes confluent. Larger changes cause erosion with a dark brown to black crust, strongly adherent, bleeding when you try to remove it. The skin changes started 2 weeks before, with erythema, blisters and edema and, believing it was allergy, he treated himself with antihistaminics, but it only got worse. After detailed anamnesis (no personal or family history of photosensitivity and most importantly – he used to work in his garden), blood test shows only a mild elevation of the white blood cells and we immediately start therapy with systemic steroid therapy, and systemic and local antibacterial therapy for 14 days. The condition does not improve, so the patient is sent to a dermatologist for further examination. The results from blood test, swab from the wound, and serology for hepatitis are all normal and the skin biopsy shows Livedoid vasculitis. He is treated with systemic corticosteroid therapy, pentoxifylline, local antibiotic and steroid therapy for one month with a significant local improvement.

Discussion It is very important for the physicians to be aware of phytophotodermatitis because the rash characteristics are highly variable and diagnosis is occasionally difficult to set because erythema and vesicles in phytophotodermatitis may mimic atopic dermatitis, type IV hypersensitivity reaction, or chemical burns. Usually, the rash is nonpruritic; pruritus should prompt consideration of other diagnoses. The complications are rare[2]. In most cases the key for making the diagnosis is well taken detailed medical history.

Conclusion Family physicians should be familiar with this rash and be comfortable making diagnoses when patients present in primary care units. It is very important to make the diagnosis and start the treatment to prevent complications as in our case.

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Multipli mijelom – bolest s puno lica

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Uvod s ciljem: Multipli mijelom zloćudna je bolest koštane srži karakterizirana neoplastičnom proliferacijom plazma stanica. Ubraja se u rijetke bolesti. Može se manifestirati nespecifičnim simptomima, a u 20 % slučajeva bolest je pri postavljanju dijagnoze asimptomatska. U bolesnika s anemijom, koštanom boli, porastom kreatinina i sedimentacije, hiperkalcemijom i/ili učestalim infekcijama treba posumnjati na multipli mijelom. Cilj je prikazati slučaj bolesnice oboljele od multiplog mijeloma i svratiti pozornost na bolest koja često dugo ostane neprepoznata.

Prikaz slučaja: Šezdesetogodišnja pacijentica bila je hitno upućena od obiteljskog liječnika na OHBP zbog sumnje na multipli mijelom. Smetnje su počele četiri mjeseca ranije bolovima u leđima pri čemu je radiološki utvrđen prijelom Th10 i Th12 kralježaka kojima nije prethodila trauma. Pregledana je od obiteljskog liječnika, fizijatra i neurokirurga te je postavljena sumnja na osteoporozu i ordinirano nošenje ortoze. Zbog progresije bolova nakon dva mjeseca učinjeni su kontrolni radiogrami torakalne kralježnice te su evidentirane novonastale frakture Th6 – Th9 i L1 kralježaka. Neposredno prije prijma u bolnicu u laboratorijskim nalazima krvi bili su utvrđeni povišena sedimentacija, kalcij i β-2 mikroglobulin. Ostali krvni nalazi i elektroforeza proteina bili su uredni. Tijekom hospitalizacije pratila se hiperkalcemija, blaža leukocitoza, trombocitoza, hipogamaglobulinemija IgA i IgM, prisutnost monoklonske frakcije slobodnog lakog lanca IgG kapa te prisutnost Bence-Jonesova proteina u urinu. Punkcijom koštane srži i biopsijom kosti potvrđena je dijagnoza. CT cijelog tijela pokazao je multiple osteolitičke lezije, a MR multiple zone patološkog infiltrata s prodorom u spinalni kanal na razini Th1 i L2 kralješka. Po prijmu provodi se suportivno liječenje (hidracija, analgetska terapija, gastroprotekcija, tromboprofilaksa, antivirusna profilaksa aciklovirom). Započeto je kemoterapijsko liječenje i liječenje zolendronatnom kiselinom. Provedena je palijativna radioterapija torakalne i lumbalne kralježnice. Iz bolnice je otpuštena s preporukom antibiotske i antivirusne profilakse, uzimanja alopurinola i enteralnog pripravka. Nakon šestog ciklusa kemoterapije utvrđena je kompletna remisija i provedeno liječenje autolognom transplantacijom perifernih matičnih stanica.

Rasprava: Iako su pacijentici detektirane višestruke patološke frakture, prošla su četiri mjeseca od prvog javljanja liječniku do trenutka upućivanja na bolničku obradu i liječenje multiplog mijeloma. Bolesnici s mijelomom u prosjeku traže liječniku pomoć mjesec dana od pojave simptoma, a 25 % njih nakon više od tri mjeseca. Od javljanja obiteljskom liječniku do postavljanja dijagnoze u prosjeku prođe 3,5 mjeseci, a u 25 % slučajeva više od osam mjeseci. Simptomi uznapredovale bolesti javljaju se i do godinu dana prije postavljanja dijagnoze. Razlog je tomu taj što su rani simptomi bolesti nespecifični i često se pripisuju drugim dobroćudnim stanjima. Pri postavljenoj sumnji na bolest potrebno je učiniti elektroforezu proteina i test urina na Bence-Jonesov protein te pretragu monoklonskih slobodnih lakih lanaca u serumu i u slučaju loših nalaza oboljele hitno uputiti hematologu.

Liječnicima obiteljske medicine pritom može pomoći RAKK – putokaz za ranu dijagnozu multiplog mijeloma. To su smjernice koje služe kao pomoć u dijagnozi bolesti, a naglašavaju četiri ključne značajke važne za rano prepoznavanje bolesti: renalno oštećenje, anemiju, kalcij (povišen) i kosti (oštećene).

Zaključak: Liječnici obiteljske medicine imaju važnu ulogu u prepoznavanju znakova multiplog mijeloma te u pravovremenoj i točnoj dijagnostičkoj obradi i liječenju bolesti.

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Multiple myeloma – Illness with many faces

Keywords: Multiple myeloma, CRAB, family physician
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Introduction and aim: Multiple myeloma is a malignant disease of bone marrow characterized by neoplastic proliferation of plasma cells. It is considered to be a rare disease, which can be manifested by lots of non-specific symptoms, and in 20% of cases it is asymptomatic at the time of setting a diagnosis. Multiple myeloma should be suspected in patients with anemia, bone pain, increased creatinine and sedimentation, hypercalcemia, and/or frequent infections. The aim of this paper is to present a case of the patient with multiple myeloma and draw attention to a disease that often remains unrecognized for a long time.

Case report: a 60-year-old female patient is urgently referred by her family physician to Accident & Emergency Department, due to suspicion of multiple myeloma. Problems started four months earlier with back pain, when fractures of the Th10 and Th12 vertebrae were found on X-rays. The fractures were not preceded by trauma. She was examined by the family physician, a physiatrist and a neurosurgeon. As osteoporosis was suspected, she was given an orthosis. Due to a progression of pain, control X-rays of the thoracic spine are performed after two months, and new fractures of the Th6-Th9 and L1 vertebrae are found. Immediately before her admission to hospital, laboratory blood tests show increased sedimentation, calcium and β-2 microglobulin. The rest of blood tests and protein electrophoresis is normal. During hospitalization, hypercalcemia is monitored, and mild leukocytosis, thrombocytosis, hypogammaglobulinemia of IgA and IgM. The presence of the monoclonal fraction of the free light chain of the IgG cap and the presence of Bence Jones protein in the urine are detected. A bone marrow puncture and bone biopsy confirm the diagnosis. CT of the whole body shows multiple osteolytic lesions, and MR shows multiple zones of pathological infiltrate with a penetration into the spinal canal at the level of Th1 and L2 of the vertebra. Upon admission, supportive treatment is conducted (hydration, analgesic therapy, gastroprotection, thromboprophylaxis and antiviral prophylaxis with acyclovir). Chemotherapy treatment is started. Zolendronic acid is introduced. Palliative radiotherapy of the thoracic and lumbar spine is performed. She is discharged from the hospital with recommendation of antibiotic and antiviral prophylaxis, taking allopurinol and enteral nutrition formulas. After the 6th cycle of chemotherapy, complete remission is established and treatment with autologous transplantation of peripheral stem cells is conducted.

Discussion: Although multiple pathological fractures were detected in the patient, four months passed from the first visit to her physician to the moment of referral for hospital treatment and treatment for multiple myeloma. On average, patients with myeloma seek help from their physician one month after the onset of symptoms, and 25% of them do it after more than 3 months. It takes an average of 3.5 months from the visit to the family physician to the diagnosis, and in 25% of cases it takes more than 8 months. Symptoms of advanced disease appear up to a year before the diagnosis is set. The reason lies in the fact that the early symptoms of the disease are non-specific and are often attributed to other benign conditions. If the disease is suspected, protein electrophoresis and a urine test for Bence-Jones protein as well as a test for monoclonal free light chains in the serum should be performed. In case of positive results, the patient should be immediately referred to a hematologist.

In their work, family physicians can be helped by CRAB - a guide for an early diagnosis of multiple myeloma. These are the guidelines with the purpose of helping in diagnosing the disease. They emphasize four key features important for early recognition: Renal failure, Anemia, Calcium (elevated) and Bones lesions.

Conclusion: Family physicians have an important role in recognizing the signs of multiple myeloma and a timely and accurate diagnostic processing and treatment of the disease.

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Erythema exsudativum multiforme

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Ključne riječi: Erythema exsudativum multiforme, HSV, promjene nalik na metu
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Uvod: *Erythema exsudativum* multiforme je upalna reakcija kože koja se očituje naglim izbijanjem eritematoznih makula, papula, urtika, vezikula ili bula prvenstveno na distalnim dijelovima ekstremiteta i licu. Može biti zahvaćena i sluznica usne šupljine. Najčešći uzrok je infekcija HSV-om. Ostali uzroci su lijekovi, cjepiva i druge virusne bolesti. Najteži oblici bolesti uključuju Stevens-Johnsonov sindrom i toksičnu epidermalnu nekrolizu odnosno Lyellovu bolest koja zahtijeva obveznu hospitalizaciju.

Prikaz slučaja: Pacijentica u dobi 74 godine javila se u ordinaciju obiteljske medicine zbog pojave bula na dlanovima i tabanima uz bolnost i svrbež. Tri dana prije dolaska u ordinaciju primijetila je pojavu sitnih crvenkastih makula na dlanovima i tabanima koje su bile praćene svrbežom. Tjedan dana prije kožnih promjena imala je grlobolju, nije bila febrilna. Uzimala je Strepfen sprej, Prospan sirup i ibuprofen. U dermatološkom statusu pacijentice na dlanovima i tabanima vidljive su gusto smještene bulozne promjene. *Erythema* multiforme karakteristična je po promjenama nalik na metu. Promjene su prstenaste s ljubičastim središtem i ružičastim rubom koji su razdvojeni blijedim prstenom. Sluznica usne šupljine i ostala koža su bez patoloških promjena. Na jeziku i usnama prisutne su manje erozije. Kod pacijentice je bolest mogla biti potaknuta infektom koji je preboljela ili nekim od preparata koje je uzimala za ublažavanje simptoma bolesti. Posavjetovana je o prestanku uzimanja navedenih preparata. Pacijentica je upućena u hitnu dermatološku ambulantu gdje je pregledana te je na osnovi kliničke slike postavljena dijagnoza *Erythema exsudativum bullosum* multiforme. Od dodatnih pretraga napravljen je brzi antigenski test na COVID-19, koji je bio negativan, bris grla, gdje je izoliran beta-hemolitički streptokok skupine A, te urinokultura, koja je bila sterilna. Predložena je hospitalizacija, no pacijentica ju je odbila. Nastavlja se liječiti u ambulanti LOM-a. Liječena je deksametazonom u dozi 8 mg i. m. pet dana. Od ostale suportivne terapije pacijentica je uzimala *per os* bilastin tablete 20 mg dva puta na dan. Prije primjene lokalne terapije bilo je potrebno sterilnom iglom otvoriti sve bule te evakuirati sadržaj, o čemu je pacijentica educirana. Lokalno su primjenjivane kupke u hipermanganu i betametazon mast u kombinaciji s gentamicinom. Usnu šupljinu ispirala je heksetidin otopinom. Zbog izoliranog beta-hemolitičkog streptokoka skupine A ordiniran je fenoksimetilpenicilin tbl. 1500000 IU tijekom deset dana. Lokalni je nalaz sa svakim kontrolnim pregledom bio u poboljšanju, a nakon mjesec dana promjene su se u potpunosti povukle.

Zaključak: Točna etiologija nastanka *Erythema* multiforme još uvijek je nejasna. Prepoznavanje i uklanjanje etioloških uzročnika ključni je korak u liječenju *Erythema* multiforme. U bolesnika s čestim recidivima uzrokovanima HSV-om može biti indicirano antivirusno liječenje. Rana dijagnoza i dalje je ključna za brzo započinjanje odgovarajućeg liječenja i praćenja.

Erythema exudativum multiforme

Keywords: Erythema exudativum multiforme, HSV, target-like lesions
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Introduction: Erythema exudativum multiforme is an inflammatory reaction of the skin that is manifested by a sudden eruption of erythematous macules, papules, urticaria, vesicles or bullae primarily on the distal parts of the extremities and face. Oral mucosa may be involved. The most common cause is HSV infection. Other causes are drugs, vaccines and other viral diseases. The most severe forms of the disease include Stevens-Johnson syndrome and toxic epidermal necrolysis, or Lyell's disease, which requires hospitalization.

Case report: A 74-year-old female patient comes to the general practitioner's office due to the appearance of bullae on her palms and soles with pain and itching. Three days before coming to the office, she noticed the appearance of small reddish macules on her palms and soles, which were accompanied by itching. A week before the skin changes, she had had a sore throat, she was not febrile. She used Strepfen spray, Prospan syrup and ibuprofen. In the dermatological status of the patient, densely located bullous changes are visible on the palms and soles. Erythema multiforme is characterized by target-like lesions. The lesions are ring-shaped with a purple center and a pink border separated by a pale ring. The mucous membrane of the oral cavity and the rest of the skin are free of pathological changes. Minor erosions are present on the tongue and lips. In patient's case, the disease could have been triggered by a pathogen she overcame or by some of the preparations she was taking to reduce the symptoms of the disease. She is advised to stop taking the mentioned preparations. The patient is sent to the emergency dermatological clinic, where she is examined. Based on her clinical picture she is diagnosed with Erythema exudativum bullosum multiforme. Additional tests have included a rapid antigen test for COVID-19 (which is negative), a bacteriological throat swab (where group A beta hemolytic streptococcus is isolated), and a sterile urine culture. Hospitalization is advised, but the patient refuses. She continues to be treated through the general practicioner's office. She is treated with dexamethasone 8 mg i.m. once daily, for 5 days. From other supportive therapy, the patient uses per os bilastin tbl 20 mg twice a day. Before applying the local therapy, it is necessary to open all bullae with a sterile needle and evacuate the contents. The patiend is educated on how to do it. Baths in solution hypermanganese and betamethasone ointment in combination with gentamicin are applied locally. The oral cavity is rinsed with hexetidine solution. Due to the isolated beta hemolytic streptococcus group A the patient is prescribed phenoxymethylpenicillin tbl 1500000 IU once a day for 10 days. The clinical status is in regresion by every next examination, and after a month the pathologial changes completely disappear.

Conclusion: The exact etiology of Erythema multiforme is still unclear. Recognition and elimination of etiological causes is a key step in the treatment of Erythema multiforme. For patients with frequent recurrences caused by HSV, antiviral treatment may be indicated. Early diagnosis remains crucial for prompt initiation of appropriate treatment and follow-up.

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Anemije kod bolesnika s tipom 2 šećerne bolesti

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Ključne riječi: anemija, metformin, šećerna bolest tipa 2, komplikacije šećerne bolesti
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Uvod s ciljem: Šećerna bolest je kronična metabolička bolest koja predstavlja jedan od vodećih javnozdravstvenih problema današnjice. Loša kontrola glikemije narušava kvalitetu života te uzrokuje nastanak komplikacija, a jedna od mogućih je i anemija (1, 2). Dosadašnja istraživanja dovela su do zaključka kako bi se probir na anemije trebao koristiti u sklopu rutinske procjene dijabetičkih komplikacija. NHANES-III studija potvrdila je prisutnost anemije u čak 50 % pacijenata s tipom 2 šećerne bolesti i KBB-om, ali je i sama šećerna bolest rizik za anemiju bez obzira na postojanje KBB-a (3, 4). Ciljevi ovog istraživanja bili su utvrditi učestalost i vrstu anemija u osoba s tipom 2 šećerne bolesti te istražiti postojanje razlike s obzirom na dob, spol i terapiju.

Ispitanici i metode: Istraživanje je provedeno kao presječno. Uključeno je 78 bolesnika s tipom 2 šećerne bolesti liječenih u ambulantama obiteljske medicine u Domu zdravlja Osječko-baranjske županije u razdoblju od veljače do lipnja 2022. godine. Podatci su prikupljeni iz zdravstvenog kartona i laboratorijskih nalaza u sklopu redovitih kontrolnih pregleda i to: dob, spol, duljina trajanja šećerne bolesti, kronična terapija, glukoza natašte, HbA1c, Fe, UIBC, TIBC, hemoglobin, MCV, MCH, MCHC. Anemija je s obzirom na vrijednosti hemoglobina definirana kao blaga, umjerena i teška. Morfološki je s obzirom na MCV podijeljena na makrocitnu, normocitnu, mikrocitnu, a s obzirom na MCHC na hiperkromnu, normokromnu i hipokromnu. Etiološka je klasificirana na sideropeničnu, anemiju kronične bolesti, miješanu, nespecificiranu anemiju i anemiju bubrežne insuficijencije.

Rezultati: U istraživanju je sudjelovalo 78 bolesnika, 44 % muškaraca i 56 % žena, medijana dobi 71 godinu, medijana trajanja šećerne bolesti osam godina, od kojih je 19 % imalo anemiju. Medijan GUK-a natašte bio je 7,7 mmol/L, a HbA1c 6,95 %. Morfološki je najčešća vrsta anemije bila normocitna normokromna anemija (46,7 %), a etiološki su najčešće bile nespecifična i anemija kronične bolesti (60 %). Po karakteru su anemije bile blage ili umjerene. Prosječna dob bolesnika s anemijom bila je 12 godina veća od prosječne dobi bolesnika bez anemije (Mann-Whitney U, P = 0,03). Normocitna normokromna i hipokromna anemija značajnije su se češće pojavljivale u bolesnika starije životne dobi (Mann-Whitney U, P = 0,007 i P = 0,004), kao i miješana anemija (Mann-Whitney U, P = 0,04). Žene su činile 73,3 % bolesnika s anemijom, a nije pronađena statistički značajna razlika u vrsti ili etiologiji s obzirom na spol. Nije uočena razlika u učestalosti anemije s obzirom na liječenje šećerne bolesti monoterapijom ili kombiniranom terapijom. Peroralnom terapijom liječeno je 86 % bolesnika, najčešće metforminom (57 %). Prvih pet godina liječenja metforminom značajno je povezano s nastankom anemije kronične bolesti (Fisherov egzaktni test, P = 0,04), a liječenje koje traje dulje od deset godina s nastankom miješane anemije (Fisherov egzaktni test, P = 0,02). U bolesnika koji su uzimali kombiniranu terapiju koja je uključivala derivate sulfonilureje uočena je značajnije povećana učestalost anemije (Fisherov egzaktni test, P = 0,01).

Zaključak: Zbog visoke incidencije anemija u bolesnika s tipom 2 šećerne bolesti potrebno je vršiti redoviti probir u sklopu redovitih kontrola, a posebice u osoba starije životne dobi s mikro- ili makroalbuminurijom, lošom kontrolom bolesti, smanjenim eGFR-om i smanjenom saturacijom transferina te u bolesnika liječenih derivatima sulfonilureje.

Anemia in patients with type 2 diabetes

Keywords: Anemia, Metformin, Type 2 diabetes mellitus, Diabetes complications
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Introduction and aim: Diabetes is a chronic, metabolic disease that represents one of the leading public health problems today. Poor glycemic control impairs the quality of life and causes complications, one of which is anemia (1,2). Previous research had led to the conclusion that screening for anemia should be used as part of the routine assessment of diabetic complications. The NHANES-III study has confirmed the presence of anemia in as many as 50% of patients with type 2 diabetes and CKD, but diabetes itself is a risk for anemia regardless of the presence of CKD (3,4). The aim of this research was to determine the frequency and type of anemia in people with type 2 diabetes and to investigate the existence of differences with regard to age, gender and therapy.

Participants and methods: The research was carried out as a cross-sectional study. Seventy-eight patients with type 2 diabetes, treated in general practices of the Osijek-Baranja County Health Center in the period from February to June 2022 were included. Data were collected from health records and laboratory findings as part of regular checkups: age, gender, duration of diabetes, therapy for diabetes, fasting glucose, HbA1c, iron, UIBC, TIBC, hemoglobin, MCV, MCH, MCHC. Anemia is defined as mild, moderate and severe based on hemoglobin values. Morphologically, according to MCV, it is divided into macrocytic, normocytic, microcytic, and according to MCHC, it is divided into hyperchromic, normochromic and hypochromic. Etiologically, it is classified into: sideropenic, anemia of chronic disease, mixed, unspecified anemia and anemia of renal failure.

Results: Out of 78 patients who participated in the study, 44% were men and 56% were women. Participants' median age was 71 years, median duration of diabetes was 8 years. Nineteen percent of the participants had anemia. The median fasting glucose was 7.7 mmol/L, and HbA1c was 6.95%. Morphologically, the most common type of anemia was normocytic normochromic anemia (46.7%) and, etiologically, the most common were non-specific and anemia of chronic disease (60 %). Cases of anemia were mild or moderate in character. The average age of patients with anemia was 12 years higher than the average age of patients without it (Mann-Whitney U, P=0.03). Normocytic normochromic and hypochromic anemia occurred significantly more often in older patients (Mann-Whitney U, P=0.007 and P=0.004) as well as mixed anemia (Mann-Whitney U, P=0.04). Women with anemia participated in 73.3% cases of patients with anemia, and no statistically significant difference was found in the type or etiology regarding gender. No difference was observed in the frequency of anemia with regard to the treatment of diabetes with monotherapy or combined therapy. Eighty-six percent of patients were treated with oral therapy, most often with metformin (57%). The first 5 years of metformin treatment was significantly associated with the onset of anemia of chronic disease (Fisher's exact test, P=0.04), and treatment lasting longer than 10 years with the onset of mixed anemia (Fisher's exact test, P=0.02). In patients who used combined therapy which included sulfonylurea derivatives, a significantly increased frequency of anemia was observed (Fisher's exact test, P=0.01).

Conclusion: Due to a high incidence of anemia in patients with type 2 diabetes, it is necessary to perform regular screenings as part of regular controls, especially in the elderly with micro or macroalbuminuria, poor disease control, reduced eGFR and reduced transferrin saturation, as well as in patients treated with sulfonylurea derivatives.

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Bolesnik s ekstremnom pretilosti, limfedemom i kroničnom ranom noge

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Ključne riječi: debljina, kronična rana, motivacijski razgovor, limfedem, liječnik obiteljske medicine
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Uvod s ciljem: Svjetska zdravstvena organizacija (SZO) proglasila je epidemiju debljine značajnim zdravstvenim problemom današnjice. Prema Eurostatu iz 2019. godine Republika Hrvatska ima najviše odraslih osoba s debljinom u Europskoj Uniji s 42 % preuhranjenih i 23 % pretilih odraslih osoba. Debljina je kronična bolest uz koju se javljaju mnoge komplikacije: metabolički sindrom, *diabetes mellitus*, arterijska hipertenzija, kardiovaskularne bolesti, opstruktivna apneja u snu, bolesti jetre i reproduktivnih organa, limfedem, kronične rane, a često je prisutna psihička promjena osobnosti uzrokovana debljinom.

Cilj je rada prikazati ulogu liječnika obiteljske medicine (LOM) kao koordinatora u multidisciplinarnom liječenju osoba s debljinom.

Prikaz slučaja: Četrdesetdvogodišnji pacijent s ITM-om 63,75 javio se s izraženim limfedemom nogu te kroničnom ranom lijeve potkoljenice koja je trajala godinu dana. Bolesnik ne boluje od drugih bolesti. Rana potkoljenice bila je tretirana pokrivalima za rane i betadinom prema preporukama dermatologa i kirurga. U više navrata liječenje se kompliciralo celulitisom koji je zbrinjavan antibioticima. Zbog liječenja debljine pacijent je pohađao dnevnu bolnicu Centra za poremećaj prehrane i bio je podvrgnut ugradnji intragastričnog balona. Najviši pacijentov ITM bio je 80,8. Kod dolaska bolesnik je imao plitku ranu veličine od oko 300 cm^2 koja je zahvaćala cirkumferenciju lijeve potkoljenice. Dno rane ispunio je fibrin, rubovi su bili nepravilni i podminirani, okolna koža hiperemična i macerirana uz obilnu sekreciju, bez znakova infekcije. Višekratno je učinjen debridman rane mikrofiber krpicom, okolnu kožu štitilo se cinkovom kremom, a rana je prekrivana hidrofiber primarnim oblogama ispod sterilne monofilamentne komprese kao sekundarnog pokrivala. Kompresivna terapija provodila se sustavom tri zavoja kratkog vlaka. Nakon 45 dana tretmana dvaput tjedno rana je potpuno zacijelila. Nastavljena je primjena kompresivne terapije obje noge istim sustavom zavoja, a u planu je nabavka samopodesivog pomagala za kompresivnu terapiju limfedema donjih ekstremiteta. Učinjeni laboratorijski nalazi upućivali su na blagu anemiju, povišene vrijednosti urata i CRP-a. U EKG-u je prikazan blok desne grane, a krvni tlak je višekratno mjeren u normalnim granicama. U konzultaciji s bolesnikom napravljen je plan daljeg liječenja debljine. Tjedno se pratila tjelesna masa i opsezi donjih ekstremiteta, pregledavali su se dnevnici prehrane i fizičke aktivnosti i pružana je psihološka podrška. Pacijent je upućen na pregled endokrinologu i psihologu, a planira se prikazati i centru za liječenje limfedema kako bi se razmotrila mogućnost daljeg kirurškog tretmana limfedema. U međuvremenu LOM prati napredak cjelokupnog liječenja.

Rasprava: Pacijenti s preuhranjenošću i debljinom zahtijevaju dugotrajnu skrb složenim komunikacijskim tehnikama koje su lišene svake osude i stigmatizacije. Najučinkovitija tehnika je motivacijski razgovor koji omogućuje jačanje samodiscipline i poticanje promjene životnih navika. U kliničkom pristupu LOM se koristi tehnikom 5P, koja se sastoji od pet koraka: 1. prepoznavanje, 2. procjena stanja, 3. preporuke o promjeni načina života, o prehrani, tjelesnoj aktivnosti te psihološkoj, farmakološkoj i kirurškoj terapiji, 4. postavljanje realnih ciljeva i individualizirani plan liječenja, 5. praćenje. LOM ima važnu ulogu u prevenciji nastanka debljine djelovanjem na jačanje sposobnosti pojedinca, ali i mijenjanjem društvenih, socijalnih i ekonomskih značajka.

Zaključak: Liječenje bolesnika s debljinom predstavlja izazov obiteljskom liječniku jer zahtijeva holistički i biopsihosocijalni pristup, stalno praćenje te psihološku podršku pacijentu.

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A patient with extreme obesity, lymphedema and a chronic leg wound

Keywords: obesity, chronic wound, motivational interview, lymphedema, family physician
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Introduction and aim: The World Health Organization (WHO) declared the obesity epidemic as a significant health problem of today. According to Eurostat report from 2019 The Republic of Croatia has the most obese adults in the European Union with 42% overweight and 23% obese adults. Obesity is a chronic disease with many complications: metabolic syndrome, diabetes mellitus, arterial hypertension, cardiovascular diseases, obstructive sleep apnea, liver and reproductive organs diseases, lymphedema, chronic wounds, and frequent psychological change of personality.

The aim of this paper is to show the importance of the family physician (FP) in coordinating the multidisciplinary treatment of the people with obesity.

Case report: A 42 year old patient with a BMI of 63.75 presents with marked lymphedema on legs and a chronic wound on the left lower leg that has lasted for a year. The patient does not suffer from other diseases. The lower leg wound has been treated with wound dressings and betadine according to the recommendations of dermatologists and surgeons. On several occasions, the treatment was complicated by cellulitis, which was then treated with antibiotics. For the treatment of obesity, the patient was referred to the Day Hospital of the Center for Eating Disorders and underwent the procedure of intragastric balloon insertion. Patient's highest recorded BMI was 80.8. On arrival, the patient has a shallow wound of about 300 cm^2 in size, affecting the circumference of the left lower leg. The wound bed is filled with fibrin, the edges are irregular and undermined. The surrounding skin is hyperemic and macerated with abundant secretion, but without signs of infection. The wound is repeatedly debrided with a microfiber cloth, the surrounding skin is protected with zinc cream and the wound is covered with hydrofiber primary dressings under a sterile monofilament compress as a secondary covering. Compression therapy is carried out with a system of short stretch bandages. After 45 days of treatment twice a week, the wound completely heals. The application of compression therapy on both legs with the same system of bandagesis continued, and the plan is to purchase adjustable compression garments for compression therapy for lymphedema on his lower extremities. Laboratory results indicate mild anemia, elevated urate and CRP levels. The ECG shows a right bundle branch block. Blood pressure is within normal limits. In consultation with the patient, a further treatment plan for obesity is made. Body mass and lower limb circumferences are monitored weekly, diet and physical activity diaries are reviewed, and psychological support is provided. The patient is referred to an endocrinologist and a psychologist, and we are planning to refer him to the center for the treatment of lymphedema in order to consider the possibility of further surgical treatment. In the meantime, the FP is monitoring the progress of the above described comprehensive treatment.

Discussion: Patients with overnutrition and obesity require long-term care with complex communication techniques without any condemnation and stigmatization. The most effective technique is a motivational interview, which makes it possible to strengthen self-discipline and encourage changes in lifestyle habits. In the clinical approach, the FP uses the 5P technique, which consists of 5 steps: 1. recognition, 2. assessment of the condition, 3. recommendations on lifestyle changes, diet, physical activity and psychological, pharmacological and surgical therapy, 4. setting realistic goals and individualized treatment plans and 5. monitoring. FP has an important role in the prevention of obesity by acting on strengthening the individual's abilities, but also by changing social, environmental and economic characteristics.

Conclusion: The treatment of obese patients is a challenge for the family physician because it requires a holistic and biopsychosocial approach, constant monitoring and psyhological support.

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Liječenje komorbidne nesanice i opstruktivne apneje u spavanju

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Ključne riječi: nesanica, opstruktivna apneja u spavanju, COMISA
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Uvod s ciljem: Nesanica i opstruktivna apneja u spavanju među najčešćim su poremećajima sna u općoj populaciji, ali se njihova istodobna prisutnost često previđa u nekih pacijenata. Komorbidna insomnija i apneja u spavanju (engl. *Co-morbid insomnia and sleep*, COMISA) jest posebno oštećujući poremećaj koji umanjuje kvalitetu života i dnevno funkcioniranje, povećava kardiovaskularni rizik, a asociran je sa smanjenom adherencijom prema CPAP terapiji. Cilj je rada uputiti na prisutnost COMISA-e u praksi obiteljskog liječnika i predložiti moguća rješenja.

Rasprava: Pretražena je baza podataka za pregled trenutačnih istraživanja o komorbidnoj insomniji s apnejom u spavanju. Mnoge ustanove koje su specijalizirane za liječenje opstruktivne apneje u spavanju nerijetko premalo dijagnosticiraju komorbidnu nesanicu što umanjuje ukupnu učinkovitost terapije. Rezultati pokazuju da između 30 – 50 % pacijenata s opstruktivnom apnejom u spavanju doživljavaju simptome nesanice što umanjuje adherenciju za CPAP terapiju. Neka istraživanja tvrde da se simptomi nesanice ne bi trebali smatrati simptomom opstruktivne apneje, već da ti simptomi zahtijevaju zasebne ciljane terapeutske intervencije. Neke studije navode da COMISA pacijenti, u usporedbi s pacijentima koji boluju samo od nesanice ili samo od opstruktivne apneje, imaju sniženu kvalitetu života, smanjeno funkcioniranje po danu i povećan kardiovaskularni rizik. Nedavni klinički pokusi pokazali su da kognitivno-biheviorална terapija za nesanicu može biti učinkovita u povećavanju adherencije i prihvaćanju uporabe CPAP-a u COMISA pacijenata. Stoga se može zaključiti da liječenje COMISA pacijenata zahtijeva multidisciplinarni dijagnostički i terapeutski pristup.

Zaključak: Kliničari bi trebali provoditi probir za simptome nesanice u pacijenata s opstruktivnom apnejom u spavanju potičući uporabu dnevnika spavanja ili uporabom modificiranog indeksa za procjenu težine nesanice. COMISA pacijenti mogli bi beneficirati od CBT-a da se poveća motivacija i adherencija prema CPAP terapiji. Liječnici obiteljske medicine trebali bi se upoznati s mogućnostima ranog prepoznavanja i dijagnosticiranja COMISA-e te se aktivno uključiti u liječenje.

Treatment of Comorbid Insomnia and Obstructive Sleep Apnea

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Introduction and aim Insomnia and obstructive sleep apnea (OSA) are among the most common sleep disorders in the general population, but their coexistence is often overlooked in some patients. Co-morbid insomnia and sleep apnea (COMISA) is a highly debilitating disorder, which reduces quality of life, daytime functioning, increases cardiovascular risk and is associated with reduced continuous positive airway pressure (CPAP) therapy adherence. Our aim is to highlight the presence of COMISA patients in family medicine practice and suggest possible treatment approaches.

Discussion We conducted a search of relevant databases for a review of current research on Comorbid Insomnia and Obstructive Sleep Apnea (COMISA). Many sleep clinics specialized in the treatment of OSA might be under diagnosing co-morbid insomnia, which reduces overall treatment efficacy. Results show that between 30%–50% of OSA patients experience insomnia symptoms, which results in lower acceptance and adherence to CPAP therapy. Researchers state that insomnia symptoms should not be assumed to be a symptom of OSA, but that they require targeted treatment interventions. Some studies have indicated that, compared to patients with either insomnia, or OSA alone, COMISA patients experience lower quality of life, reduced daytime functioning and increased cardiovascular risk. Recent clinical trials have shown that cognitive behavioral therapy for insomnia (CBTi) may be effective in increasing acceptance and use of CPAP therapy in COMISA patients. Therefore, the treatment of COMISA patients requires a multidisciplinary diagnostic and therapeutic approach.

Conclusion Clinicians should screen for insomnia symptoms in OSA patients by administrating sleep diaries or an adjusted insomnia severity index. COMISA patients might benefit from CBTi to increase motivation and adherence to CPAP therapy. Family medicine specialists should familiarize themselves with early screening and diagnostic methods for COMISA patients and should be actively involved in their treatment.

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Prikaz slučaja: eozinofilni ezofagitis u ordinaciji obiteljske medicine

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Uvod s ciljem: Porast pojavnosti eozinofilnog ezofagitisa novi je moment u skrbi za pacijenta u ordinaciji obiteljskog liječnika. Donedavno rijetka bolest počela se pojavljivati češće, što u praktičnom smislu potiče na razmišljanje o još jednoj bolesti u sklopu promišljanja o diferencijalnoj dijagnozi bolesti gornjeg dijela probavnog sustava. Cilj je ovog rada prikazati pojavu eozinofilnog ezofagitisa u svakodnevnom okruženju ordinacije obiteljske medicine kako bi se svratila pozornost na važnost razmišljanja o eozinofilnom ezofagitisu te promišljanja o mogućim etiološkim čimbenicima i terapijskim opcijama.

Rasprava: Eozinofilni ezofagitis kronična je upala jednjaka karakterizirana eozinofilnom infiltracijom sluznice. Iako muškarci češće obolijevaju, ova se bolest javlja i u dječjoj dobi. S razvojem bolesti povezuju se brojni rizični čimbenici i potencijalni uzroci, no stvarni uzrok međutim ostaje nepoznat ili je on vjerojatno multifaktorski. Simptomatologija bolesti također je raznolika, što je pogotovo evidentno kada se usporedi razlika između različitih dobnih skupina. Tako je, primjerice, u odraslih najčešći simptom odinofagija i disfagija, u djece odbijanje hrane, povraćanje, bol u trbuhu ili prsima. Zbog eozinofilije uglavnom se ipak povezuje s alergijskom dijatezom. Dijagnoza se često postavlja kasno zbog toga što ova bolest dijeli simptome s drugim poremećajima gornjeg dijela probavnog sustava, a konačna dijagnoza postavlja se patohistološki utvrđivanjem predominantne eozinofilne infiltracije sluznice jednjaka. Liječenje se sastoji od eliminacijske dijete i lijekova. U kroničnim i uznapredovalim stadijima rješavaju se posljedice endoskopskim dilatacijama zbog striktura jednjaka koje su glavna kronična posljedica neliječenoga eozinofilnog ezofagitisa. Zbog sve veće pojavnosti ove bolesti, koja je do nedavno u literaturi bila rijetka, te zbog različitih dobnih skupina u kojima se javlja, dolazi do diskrepancije u postupanju, dijagnostici i liječenju bolesti. Iz istog razloga ovdje su prikazana dva slučaja koja to demonstriraju.

Pacijent, 1995. godište, prvi put javlja se u ambulantu s tegobama u vidu disfagije koja je počela nakon perioda podrigivanja s osjećajem pulzacija u lijevom uhu. Obrađen po stomatologu te mu je izvađen zub. Tada je uzimao antibiotik i IPP. Godinu dana nakon početka tegoba biopsijom je utvrđen eozinofilni ezofagitis. U terapiju uveden budezonid 1 mg p.o. uz eliminacijsku dijetu. Po regresiji simptoma i neuroloških nuspojava isključen kortikosteroid uz nastavak dijete. Po prekidu terapije disfagija se minimalno pogoršava. Je li infekcija zuba mogla uzrokovati ovu imunološku reakciju?

Pacijent, 2004. godište, obrađen u hitnoj ambulanti radi odstranjivanja stranog tijela iz jednjaka. Nakon toga nema simptoma, ponekad osjeća žgaravicu. Biopsijom utvrđen eozinofilni ezofagitis te uvedena eliminacijska prehrana i enteralna prehrana za eozinofilni ezofagitis. Na kontrolnoj endoskopiji potpuno uredan nalaz. Je li strano tijelo izazvalo upalnu reakciju koja je kasnije regredirala ili se radi o slučajnom nalazu asimptomatske bolesti?

Zaključak: Primjeri slučajeva služe nam kako bismo praktično vidjeli kakva nam se pitanja javljaju u svakodnevnoj praksi vezano za liječenje pacijenata od ove bolesti. Bilo da se radi o upitnoj etiologiji bolesti ili raznovrsnim simptomima, na svakom koraku javljaju nam se brojna pitanja. Smjernice, iako postoje, u praksi vidimo da se vrlo fleksibilno i individualno primjenjuju, što je za pacijenta dobro, međutim takvo postupanje ostavlja pitanje o pleiotropnoj prirodi ove bolesti. Zato je kod pojavnosti novih kliničkih entiteta važno na praktičnim primjerima vidjeti koja nam pitanja donose kako bismo mogli postupno doći do rješenja za izazove u zbrinjavanju pacijenata s ovom bolesti.

Case report: eosinophilic esophagitis in a family medicine practice

Keywords: eosinophilic esophagitis, eosinophilia, endoscopy, case report
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Introduction and aim. The increase in the incidence of eosinophilic esophagitis is a new moment in patient care in the family doctor's office. Until recently a rare disease, which began to occur more often, which, practically, makes one think about one more disease as part of thinking about the differential diagnosis of diseases of the upper part of the digestive tract. The aim of this paper is to show the occurrence of eosinophilic esophagitis in the everyday environment of a family medicine practice. Because of this, attention should be drawn to the importance of pondering about eosinophilic esophagitis, and thinking about possible etiological factors, as well as therapeutic options.

Discussion. Eosinophilic esophagitis is a chronic inflammation of the esophagus. It is characterized by eosinophilic infiltration of the mucosa. Although men suffer from this disease more often, it also occurs in children. Numerous risk factors and potential causes are associated with the development of this disease, however the actual cause of the disease remains unknown, or theoretically, the cause is probably multifactorial. The symptomatology of the disease is also diverse, which is especially evident when comparing the difference between age groups. For example, in adults, the most common symptoms are odynophagia and dysphagia, in children, food refusal, vomiting, abdominal or chest pain. Because of eosinophilia, it is mostly associated with allergic diathesis. The diagnosis is often made late because it shares symptoms with other disorders of the upper part of the digestive tract, and the definitive diagnosis is made pathohistologically by determining the predominant eosinophilic infiltration of the esophageal mucosa. Treatment consists of an elimination diet and medications. In chronic and advanced stages, the consequences are solved by endoscopic dilation due to esophageal strictures, which are the main chronic consequence of untreated eosinophilic esophagitis. Due to the increasing incidence of this interesting disease, which until recently was a rare disease in literature, and due to different age groups in which it occurs, there is a discrepancy in the management, diagnosing and treatment of this disease. For this reason, we are presenting two cases.

Born in 1995, the patient first comes to the outpatient clinic with complaints of dysphagia, which began after a period of belching with a feeling of pulsations in the left ear. He was treated by a dentist and his tooth was extracted. Then he took an antibiotic and PPI. A year after the onset of symptoms, eosinophilic esophagitis is diagnosed by biopsy. Budesonide 1mg orally is introduced into therapy with an elimination diet. After the regression of symptoms and neurological side effects, corticosteroids are discontinued while the diet is continued. Dysphagia worsens minimally after stopping therapy. Could a dental infection have caused this immune reaction?

Another patient born in 2004 is treated in the emergency department for the removal of a foreign body from his esophagus. Later there are no symptoms, sometimes heartburn. Eosinophilic esophagitis is diagnosed by biopsy, and elimination diet and enteral nutrition are introduced for eosinophilic esophagitis. The control endoscopy shows a completely normal finding. Did the foreign body cause an inflammatory reaction that later regressed, or was it an accidental finding of an asymptomatic disease?

Conclusion. The case examples serve us to practically see the questions arising in our daily practice regarding the treatment of patients with this disease. Whether it is a questionable etiology of the disease or various symptoms, numerous questions arise at every step. The existing guidelines, in practice, are applied very flexibly and individually, which is good for the patient, but such treatment leaves the question of the pleotropic nature of this disease. That is why, when new clinical entities occur, it is important to see which questions they bring us through practical examples so that we can gradually find solutions to the challenges in treating patients with any such disease.

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Obilježja bolesnika s dijabetičkom ketoacidozom u istočnoj Hrvatskoj – iskustva jedne ustanove

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Uvod: Dvije najčešće i najozbiljnije akutne hiperglikemijske komplikacije šećerne bolesti (ŠB) jesu dijabetička ketoacidoza (DKA) i hiperosmolarno hiperglikemijsko stanje (HHS). Oba poremećaja nastaju zbog manjka inzulinske aktivnosti s popratnim porastom kontraregulacijskih hormona kao što su glukagon, kateholamini, kortizol i hormon rasta. Oba su poremećaja različita očitovanja istog metaboličkog poremećaja jer DKA nastaje zbog potpunog ili djelomičnog manjka inzulina, a HHS zbog manjka inzulina manjeg stupnja (1). DKA je vodeći uzrok smrti u djece i mlađih odraslih s tipom 1 šećerne bolesti. Oko 50 % smrti u navedenoj populaciji posljedica je dijabetičke ketoacidoze (2). Cilj istraživanja bio je sažeti dostupne podatke o bolesnicima, njihovim simptomima, biokemijskim pokazateljima i precipitirajućim čimbenicima dijabetičke ketoacidoze u Općoj županijskoj bolnici Našice i usporediti ih s dostupnom literaturom.

Ispitanici i metode: U istraživanje su uključeni bolesnici obaju spolova i svih dobnih skupina koji su primljeni zbog dijabetičke ketoacidoze u OŽB Našice između siječnja 2014. i prosinca 2019. godine.

Rezultati: Ukupno su obuhvaćena 32 bolesnika od kojih je 13 (41 %) bilo ženskog spola, a 19 (59 %) muškoga. Prosječna dob je bila 32,66 godine (SD 23,9). Bilo je 12 bolesnika (38 %) mlađih od 18 godina. Najčešća dobna skupina u odrasloj dobi bila je između 31 do 40 godina (6 bolesnika, 19 %). Prosječni boravak u bolnici bio je 7,17 dana (SD 2,79). Jedan je bolesnik (3,4 %) preminuo od DKA-e.

Zaključak: Istraživanje daje uvid u obilježja bolesnika s DKA-om u općoj bolnici u istočnoj Hrvatskoj i stavlja Opću županijsku bolnicu Našice uz bok bolnicama u razvijenim zemljama.

Characteristics of patients with diabetic ketoacidosis in Eastern Croatia - A single centre experience

Keywords: Diabetic ketoacidosis, diabetes mellitus, child, adults
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Introduction and aim Two of the most common and most serious acute hyperglycemic diabetes mellitus (DM) complications are diabetic ketoacidosis (DKA) and hyperosmolar hyperglycemic state (HHS). Both disorders result from a lack of insulin activity coupled with a concomitant elevation of counter regulatory hormones, such as glucagon, catecholamines, cortisol, and growth hormone. They are different manifestations of the same metabolic disorder, as DKA results from complete or relative insulin deficiency, and HHS results from a lesser degree of insulin deficiency (1). DKA is the leading cause of death in children and young adults with T1DM. It is responsible for about 50 % of deaths in that population (2). This study aimed to summarize the available data containing general patients' data, symptoms, biochemical data, and the precipitating factors of DKA in General County Hospital Našice and to compare them with the accessible literature.

Patients and methods Patients of both sexes and all ages admitted to General County Hospital Našice for diabetic ketoacidosis between January 2014 and December 2019 were included in the study.

Results There were 32 patients overall, out of which 13 (41%) were female and 19 (59%) were male. Mean age was 32.66 years (SD 23,9) and 12 patients (38%) were younger than 18. In adult patients, the most common age group was 31-40 (6 patients, 19%). Average hospital stay was 7.17 days (SD 2.79). One patient (3.4%) had died of DKA.

Conclusion Study gives insight in the characteristics of patients with DKA in a General Hospital in Eastern Croatia and, for its results, ranks General County Hospital Našice among hospitals in developed countries.

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Je li svaki miokarditis baš miokarditis?
Kardiovaskularne posljedice COVID-19 bolesti

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Ključne riječi: COVID-19, miokarditis, obiteljska medicina, PASC, SARS-CoV-2
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Uvod s ciljem: Koronavirusna bolest 2019 (COVID-19) uzrokovana je virusom teškog akutnog respiratornog sindroma koronavirus 2 (SARS-CoV-2). Navedeni virus inficira ljudske stanice vežući se svojim šiljastim glikoproteinom (S protein) za ACE2 receptor koji je predominantno izražen na endotelnim stanicama dišnog sustava, a to dovodi do respiratornih simptoma COVID-19 bolesti. S obzirom na to da se navedeni receptor nalazi i na površini stanica drugih organa i tkiva, može dovesti i do ekstrapulmonalnih manifestacija bolesti COVID-19, među ostalim i do kardiovaskularnih simptoma. Cilj je ovog postera upoznati liječnike obiteljske medicine s različitim kardiovaskularnim entitetima koji se javljaju uz COVID-19, s načinom njihove dijagnostike i obrade.

Rasprava: Pojava miokarditisa često se vezuje uz simptome poput nelagode u prsima, zaduhe, umora, palpitacija i sinkope, koji su u nekim slučajeva praćeni febrilnošću. Prilikom dijagnostike, uz indikativnu anamnezu, nailazi se na abnormalan EKG zapis, povišen troponin, abnormalan nalaz UTZ srca te abnormalne nalaze MR-a ili biopsije miokarda.

Ako se obradom isključi miokarditis, postavlja se dijagnoza zahvaćenosti miokarda. Ona podrazumijeva leziju miokarda koja može i ne mora biti simptomatska, a vrijednosti su troponina u trenutku obrade uredne.

Dio pacijenata razvija PASC (engl. *post-acute sequelae* COVID-19), stanje definirano prisutnošću kardiovaskularnih simptoma koji se pojavljuju za vrijeme bolesti COVID-19 ili neposredno nakon preboljenja te bolesti, a traju još barem 4 – 12 tjedana nakon oporavka od bolesti COVID-19. PASC obuhvaća širok raspon simptoma koji nisu miokardijalnog podrijetla, a ponekad je kardiovaskularnu etiologiju uopće teško dokazati.

U ordinaciji obiteljske medicine liječnik obiteljske medicine treba obratiti pažnju na anamnestičke podatke vezane uz simptome i njihovu pojavu u odnosu na COVID-19. Važno je napraviti fizikalni pregled čak i asimptomatskim bolesnicima, a u EKG-u obratiti pažnju na difuznu inverziju T-vala, elevaciju ST-segmenta bez zrcalne ST-depresije u zapisu i produljenje trajanja QRS-kompleksa. Za dalje pretrage bolesnika je potrebno uputiti kardiologu. Iako se dalji način liječenja vrši u suradnji s kardiolozima, ipak je većinska (a ponekad i isključiva) odgovornost ishoda terapije na liječniku obiteljske medicine.

Zaključak: Liječnik obiteljske medicine ima veliku odgovornost aktivno pratiti i prepoznati kardiovaskularne komplikacije bolesnika i rekonvalescenata od bolesti COVID-19.

Is every myocarditis really myocarditis? Cardiovascular consequences of COVID-19 disease

Keywords: COVID-19, family medicine, myocarditis, PASC, SARS-CoV-2
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Introduction and aim. The coronavirus disease 2019 (COVID-19) is caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus. The virus infects human cells by binding with its spiked glycoprotein (S protein) to the ACE2 receptor, which is predominantly expressed on the endothelial cells of the respiratory system. This leads to the respiratory symptoms of the COVID-19 disease. Given that the mentioned receptor is also found on the cell surface of other organs and tissues this leads to extrapulmonary manifestations of COVID-19, including cardiovascular symptoms. The aim of this poster is to familiarize family physicians with different cardiovascular entities occurring with COVID-19, the way they are diagnosed and treated.

Discussion. Myocarditis is often associated with symptoms such as chest discomfort, shortness of breath, fatigue, palpitations and syncope, in some cases accompanied by fever. For its diagnosing, in addition to an indicative anamnesis, there is an abnormal ECG recording, elevated troponin, abnormal echocardiogram findings, as well as abnormal heart MR or myocardial biopsy findings. If the treatment excludes myocarditis, a diagnosis of the myocardial involvement is declared. It implies a myocardial lesion that may or may not be symptomatic, but the troponin values are normal at the time of diagnosing. Some patients develop PASC (post-acute sequelae of COVID-19), a condition defined by the presence of cardiovascular symptoms that appear during COVID-19 or immediately after recovery, and lasts for at least 4 to 12 weeks after thier recovery from COVID-19. PASC encompasses a wide range of symptoms that are not of myocardial origin, and sometimes a cardiovascular etiology is difficult to be proven at all. In the family medicine practice, the family physician should pay attention to anamnestic data related to symptoms and their occurrence relative to COVID-19. It is important to perform a physical examination even in asymptomatic patients, and to pay attention to diffuse T-wave inversion in ECG, elevation of the ST segment without mirror ST depression in the record and the QRS prolongation. For further tests, the patient should be referred to a cardiologist. Although further treatment is conducted in cooperation with cardiologists, the biggest (sometimes exclusive) responsibility for the outcome of the therapy rests with the family physician.

Conclusion. The family physician has a great responsibility to actively monitor and recognize cardiovascular complications in patients and convalescents from COVID-19.

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SADRŽAJ / CONTENTS