

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

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1. Kronične bolesti u doba pandemije COVID 19

■ Život s multimorbiditetom u pandemiji COVID-19 – Trebamo li novi model skrbi?

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Ključne riječi: multimorbiditet, skrb, obiteljska medicina, zdravstveni sustav

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Uvod s ciljem: Multimorbiditet (MM) predstavlja rastući problem u populaciji za koju skrbi liječnik obiteljske medicine (LOM). Osim progresivnog starenja stanovništva, na porast multimorbiditeta također utječe način života, socioekonomski status, genetika i biopsihosocijalne odrednice. Pandemija COVID-19 iscrpila je zdravstveni sustav kako na razini bolničke zdravstvene zaštite, tako i na razini primarne zdravstvene zaštite (PZZ) i njezine temeljne djelatnosti, obiteljske medicine (OM). Pojava akutne bolesti u bolesnika s višestrukim kroničnim bolestima u uvjetima ograničenog i kontroliranog pristupa ordinaciji i kući bolesnika te elektronička komunikacija koja je zatrpana liječnike obiteljske medicine (LOM) nebrojenim informacijama naglasila je potrebu za novim strategijama. Cilj je rada istaknuti značaj novih strategija i pristupa u obiteljskoj medicini.

Rasprrava: Unatoč visokoj i rastućoj prevalenciji MM-a ne postoje jasno definirane smjernice ni oblici liječenja za takve bolesnike. MM bolesnicima predstavlja velik životni teret jer su opterećeni velikim brojem lijekova, potrebom za brojnim posjetima LOM-u, dijagnostičkim i terapijskim postupcima te redovitim posjetima specijalistima drugih specijalnosti. Uz napredovanje bolesti i starenje, nadovezuje se propadanje samostalnih funkcionalnih sposobnosti, pojava i povećanje nemoći te posljedično povećanje ovisnosti o pomoći okoline i zajednice. Skrb za ove bolesnike zahtijeva promjene. One se prije svega odnose na strategiju i specifično postupanje kod pojedinog bolesnika, ali i na organizaciju zdravstvene službe kako na primarnoj razini, tako i na razini cjelokupne zdravstvene zaštite u vidu integracije LOM-a kao dijela multidisciplinarnoga konziliarnog tima za MM. Nužno je jačanje promocije zdravijeg načina života i promjena stava

pacijenata u smislu samostalne skrbi te jačanje potpore zajednice u kojoj žive.

Postoji nekoliko modela skrbi za bolesnike s MM-om koji se danas primjenjuju u praksi. Glavne su odrednice tih modela integrirana zdravstvena zaštita i izvaninstitucionalna skrb koja uključuje timski rad različitih medicinskih djelatnika i neformalnih sudionika u skrbi za bolesnika. Potporno socijalno okruženje pozitivno utječe na mentalno i fizičko stanje bolesnika. Iako je vrijeme pandemije COVID-19 donijelo izrazite teškoće u pružanju zdravstvene zaštite, posebice bolesnicima s MM-om, ipak su se pojedine mogućnosti izravne konzultacije liječnik-liječnik u vidu konzultacije bez pacijenta, što predstavlja novi način rada koji ubrzava i unaprjeđuje skrb za bolesnike.

Zaključak: MM zahtijeva skrb koja nadilazi do sadašnje okvire skrbi za pojedine kronične bolesti te su neizbjježne promjene u načinu rada i edukaciji LOM-a, ali i u organizaciji cjelokupnoga zdravstvenog sustava.

■ Living with multimorbidity in the COVID 19 pandemic - Do we need a new model of care?

Keywords: multimorbidity, care, family medicine, health system

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Introduction and aim : Multimorbidity (MM) is a growing problem in the population cared for by a family physician (FP). In addition to the progressive aging of the population, the lifestyle, socioeconomic status, genetics and biopsychosocial determinants contribute to the rise of the MM problem. The COVID 19 pandemic has exhausted the health care system both at the level of hospital health care and at the level of primary health care (PHC) and its core business, family medicine (FM). The emergence of acute diseases in patients with multiple chronic diseases in the conditions of limited and controlled access to PHC in the office and home of patients and electronic communication overwhelming FPs with countless information highlighted the need for new strategies. The aim of this paper is to emphasize the importance of new strategies and approaches in family medicine.

Discussion: Despite the high and growing prevalence of MM, there are no clearly defined guidelines and forms of treatment for such patients. MM is a great burden on patients burdened with a large number of drugs, the need for numerous visits to the FP, diagnostic and therapeutic procedures and regular visits to the specialists in other specialties. With the progression of disease and aging, there is a decline in independent functional abilities, the emergence and increase of weakness, and the consequent increase in the dependence on the help of the environment and the community. Caring for these patients requires changes. They primarily refer to the strategy and specific treatment of individual patients, but also to the organization of health care both at the primary level and at the level of overall health care in the form of integration of FPs in multidisciplinary multimorbidity consultation teams. It is necessary to strengthen the promotion of a

healthier lifestyle, change the attitude of patients in terms of self-care and strengthen the support from the community in which they live. There are several models of care for patients with MM that are applied in practice today. The main determinants of these models are integrated health care and non-institutional care, which include teamwork of various medical staff and informal participants in patient care. The supportive social environment has a positive effect on the mental and physical condition of patients. Although the time of the COVID 19 pandemic brought significant difficulties in providing health care, especially for patients with MM, the possibilities of direct doctor-doctor consultation in the form of patient-free consultation has increased, which is a new way of working that accelerates and improves patient care.

Conclusion: MM requires care that goes beyond the current framework of care for individual chronic diseases and inevitable changes include changes in the way of working in the organization of the entire health system and FP's education.

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■ Polifarmacija i polipragmazija – kako sačuvati sigurnu medicinsku praksu?

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Ključne riječi: multimorbiditet, pandemija, polifarmacija

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Uvod s ciljem: U kliničkoj se praksi istovremeno uzimanje pet i više lijekova smatra polifarmacijom koja može biti povezana s lošim kliničkim ishodima. Rizik od štetnih učinaka polifarmacije raste s povećanjem broja propisanih lijekova i može prijeći u polipragmaziju. Multimorbiditet i starenje u velikoj su mjeri odgovorni za porast prevalencije polifarmacije. Malo je poznato kakav je utjecaj polifarmacije na kliničke ishode oboljelih od COVID-19 infekcije. Cilj je rada upozoriti na važnost razlikovanja primjerenoj i neprikladnog propisivanja lijekova u svakodnevnom radu obiteljskog liječnika u doba pandemije.

Rasprava: U aktualnoj kliničkoj praksi u kojoj je propisivanje više lijekova sve češće u starijih osoba s multimorbiditetom, razlikovanje između ‘mnogo’ lijekova i ‘previše’ lijekova postaje složeno. Kad se promatra klinički aspekt multimorbidnog bolesnika, propisivanje ‘mnogih’ lijekova zapravo može biti sasvim prikladno. Numeričko označavanje broja propisanih lijekova ne uzima u obzir kliničke potrebe pojedinca i može previdjeti izostavljanje potencijalno korisnih lijekova. Novije studije upućuju na potrebu prihvaćanja pojma „prikladna polifarmacija“ korištenjem holističkog pristupa procjene uporabe lijekova u kontekstu prisutnih komorbiditeta prema najboljim dostupnim dokazima kako bi se optimizirali zdravstveni ishodi. COVID-19 pandemija svraća pozornost na povećan rizik negativnih kliničkih ishoda među bolesnicima s dvije ili više kroničnih bolesti koji su prethodno uzimali šest i više lijekova. Prijavljeni štetni klinički ishodi uključili su nuspojave, povećan rizik od infekcije COVID-19, težak oblik COVID-19 bolesti i smrtnost. Rezultati drugih studija iznose slične podatke o negativnom kliničkom utjecaju polifarmacije na druge virusne i respiratorne bolesti kao

što su upala pluća i gripa. Antipsihotici, netrici-klički antidepresivi, opioidni analgetici, inhibitori protonskе pumpe češće su povezani sa štetnim kliničkim ishodima osoba s komorbiditetima oboljelima od COVID-19 infekcije. Podatci upućuju na potrebu izostavljanja lijekova koji nisu nužni u liječenju multimorbidnog bolesnika s bolesti COVID-19 jer se time može spriječiti daljnje pogoršanje bolesti.

Zaključak: U COVID-19 pandemiji liječnici-ma obiteljske medicine poseban izazov u skribi čine bolesnici s multimorbiditetom. Bolesnicima koji uz svoje osnovne kronične bolesti obole od COVID-19 bolesti, treba posvetiti posebnu pažnju i optimizirati upravljanje lijekovima kako bi se postigli što bolji klinički ishodi.

■ Polypharmacy and polypragmasy - how to maintain safe medical practice?

Keywords: multimorbidity, pandemic, polypharmacy,

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Introduction and aim: In clinical practice, taking five or more drugs at the same time is considered to be polypharmacy that may be associated with poor clinical outcomes. The risk of adverse effects of polypharmacy increases with the increasing number of prescribed drugs and may progress to polypragmasy. Multimorbidity and aging are largely responsible for the increase in the prevalence of polypharmacy. Little is known about the impact of polypharmacy on the clinical outcomes of patients with COVID-19 infection. The aim of this paper is to point out the importance of distinguishing between appropriate and inappropriate prescribing in the daily work of a family doctor during a pandemic.

Discussion: In current clinical practice where polypharmacy is becoming more common in the elderly with multimorbidity, the distinction between ‘many’ drugs and ‘too many’ drugs becomes complex. When looking at the clinical aspect of a multimorbid patient, prescribing ‘many’ drugs may actually be quite appropriate. Numerical labelling of the number of prescribed drugs does not take into account the clinical needs of the individual and may overlook the omission of potentially useful drugs. Recent studies suggest the need to embrace the notion of “appropriate polypharmacy” using a holistic approach to assessing drug use in the context of existing comorbidities, according to the best available evidence in order to optimize health outcomes. The COVID 19 pandemic indicated an increased risk of negative clinical outcomes among patients with two or more chronic diseases who had previously taken 6 or more drugs. Reported adverse clinical outcomes included adverse events, increased risk of COVID-19 infection, severe COVID-19, and mortality. The results of other studies provide similar data on the negative

clinical impact of polypharmacy on other viral and respiratory diseases such as pneumonia and influenza. Antipsychotics, nontricyclic antidepressants, opioid analgesics, proton pump inhibitors are more commonly associated with adverse clinical outcomes of individuals with comorbidities suffering from the COVID-19 infection. The data suggest the need to omit drugs that are not necessary in the treatment of a multimorbid patient with COVID-19 as this may prevent the further exacerbation of the disease.

Conclusion: In the COVID pandemic, patients with multimorbidity present as a special challenge to family physicians. Patients suffering from COVID-19 in addition to their underlying chronic diseases should be given special attention and drug management should be optimized in order to achieve the best possible clinical outcomes.

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■ Informacijske tehnologije i kronične nezarazne bolesti

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Uvod s ciljem: Kronične nezarazne bolesti (KNB) vodeći su uzrok morbiditeta i mortaliteta u svijetu, a skrb o oboljelima podrazumijeva složenu interakciju između liječnika, bolesnika i zdravstvenoga sustava. Jedan od prijedloga za poboljšanje ishoda oboljelih od KNB-a jest primjena informacijskih tehnologija (IT) u skrbi za ove bolesnike. Cilj je rada prikazati ulogu IT-a u skrbi za oboljele od hipertenzije i šećerne bolesti, koje su najviše istraživane, s osvrtom na uvjete u COVID-19 pandemiji.

Rasprava: Jedan od globalnih ciljeva za smanjenje tereta KNB-a jest smanjenje prevalencije hipertenzije za 25 % do 2025. godine. Kao tri glavna razloga za neuspjeh u liječenju KNB-a navode se niska adherencija bolesnika s KNB-om, klinička inercija i slabosti zdravstvenoga sustava. Prijedlog je da se većim i ciljanijim korištenjem IT-a pokušaju premostiti ti razlozi. Iako nema standardizirane definicije, prema Svjetskoj zdravstvenoj organizaciji korištenje IT-a u ovom kontekstu podrazumijeva primjenu mobilnih telefona, osobnih digitalnih asistenata, opreme za monitoriranje pacijenata te druge bežične tehnologije. Primarni je cilj pomoći medicinskom profesionalcu u donošenju odluke (telekontrola), a pacijentu u promjeni nepovoljnog ponašanja (samokontrola). IT se brzo razvija, a ta je tehnologija otvorila širok scenarij mogućih intervencija za poboljšanje prevencije, probira i liječenja hipertenzije i šećerne bolesti. Kontinuirano mjerjenje glukoze primjer je primjene IT-a koja je omogućila stvarni individualni pristup u korekciji terapije. Angažman pacijenata u korištenju IT-a pod utjecajem je brojnih čimbenika (motivacija, osobne vrijednosti, dostupnost, informatička i zdravstvena pismenost). Od početka COVID-19 pandemije došlo je do izrazitog povećanja korištenja IT-a primarno za pružanje telemedicinskih usluga, monitoriranje i nadzor oboljelih od

bolesti COVID-19, komunikaciju sa zdravstvenim vlastima, praćenje digitalnih podataka radi analize širenja bolesti COVID-19, ali i za bolesti neovisne o bolesti COVID-19. Regulacijski okvir, poštivanje privatnosti i naknada za rad samo su neka od pitanja koja nisu razjašnjena, a aktualna istraživanja uključuju uvjek COVID-19 te se nameće pitanje korištenja IT-a za paciente s KNB-om u postkovid razdoblju.

Zaključak: Primjena IT-a u regulaciji KNB-a brzo se razvija, a nakon razdoblja pandemije u kojoj su pacijenti nerijetko ovisili o IT-u važno je misliti o implementaciji te tehnologije u skladu s 21. stoljećem. IT se može koristiti u širokom scenariju mogućih intervencija za poboljšanje prevencije, kontrole i liječenja te posljedica KNB-a, ali i za smanjenje kardiovaskularnog rizika općenito. Uz definiranje primjene IT-a u smjernicama stručnih društava, pri čemu se određuje komu, kada i kako primjeniti IT, ta nam tehnologija omogućuje proaktivni pristup, aktivno uključivanje pacijenata u brigu o vlastitom zdravlju i integraciju različitih profesionalaca.

■ Information technologies and noncommunicable diseases

Keywords: chronic non-communicable diseases, information technologies

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Introduction: Chronic non-communicable diseases (NCD) are the leading cause of morbidity and mortality in the world, and patients' care involves complex interactions between physicians, patients, and the health care system. One of the proposals to improve the outcomes of patients with NCD is the application of information technology (IT) in the care of these patients. The aim of this paper is to present the role of IT in the care of patients with hypertension and diabetes, which are most researched with reference to the conditions in the COVID-19 pandemic.

Discussion: One of the global goals for reducing the burden of NCD is to reduce the prevalence of hypertension by 25% till 2025. The three main reasons for failure in the treatment of NCD are a low adherence of patients with CKD, clinical inertia and weaknesses in the health system. The proposal is to try to overcome these reasons with greater and more targeted use of IT. Although there is no standardized definition, according to the World Health Organization, the use of IT in this context involves the use of mobile phones, personal digital assistants, patient monitoring equipment and other wireless technologies. The primary goal is to help the medical professional make a decision (telecontrol) and the patient to change the unhealthy behavior (self-control). IT is evolving rapidly and has opened up a broad scenario of possible interventions to improve the prevention, screening, and treatment of hypertension and diabetes. Continuous glucose measurement is an example of IT that has provided a real individual approach in therapy correction. Patient engagement in the use of IT is influenced by a number of factors (motivation, personal values, accessibility, information and health literacy). Since the beginning of the COVID-19 pandemic, there has been a marked increase in the use of IT primarily for the provision of

telemedicine services, monitoring and surveillance of COVID-19 patients, communication with health authorities, monitoring digital data to analyze the spread of COVID-19, but also for COVID-19 independent diseases. The regulatory framework, privacy issues and reimbursement are just some of the issues that have not been clarified. Since current research always includes COVID-19 the issue of using IT for patients with NCD in the post-covid era should be considered.

Conclusion: The application of IT in the regulation of NCD is developing rapidly, and after a period of pandemic in which patients have often depended on IT, it is important to think about its implementation in accordance with the 21st century. IT can be used through a broad scenario of possible interventions to improve prevention, control and treatment, and the consequences of NCD, but also to reduce cardiovascular risk in general. In addition to defining the application of IT through the guidelines of professional societies to whom, when and how to apply IT, it allows us a proactive approach, active involvement of patients in caring for their own health and the integration of different professionals.

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■ Zdravstvena pismenost i adherencija

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Uvod s ciljem: Zdravstveni se sustav, kao i svi njegovi sudionici, u današnje vrijeme suočava s velikim izazovima. Nedostaje dovoljan broj zdravstvenog osoblja i vremena za konzultacije, s jedne strane, a s druge strane postoji velik broj bolesnika s potrebama za mnogim dijagnostičkim i terapijskim postupcima. Kad se tomu pridruži slaba zdravstvena pismenost koja vodi lošoj adherenciji, zdravstveni sustav postaje slabo održiv. Cilj je rada istražiti pojам zdravstvene pismenosti i adherencije te čimbenike koji na njih utječu, kao i pronaći rješenja za njihovo poboljšanje.

Rasprava: Zdravstvena pismenost definira se kao mogućnost da se zdravstvena informacija primi, razumije i upotrijebi u svrhu unaprjeđenja vlastitog zdravlja, liječenja bolesti i povećanja kvalitete života. Ona također podrazumijeva znanje o zdravstvenom sustavu i prepoznavanje potrebe ciljanog javljanja u zdravstvenu službu, a prije toga pokušaj samozbrinjavanja ako je moguć. Podatci pokazuju da je samo do 50 % bolesnika adekvatno zdravstveno obrazovano, a taj se postotak smanjuje kod bolesnika nižeg stupnja obrazovanja, djece, starijih i migranata. Slabije obrazovan bolesnik najčešće neće biti adherentan, odnosno neće aktivno i primjereno sudjelovati u zaštiti svojeg zdravlja i liječenju bolesti te se njegovo ponašanje neće podudarati s preporukama liječnika. Zato danas 50 % kroničnih bolesnika ne uzima svoju terapiju kako je preporučeno, a taj je postotak još viši u zemljama u razvoju. Na zdravstvenu pismenost i adherenciju utječu sociodemografski čimbenici te čimbenici vezani za zdravstveni sustav i zdravstvene djelatnike, bolesnika, samu bolest i terapiju. Najčešće se izdvajaju dob, niski prihodi i niži stupanj obrazovanja u socioekonomskoj skupini, a loša komunikacija bolesnika i liječnika, ali i liječnika međusobno, preopterećenost zdravstvenih djelatnika, loša motivacija i stav bolesnika prema liječenju, nerazumijevanje vlastite bolesti, manjak podrške okoline, nemogućnost pronašlaska i primjene točnih zdravstvenih informacija u

ostalim kategorijama. Svaki zdravstveni djelatnik mora biti svjestan da se bolesnik sjeti samo do polovice informacija s konzultacije. Stoga je potrebna reakcija na individualnoj i sustavnoj razini kako bi zdravstvena pismenost bolesnika bila bolja. Na individualnoj razini edukacija bolesnika trebala bi počinjati od dječje dobi, dok bi se zdravstveni djelatnici konstantno trebali educirati u području komunikacije kako bi upotrebljavali razumljiv rječnik u konzultacijama, osiguravali jasno i detaljno napisane upute o prevenciji ili liječenju bolesti te preporučili dodatne izvore relevantnih informacija za bolesnika. Da bi to bilo moguće, na sustavnoj razini potrebno je osigurati vrijeme za bolesnika, osmislići službeni, lako razumljiv i detaljan edukacijski materijal, aktivno podržavati grupe bolesnika koje vode obrazovani pojedinci te držati korak s vremenom i novim tehnologijama.

Zaključak: Dobra zdravstvena pismenost, a time i adherencija rezultiraju boljim ishodima za bolesnika te se ostvaruje zadovoljstvo i bolesnika i liječnika. Rezultat toga je manje, ali ciljano korištenje zdravstvenog sustava čime se povećava vrijeme pojedine liječničke konzultacije, smanjuju se troškovi i povećava održivost zdravstvenog sustava.

■ Health literacy and adherence

Keywords: health literacy, adherence, healthcare system

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Introduction and aim Great challenges lie in front of the healthcare system and all its participants. There is a lack of healthcare professionals and consultation time, and on the other hand, there are many patients in need of diagnostic procedures and therapy. When combined with poor health literacy, which leads to bad adherence, the health system becomes unsustainable. The aim of this paper is to explore the concept of health literacy and adherence as well as factors that influence them and solutions for improvement.

Discussion: Health literacy is defined as a potential for health information to be received, understood, and used for health promotion, disease prevention, and treatment assuring a better life quality. It also implies knowledge about the healthcare system, an attempt to self-care if possible, and recognizing the right time to visit certain healthcare professionals. According to the data, only up to 50% of the patients have an adequate health. Poor health education leads to lower patient adherence and the patient will not actively and appropriately take part in health protection and disease treatment. Almost 50% of patients with chronic diseases do not take their prescribed drugs, and the numbers are even higher in developing countries. Socio-demographic variables, factors related to the healthcare system, healthcare professionals, patient, disease, and therapy are influencing health literacy and adherence. The most responsible factors are age, low income, a low degree of education in socio-demographic variables and bad patient - doctor or doctor - doctor communication, overworked healthcare professionals, poor patient's motivation and attitude towards disease treatment, misunderstanding of the disease, not having a support system, and not having the ability to find and apply correct

health information are reasons in other mentioned categories. Every healthcare professional has to be aware that the patient remembers only half of the information given in the consultation. To raise health literacy, action on an individual and systematic level has to be undertaken. At the individual level, a patient's health education should start from a very young age, even pre-school, while healthcare professionals should constantly improve their communication skills, develop an understandable vocabulary, and make clear instructions about disease prevention or treatment. Additional official materials should be recommended to the patient. To make this possible, the healthcare system should change to ensure enough time for patient consultation, develop official, easily understandable, and detailed educational material, actively support patient groups led by knowledgeable individuals, and apply new technologies in health education.

Conclusion: Good health literacy and adherence result in better outcomes for the patient and also both patient's and doctor's satisfaction. It leads to reduced but targeted usage of healthcare services which then results in more time for patient's consultation, lowers the cost, and makes the healthcare system sustainable.

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■ Kronična bubrežna bolest – prevalencija u RH Postavljamo li dijagnozu pravovremeno

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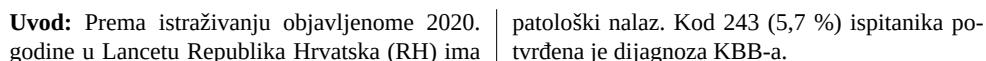
Ključne riječi: kronična bubrežna bolest, prevalencija KBB-a, obiteljska medicina

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Uvod: Prema istraživanju objavljenome 2020. godine u Lancetu Republika Hrvatska (RH) ima 562 778 (13,7 %) oboljelih od kronične bubrežne bolesti (KBB). Podatci o zabilježenom morbiditetu u obiteljskoj medicini Hrvatskog zavoda za javno zdravstvo govore o ukupno 29 720 bolesnika koji su imali evidentiranu dijagnozu bubrežne insuficijencije (N17-N19) u toj godini. Ima li RH zaista nisku prevalenciju KBB-a ili ipak imamo puno neprepoznatih slučajeva?

Cilj rada: Utvrditi evidentira li se kronična bubrežna bolest u bolesnika koji boluju od hipertenzije i šećerne bolesti u ordinacijama obiteljske medicine adekvatno.

Metode: Retrospektivno istraživanje provedeno je u osam ordinacija obiteljske medicine u Primorsko-goranskoj županiji. U istraživanje su bili uključeni svi oboljeli od arterijske hipertenzije i/ili šećerne bolesti kao najčešćih uzroka KBB-a, njih ukupno 4241. Pretraživani su laboratorijski nalazi s ciljem otkrivanja snižene projenjene glomerularne filtracije i proteinurije u urinu.

Rezultati: Od 4064 ispitanika s hipertenzijom i/ili šećernom bolesti koji nisu od ranije imali evidentiran KBB kod njih 515 (12 %) pronađen je

patološki nalaz. Kod 243 (5,7 %) ispitanika potvrđena je dijagnoza KBB-a.

Zaključak: Većina oboljelih od KBB-a (58 %) nema dijagnozu evidentiranu u svojem zdravstvenom kartonu. S obzirom na to da su glavni uzroci bolesti (arterijska hipertenzija i šećerna bolest) u porastu, a zbrinjavanje većine oboljelih od KBB-a u domeni obiteljskog liječnika, izuzetno je važno pojačati napore i u pravovremenom postavljanju dijagnoze i u adekvatnom zbrinjavanju oboljelih.

■ Chronic kidney disease - prevalence in Republic of Croatia Do we diagnose on time

Keywords: chronic kidney disease, CKD prevalence, family medicine.

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Introduction: According to a study published in Lancet in 2020, there are 562,778 (13.7%) people with chronic kidney disease (CKD) in the Republic of Croatia . Data on recorded morbidity in family medicine service from the Croatian Institute of Public Health show a total of 29,720 patients who had a recorded renal insufficiency diagnosis (N17-N19) in that year. Does the Republic of Croatia really have a low prevalence of CKD or do we still have a lot of unrecorded cases?

Objective: To determine whether chronic kidney disease is recorded in patients suffering from hypertension and diabetes mellitus in family medicine offices adequately.

Methods: Retrospective research was conducted in 8 family medicine practices in Primorsko-Goranska County. The study included all patients with arterial hypertension and/or diabetes mellitus as the most common causes of CKD, a total of 4241. Laboratory findings were searched with the aim of detecting reduced estimated glomerular filtration and proteinuria in the urine.

Results: Out of 4,064 subjects with hypertension and/or diabetes mellitus who had not previously had a recorded CKD, 515 (12%) were found with a pathological report. In 243 (5.7%) subjects, the diagnosis of CKD was confirmed.

Conclusion: Most CKD patients (58%) do not have a diagnosis recorded in their medical records. Given the main causes of the disease (arterial hypertension and diabetes mellitus) are on the rise, and the care of most CKD patients in the domain of the family physician, it is extremely important to step up efforts both in timely diagnosis and in adequate care of the patients.

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■ Koji cilj slijediti u oboljelih od šećerne bolesti s multiplim komorbidnim stanjima?

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Ključne riječi: glikemija, komorbiditeti

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Uvod s ciljem: Sve veća prevalencija multimorbiditeta među bolesnicima sa šećernom bolesti posljedica je, paradoksalno, sve bolje zdravstvene skrbi koja produljuje njihovo očekivano trajanje života. Koliko je do danas poznato, većina odraslih osoba s dijabetesom ima barem jednu komorbidnu kroničnu bolest, a čak ih 40 % ima najmanje tri. Cilj je rada pokušati odgovoriti na pitanje koji cilj slijediti u oboljelih od šećerne bolesti s multiplim komorbidnim stanjima.

Rasprava: Komorbiditeti uvelike utječu na liječenje šećerne bolesti; npr. depresija i artritis predstavljaju prepreke promjenama načina života, a bolna stanja mogu imati veći utjecaj na zdravstveno stanje bolesnika s dijabetesom koji za bolesnika više nije od primarnog interesa iako je zapravo najozbiljniji dugoročni rizik. S druge strane, teža stanja, kao što su uznapredovalo zatajenje srca i demencija, miču još više šećernu bolest iz fokusa liječenja. Stanja povezana sa značajno skraćenim životnim vijekom (npr. maligna bolest u finalnoj fazi) jasno upućuju na činjenicu da se kronične komplikacije ne smatraju više bitnim čimbenikom. U bolesnika s komorbiditetima bitno je odgovoriti na nekoliko pitanja: Koja je bolest prioritet liječenja? Koja je vodeća bolest koja određuje očekivano trajanje života i kvalitetu života? Koliko je dugoročno, ali i kratkoročno, šećerna bolest bitna u ishodu liječenja komorbiditeta, a koliko su oni povezani s ishodima koji su vezani uz dijabetes i njegove komplikacije? Koliko nam je bitna striktna regulacija glikemije, koliko ćemo se usmjeriti na hipoglikemije, a koliko na hiperglikemije? Kako liječiti bolesnika s dijabetesom i multiplim komorbiditetima? Radi se o pristupu skrbi koji je ponajprije usmjeren na bolesnika i njegovu dobrobit u smislu kvalitete života, koji zahtijeva balans između očekivanja bolesnika i kliničkih ciljeva liječnika uključenih u planiranje liječenja. Osobe s dijabetesom trebale bi imati zdravstvenu skrb od koordiniranoga interdisciplinarnog tima koji vodi specijalist primarne zaštite uz dijabetologa, medicinske sestre, nutricionista, fizioterapeuta, stručnjaka za mentalno zdravlje te ostale specijalnosti. Također,

neminovno je da osobe s dijabetesom preuzimaju aktivnu ulogu u svojoj skrbi.

Zaključak: Ciljevi liječenja glikemije u osoba s mnogo komorbiditeti nisu striktni. Bitno je razlikovati dugoročne ishode i prema njima odrediti ciljeve glikemije (aktualna glikemija vs. dugoročna) uz izbjegavanje akutnih stanja (prvenstveno hipoglikemije korištenjem lijekova koji ne dovode do njih, a praćenjem glikemije izbjegavanjem akutnih hiperglikemijskih stanja).

■ Which goal to achieve in diabetes with multiple comorbid conditions?

Keywords: glycaemia, multimorbidity

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Introduction and aim: The increasing prevalence of multimorbidity among patients with diabetes is, paradoxically, a consequence of better health care that prolongs their life expectancy. To date, most adults with diabetes have at least one comorbid chronic disease, and as many as 40% have at least three. The aim is to try to answer the question of which goal to pursue in diabetics with multiple comorbid conditions.

Discussion: Comorbidities have a major impact on the treatment of diabetes; for example, depression and arthritis are obstacles to lifestyle changes, and painful conditions can have a greater impact on the health of patients with diabetes than is no longer of primary interest to the patient even though it is actually the most serious long-term risk. On the other hand, more severe conditions, such as advanced heart failure and dementia, move diabetes even further out of the focus of treatment. Conditions associated with significantly shortened life expectancy (e.g., malignancy in the final stage) clearly point to the fact that chronic complications are no longer considered a significant factor. In patients with comorbidities, it is important to answer a few questions. Which disease is the priority of treatment? What is the leading disease that determines life expectancy and quality of life? How important is long-term, but also short-term diabetes in the outcome of comorbidity treatment, and how much are they related to the outcomes related to diabetes and its complications? How important is the strict regulation of glycemia, how much will we focus on hypoglycemia, and how much on hyperglycemia. How to treat patients with diabetes and multiple comorbidities? It is an approach to care

that is primarily focused on the patient and their well-being in terms of quality of life, which requires a balance between the expectations of patients and the clinical goals of physicians involved in treatment planning. People with diabetes should have health care from a coordinated interdisciplinary team led by a primary care specialist with a diabetologist, nurses, nutritionists, physiotherapists, mental health professionals and other specialties. It is also inevitable that people with diabetes take an active role in their care.

Conclusion: The goals of glycemic treatment in people with many comorbidities are not strict. It is important to differentiate long-term outcomes and determine the goals of glycemia (current glycemia vs. long-term) while avoiding acute conditions (primarily hypoglycemia using drugs that do not lead to them, and monitoring glycemia by avoiding acute hyperglycemic conditions).

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■ Značaj pedobrahijalnog indeksa u bolesnika s multimorbiditetom i povišenim kardiovaskularnim rizikom

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Ključne riječi: kardiovaskularni rizik, pedobrahijalni indeks, periferna arterijska bolest

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Uvod s ciljem: Procjena ukupnog kardiovaskularnog rizika (KVR) temelj je prevencije morbiditeta i mortaliteta uzrokovanih kardiovaskularnim bolestima. Republika Hrvatska svrstanja je u skupinu zemalja visokog KVR-a. U bolesnika s dokazanom aterosklerotskom kardiovaskularnom bolesti (ASKVB) potrebno je pravovremeno otkriti znakove periferne arterijske bolesti donjih ekstremiteta (PAB) procjenom gležanjskog indeksa (engl. *Ankle-Brachial Index*, ABI).

Cilj je ovog rada pružiti spoznaje obiteljskim liječnicima o potrebi i važnosti primjene gležanjskog indeksa u bolesnika s multimorbiditetom i povišenim kardiovaskularnim rizikom na razini primarne zdravstvene zaštite.

Rasprrava: Europske smjernice za prevenciju kardiovaskularnih bolesti u kliničkoj praksi objavljene 2021. godine razlikuju se od prethodnih. U procjeni KVR-a koristimo se SCORE2 tablicama za osobe u dobi od 40 do 69 godina i SCORE2 OP-om za osobe starije od 70 godina. Bolesnike sa šećernom bolesti, kroničnom bubrežnom bolesti (KBB), ASKVB-om i obiteljskom hiperkolesterolemijom svrstavamo u kategorije umjerenog, visokog i vrlo visokog rizika ovisno o duljini trajanja i tipu šećerne bolesti, oštećenju ciljnih organa, opterećenju čimbenicima rizika, stupnju KBB-a te dokazanoj ASKV bolesti. Procjena KVR-a pomaže liječniku obiteljske medicine da motivira bolesnika u provođenju preventivnih aktivnosti te predstavlja temelj za farmakoterapiju. U procjeni ASKVB-a značajno je pravovremeno uočiti znakove i simptome PAB-a. Uporabom Edinburškog upitnika i mjerjenjem pedobrahijalnog indeksa (ABI) s 90 % osjetljivosti može se detektirati PAB i stupanj oštećenja arterija. PAB je pokazatelj generalizirane ateroskleroze i povezan je s povišenim rizikom razvoja kardiovaskularnog događaja i lošijeg kliničkog ishoda. 70 % bolesnika nije svjesno bolesti zbog čega dugo ostaju asimptomatski. U bolesnika s patološkim vrijednostima ABI-ja (iznad 1,3 ili ispod 0,9) kardiovaskularni mortalitet u desetogodišnjem intervalu iznosi 18,7 %. Ranom detekcijom PAB-a u asimptomatskih

bolesnika povećava se mogućnost prevencije težih oblika bolesti te preciznija procjena KVR-a.

Zaključak: Iako se uz sve napore moderne medicine ljudski vijek produžio, kardiovaskularne bolesti ostaju visoko na ljestvici uzroka pobola i smrtnosti. Različiti alati kojima se obiteljski liječnici mogu koristiti u svakodnevnom radu u domeni prevencije kardiovaskularnih događaja mogu bitno utjecati na očuvanje kvalitete života pojedinca.

■ Significance of the ankle brachial index in patients with multimorbidity and elevated cardiovascular risk

Keywords: cardiovascular risk, ankle-brachial index, peripheral arterial disease

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Introduction and aim: Assessment of total cardiovascular (CV) risk is the basis for the prevention of morbidity and mortality caused by cardiovascular diseases. The Republic of Croatia is classified in the group of high CV risk countries. In patients with proven atherosclerotic cardiovascular disease (ASCVD), signs of peripheral arterial disease of the lower extremities (PAD) should be detected in a timely manner by assessing the Ankle-Brachial Index (ABI).

The aim of this paper is to provide family physicians with information on the need and importance of using the ankle index in patients with multimorbidity and increased cardiovascular risk at the level of primary health care.

Discussion: The European Guidelines for the Prevention of Cardiovascular Diseases in Clinical Practice published in 2021 differ from the previous ones. We use SCORE2 tables for people aged 40 to 69 and SCORE2 OP for people aged ≥ 70 years in the CV risk assessment. Patients with diabetes, chronic kidney disease (CKD), ASCVD and familial hypercholesterolemia are classified as moderate, high and very high risk depending on the duration and type of diabetes, target organ damage, risk factor burden, CKD level and proven ASCVD. The CV risk assessment helps the family doctor to motivate the patient to carry out preventive activities and is the basis for pharmacotherapy. In the assessment of ASCVD, it is important to notice the signs and symptoms of PAD in a timely manner. Using the Edinburgh Questionnaire and measuring the ABI with 90% sensitivity, PAD and the degree of arterial damage can be detected. PAB is an indicator

of generalized atherosclerosis and is associated with an increased risk of developing a cardiovascular event and a poorer clinical outcome. Seventy percent of patients are not aware of the disease, which is why they remain asymptomatic for a long time. In patients with pathological ABI values (above 1.3 or below 0.9), cardiovascular mortality in the ten-year interval is 18.7%. Early detection of PAD in asymptomatic patients increases the possibility of prevention of more severe forms of the disease and more accurate assessment of CV risk.

Conclusion: Although with all the efforts of modern medicine, human life expectancy has been prolonged, cardiovascular diseases remain high on the scale of morbidity and mortality scale. The various tools that family physicians can use in their daily work in the field of prevention of cardiovascular events can significantly affect the preservation of an individual's quality of life.

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2. Onkološki bolesnik

Nuspojave i interakcije specifičnih onkoloških lijekova

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Ključne riječi: kapecitabin, antiestrogeni, antiandrogeni, nuspojave, interakcije

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Uvod s ciljem: Prema Hrvatskome zdravstveno-statističkom ljetopisu najčešćalija sijela karcinoma jesu prostate u muškaraca, dojke u žena te pluća i debelo crijevo u oba spola. Iako se terapija najvećim dijelom provodi u bolničkim uvjetima, pojedini citostatici poput kapecitabina, antiestrogena (tamoksifena, inhibitori aromataze anastrozol) i antiandrogena (bikalutamid) primjenjuju se peroralnim putem kod kuće. Procjenjuje se da gotovo 60 % bolesnika iskusi neku od posljedica interakcije onkološkog lijeka s drugim lijekom. Liječnici obiteljske medicine moraju biti upoznati s njihovim djelovanjem, mogućim nuspojavama te interakcijama s drugim lijekovima koje ti pacienti zbog prisutnosti brojnih komorbiditeta uzimaju u stalnoj terapiji. Cilj ovog rada bio je prikazati najčešće nuspojave i interakcije specifičnih onkoloških lijekova koji se primjenjuju peroralnim putem u liječenju raka kolona, prostate i dojke.

Rasprava. Kapecitabin je citostatik koji se najčešće primjenjuje kao adjuvantna terapija u liječenju karcinoma debelog crijeva, rektuma, želuca i dojke. Tijekom liječenja kapecitabinom potreban je oprez pri istodobnoj primjeni varfarina zbog njegova pojačanog djelovanja i mogućnosti pojave krvarenja, zatim allopurinola zbog veće mogućnosti nuspojave poput proljeva, mučnine, povraćanja, Stevens-Johnsonova sindroma, alprazolama koji smanjuje izlučivanje kapecitabina što može dovesti do njegove povećane koncentracije u serumu te apiksabana koji pak smanjuje njegovo djelovanje. Njegove najčešće nuspojave su smanjenje leukocita ili eritrocita, dehidracija, gubitak tjelesne težine, nesanica, depresija, glavobolja, promjene okusa, tromboflebitis, upala kože, promjene na noktima, stomatitis i slično. Istodobna primjena antikoagulantne terapije zahtijeva oprez i kod ostalih spomenutih onkoloških lijekova. Kod primjene antiestrogena moramo imati na umu njihove najčešće nuspojave poput osteoporoze, boli u kostima i upale zglobova, a prema Agenciji za hranu i lijekove SAD-a (engl. U.S. Food and Drug Administration, FDA), tamoksifen može povećati rizik od ozbiljnih i za život opasnih događaja, uključujući rak maternice, krvne ugruške i moždani udar. Bikalutamid, koji se koristi za liječenje karcinoma prostate, smanjuje djelovanje antiaritmika i može dovesti do pojave srčanih aritmija u kombinaciji s pojedinim lijekovima poput antibiotika moksifloksacina ili

antipsihotika. Kako od karcinoma prostate obolevaju uglavnom stariji muškarci koji najčešće boluju i od kardiovaskularnih bolesti, liječnik obiteljske medicine mora češće pratiti ove pacijente. Najčešće nuspojave koje se javljaju prilikom primjene antiandrogena jesu osip na koži, zatvor, mučnina i osjetljivost dojki.

Zaključak: Primjena onkološke terapije je kompleksna i zahtijeva multidisciplinarni pristup. Liječnik obiteljske medicine ima važnu ulogu u praćenju ovih bolesnika usmjeravajući svoju pažnju na pojavu mogućih nuspojava ovih lijekova i njihovo zbrinjavanje kako bi pomogli svojem pacijentu što jednostavniji prolazak kroz za njih teško razdoblje liječenja. S obzirom na to da su to najčešće bolesnici srednje i starije životne dobi s prisutnim komorbiditetima, liječnik obiteljske medicine mora biti educiran o mogućim interakcijama s drugim lijekovima kako bi umanjio i sprječio neželjene posljedice.

■ Side effects and drug interactions of specific cancer therapy

Keywords: capecitabine, antiestrogens, antiandrogens, side effects, interactions

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Introduction and aim. According to the Croatian Health Statistics Yearbook, the most common site in which cancer develops in men is prostate, in women it is breast while it is and lungs, and colon in both sexes. Although the therapy is mostly performed in hospital, some cytostatics such as capecitabine, antiestrogens (tamoxifen, aromatase inhibitor anastrozole) and antiandrogens (bicalutamide) are administered orally at home. Nearly 60% of patients undergoing cancer therapy (regardless of the mode of administration) are estimated to have had at least one potential drug-drug interaction. Family physicians must be familiar with pharmacology, possible side effects and interactions with other drugs that these patients use in their continuous therapy. The aim of this study was to present the most common side effects and interactions of specific cancer therapy administered orally in the treatment of colon, prostate and breast cancer.

Discussion. Capecitabine is a cytostatic that is most commonly used as adjuvant therapy in the treatment of the colon, rectum, stomach, and breast cancer. Capecitabine should be used with caution with warfarin due to its increased action and bleeding potential, then allopurinol due to its increased potential for side effects such as diarrhea, nausea, vomiting, Stevens-Johnson syndrome, with alprazolam which reduces capecitabine excretion and which may lead to increased concentrations in serum and with apixaban, which could reduce its curative effect. Its most common side effects are decreased white blood cells or erythrocytes, dehydration, weight loss, insomnia, depression, headaches, taste changes, thrombophlebitis, skin inflammation, nail changes, and stomatitis. Concomitant use of anticoagulant

therapy requires caution with most oncological drugs. When using antiestrogens, we must keep in mind their most common side effects such as osteoporosis, bone pain and inflammation of the joints, and according to The Food and Drug Administration, FDA, tamoxifen may increase the risk of serious and life-threatening events, including uterine cancer, blood clots and stroke. Bicalutamide that is used to treat prostate cancer reduces the action of antiarrhythmics and can lead to cardiac arrhythmias in combination with certain drugs such as antibiotic moxifloxacin or antipsychotics. As prostate cancer mainly affects older men, the family doctor must monitor these patients more often. The most common side effects that occur when taking antiandrogens are skin rash, constipation, nausea, and breast tenderness.

Conclusion. The regimen of cancer therapy is complex and requires a multidisciplinary approach. The family doctor has an important role in monitoring these patients by focusing on the possible side effects of these drugs and prevent permanent impairment or damage to help their patient get through the difficult period of treatment as easy as possible. Since these are most often middle-aged and elderly patients with comorbidities, the family doctor must be educated about possible interactions with other drugs in order to reduce and prevent side effects.

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■ Učestalost otkrivanja onkoloških bolesnika u obiteljskoj medicini prije COVID-19 pandemije i za vrijeme pandemije te bolesti

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Uvod: COVID-19 pandemija uzrokom je promjene u probiru, dijagozi i liječenju onkoloških bolesnika.

Cilj: Cilj ovog rada bio je istražiti učestalost otkrivanja karcinoma prostate, dojke, pluća i debelog crijeva u obiteljskoj medicini kao i vremenski period početka liječenja ovih bolesnika za vrijeme COVID-19 pandemije u odnosu na period prije pandemije.

Ispitanici i metode: U pet ordinacija obiteljske medicine na području grada Zagreba, Zagrebačke županije i Krapinsko-zagorske županije provedeno je retrospektivno istraživanje pregledom zdravstvenih kartona 7848 registriranih pacijenata starijih od 18 godina od kojih je 46,5% muškaraca. Za period prije pandemije (1. 3. 2018. – 31. 12. 2019.) te za vrijeme pandemije (1. 3. 2020. – 31. 12. 2021.) prikupljeni su podatci o broju novootkrivenih bolesnika s karcinomom prostate u muškaraca, dojke u žena te karcinomom bronha i pluća i debelog crijeva u oba spola, prisutnosti metastaza pri otkrivanju bolesti te o vremenu proteklom od postavljanja dijagnoze do početka liječenja.

Rezultati: U vremenu prije pandemije otkriveno je ukupno 55 bolesnika, a za vrijeme pandemije 40 bolesnika. Prije pandemije otkriveno je 20 žena oboljelih od karcinoma dojke prosječne životne dobi 74 godine, a na liječenje se čekalo u prosjeku 32 dana, dok je za vrijeme pandemije otkriveno njih samo 14 prosječne dobi 62 godine s početkom liječenja od 33 dana. Karcinom prostate dijagnosticiran je u 17 muškaraca prosječne dobi 65 godina s početkom liječenja od 28 dana prije pandemije nasuprot 11 oboljelih prosječne dobi 65 godina s početkom liječenja od 49 dana tijekom pandemije. Karcinom bronha i pluća otkriven je u 7 pacijenata prije pandemije (prosječna dob 67 g.) uz početak liječenja 42 dana po otkrivanju dijagnoze. Tijekom pandemije otkrivena su 4 novooboljela prosječne dobi 76 godina uz početak liječenja od 22 dana. Prije pandemije karcinom debelog crijeva otkriven je u 11 pacijenata (prosječna dob 71 g.), a na liječenje se čekalo 36 dana. Za vrijeme pandemije otkriven je jednak broj oboljelih, njih 11, prosječne dobi 60 godina, s početkom liječenja nakon 32 dana. Nije bilo značajne razlike prisutnosti metastaza prilikom otkrivanja karcinoma prije pandemije i tijekom pandemije.

Zaključak: Tijekom COVID-19 pandemije otkriveno je 15 bolesnika s karcinomom manje no u vremenu prije pandemije. Vremenski period od postavljanja dijagnoze do početka liječenja tijekom pandemije nije se značajno promijenio, osim u oboljelih od karcinoma prostate, što pokazuje relativno dobru organizaciju zdravstvenog sustava u liječenju onkoloških bolesnika tijekom pandemije. Kako značajan broj oboljelih od karcinoma dojke i prostate nije dijagnosticiran tijekom pandemije, potrebno je uložiti dodatan napor u njihovu probiru kako bi se postavila pravovremena dijagnoza, a ishod liječenja bio uspješniji.

Frequency of detection of cancer patients in family medicine before and during the COVID-19 pandemic

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Introduction The COVID-19 pandemic is the cause of changes in the screening, diagnosis and treatment of cancer patients.

Aim. The aim of this study was to investigate the incidence of prostate, breast, lung and colon cancers in family medicine as well as the time period for the beginning of treatment of these patients during the COVID-19 pandemic compared to the pre-pandemic period.

Respondents and methods. In five family medicine practices in the city of Zagreb, Zagreb County and Krapina-Zagorje County, a retrospective study was conducted by reviewing the health records of 7,848 registered patients over the age of 18, of which 46.5% were men. For the period before the pandemic (01.03.2018. – 31.12.2019.) and during the pandemic (01.03.2020. – 31.12.2021.) data were collected on a number of newly diagnosed patients with prostate cancer in men, breast cancer in women and bronchial and lung cancer and colon cancer in patients of both sexes, the presence of metastases at the detection of the disease and the time elapsed from diagnosis until the start of treatment.

Results. A total of 55 patients were detected in the period before the pandemic, and 40 patients during the pandemic. Before the pandemic, 20 women were diagnosed with breast cancer at an average age of 74, and they waited for treatment for an average of 32 days, while during the pandemic only 14 women at an average age of 62 were diagnosed and waited for 33 days until the start of treatment. Prostate cancer was diagnosed in 17 men at a mean age of 65 with treatment starting 28 days after having been diagnosed before

the pandemic versus 11 patients at a mean age of 65 and treatment starting 49 days after diagnosis during the pandemic. Bronchial and lung cancer was detected in 7 patients before the pandemic (mean age 67) with treatment starting 42 days after diagnosis. During the pandemic, 4 new cases of lung cancer at an average age of 76 were detected with the start of treatment 22 days after detection. Prior to the pandemic, colon cancer was detected in 11 patients (mean age 71), and treatment was waited for 36 days. During the pandemic, an equal number of patients were discovered, 11 of them, at an average age of 60 and the start of treatment after 32 days. There were no significant differences in the presence of metastases in cancer detection before and during the pandemic.

Conclusion. During the COVID-19 pandemic, the number of detected cancer patients was lower by 15 compared to the number of patients before the pandemic. The time period from diagnosis to the start of treatment during the pandemic did not significantly change except in patients with prostate cancer, which shows a relatively good organization of the health system in the treatment of cancer patients during the pandemic. As a significant number of breast and prostate cancer patients were not diagnosed during the pandemic, additional efforts are needed in their screening in order to make a timely diagnosis and ensure a more successful treatment outcome.

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■ Prevencija i rano otkrivanje i kontrola malignih bolesti u doba Covid-19 pandemije

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Uvod. Prema podacima Svjetske zdravstvene organizacije (SZO) u Europskoj regiji je 2020 godine 4,8 milijuna ljudi oboljelo je od raka, a 2,1 milijun ljudi je od raka umrlo. Procjenjuje se da će te brojke do 2030. doseći 5,4 milijuna, odnosno 2,5 milijuna, bez – aktivnijeg djelovanja. U Republici Hrvatskoj su 2020. zločudne novo tvorevine bile i dalje na drugom mjestu uzroka smrtnosti. Gledajući prema spolu u muškaraca su ih na drugom mjestu zamjenile posljedice Covid-19, a u žena posljedice Covid -19 su na petom mjestu. Poznato je kako se trećina malignih bolesti može sprječiti zdravim načinom života, a trećina ranim otkrivanjem ili liječenjem.

Cilj. Osvijestiti važnost prevencije i ranog otkrivanja i kontrole malignih bolesti u doba Covid -19 pandemije.

Rasprava. SZO/Europa pokrenula je Ujedinjenu akciju protiv raka (engl. United Action Against Cancer) s dugoročnom vizijom eliminacije raka kao bolesti opasne po život, kroz pet dimenzija kontinuma kontrole raka: prevencija, rano otkrivanje, dijagnoza i liječenje, palijativna skrb, planiranje i podaci za kontrolu raka. Evropski kodeks protiv raka (engl. European Code Against Cancer – ECAC ističe načine smanjenja rizika od nastanka raka. Promoviranje nepušenja ili prestanak pušenja je vrlo važno jer je pušenje odgovorno za četvrtinu smrtnih slučajeva svih zločudnih bolesti (rak pluća, usne šupljine, grkljana, jetre, gušterić, dojke, mokraćnog mjehura, bubrega, debelog crijeva). Svi pušači ne obolijevaju od raka pluća, ali oko 70% raka pluća pripisuje se isključivo pušenju. Smanjena izloženost kože suncu prevenirati će rak kože, posebno melanoma, uz redoviti pregled postojećih madeža. Održavanje optimalne tjelesne težine i tjelesne aktivnosti prevenirati će 20 – 30% različitih sijela raka (rak dojke u postmenopauzi, rak endometrija maternice, debelog crijeva, bubrega, jednjaka). Osobe sa nezdravim prehranbenim navikama i konzumacijom velike količine alkohola u kombinaciji s pušenjem, imaju veći rizik za neka sijela raka (rak usne šupljine, ždrijela, grkljana, jednjaka, jetre, dojke). Žene koje doje svoju djecu imaju manji rizik od pojave raka dojke. Upotrebu hormonalne nadomjesne terapije treba ograničiti.

Cijepljenjem protiv hepatitisa B (novorođena u djeca) i hepatitisa C prevenira se rak jetre, a cijepljenjem protiv humanog papiloma virusa (HPV) posebno u djevojčica prevenira se rak grlića maternice, ostalih mesta anorektalne regije i usta. Programi ranog otkrivanjem raka probirom rizičnih skupina djelotvorno smanjenju smrtnosti od raka. ECAC također predlaže korištenje postojećih programa.

Zaključak Programi probira, trebali bi postići visoko sudjelovanje u testiranju, dijagnostici i liječenju kako bi bili uspješni i učinkoviti. Kontrola raka ključni je prioritet za postizanje cilja održivog razvoja za smanjenje za jednu trećinu prevaranjene smrtnosti od nezaraznih bolesti do 2030. Personalizirana medicina sve više zauzima mjesto gdje liječnik obiteljske medicine ima veliku ulogu poznavanjem pacijenta i obitelji u odluci o ranom otkrivanju malignih bolesti.

■ Prevention and early detection and control of malignant diseases during the Covid-19 pandemic

Keywords: prevention of malignant diseases, early detection of malignant diseases, control of malignant diseases, family medicine

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Background. According to the World Health Organization (WHO) 4.8 million people in the European region have cancer and 2.1 million have died from cancer in 2020 with estimation that by 2030 these figures will reach 5.4 million and 2.5 million, respectively, without bolder action. In the Republic of Croatia in 2020, malignant neoplasms are still in second place in terms of mortality. Looking at gender, the consequences of COVID-19 erupted in second place in men and in fifth place in women. It is a well-known fact that one third of malignant diseases could be prevented by a healthy lifestyle, and one third by early detection or treatment.

Aim. Awareness of the importance of prevention and early detection and control of malignant diseases during the Covid -19 pandemic

Discussion. WHO / Europe has launched the United Action against Cancer with a long-term vision of eliminating cancer as a life-threatening disease, through five dimensions of the cancer control continuum: prevention, early detection, diagnosis and treatment, palliative care, planning and data for cancer control. The European Code against Cancer (ECAC) outlines ways to reduce the risk of cancer. Promoting non-smoking or smoking cessation is responsible for a quarter of all deaths from all malignancies (lung, oral, laryngeal, liver, pancreas, and breast). Not all smokers suffer from lung cancer, but about 70% of lung cancers are attributed solely to smoking. Reduced skin exposure to the sun will prevent skin cancer, especially melanoma, with regular checkups of existing moles. Maintaining optimal body weight and physical activity will prevent 20-30% of various cancers (postmenopausal breast cancer, cancer of the uterine endometrium, colon, kidneys, and esophagus). People with unhealthy eating habits and consuming large amounts of

alcohol in combination with smoking are at higher risk for some cancers (cancer of the oral cavity, pharynx, larynx, esophagus, liver, and breast). Women who breastfeed their children have less risk of the onset of breast cancer. The use of hormone replacement therapy should be limited. Vaccination against hepatitis B (newborns) and hepatitis C prevents liver cancer, and vaccination against human papilloma virus (HPV) especially in girls prevents cancer of the cervix, other parts of the anorectal region and mouth. Early cancer detection programs by screening at-risk groups effectively reduce cancer mortality. ECAC also suggests using existing programs.

Conclusion. Screening programs should achieve high participation in testing, diagnosis and treatment in order to be successful and effective. Cancer control is a key priority for achieving the goal of sustainable development to reduce by one third the premature deaths from non-communicable diseases by 2030. Personalized medicine is increasingly taking the place where family medicine physicians play a major role in knowing patients and families in early detection of malignancies.

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3. Zaštita mentalnog zdravlja

■ Psihički poremećaji u COVID-19 pandemiji

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Ključne riječi: COVID-19, mentalno zdravlje, psihički poremećaji

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Uvod s ciljem: COVID-19 epidemija započela je krajem 2019. u kineskom gradu Wuhanu. Svjetska zdravstvena organizacija (SZO) u ožujku 2020. proglašila je pandemiju, koja još traje i koja je globalno promijenila način života ljudi. Uvode se protupandemijske mjere: nošenje maski i vizira na javnim mjestima, održavanje fizičke distance, izbjegavanje većih okupljanja, ograničenje kretanja, kao što je samoizolacija pojedinača, karantena ili zaključavanje (engl. *lockdown*). Nastava se često odvija preko interneta, mnogi zaposlenici rade od kuće. Krajem 2020. započinje cijepljenje protiv COVID-19 infekcije. Navedene promjene u svakodnevnom životu predstavljaju dodatni stres, što pogoršava mentalno zdravlje pojedinaca, njihovih obitelji i šire zajednice. Cilj je rada dati kratak pregled istraživanja o psihičkim poremećajima u COVID-19 pandemiji.

Rasprava: Prediktori pogoršanja mentalnog zdravlja u COVID-19 pandemiji jesu neučinkoviti načini suočavanja sa stresom, smanjena socijalna potpora i tjelesna neaktivnost. Dezinformacije, uz protupandemijskim mjerama promijenjeni način života, dovode do povećanja anksioznosti, depresivnosti i antisocijalnog ponašanja. Strah od smrti, bilo od same bolesti ili kao posljedice cijepljenja, izaziva kognitivnu i emocionalnu zbrku. Povećana incidencija psihičkih poremećaja korelira s povećanom incidencijom, odnosno s porastom smrtnih ishoda od COVID-19 infekcije. COVID-19 pandemija pogoršava simptome u psihičkim bolesniku. Nesigurnost, usamljenost i finansijske brige prediktori su razvoja akutnih psihičkih poremećaja tijekom COVID-19 pandemije. Pandemija utječe na povećanu incidenciju anksioznosti, depresije i nesanice, posebno u psihičkim bolesnika. COVID-19 pandemija pojačala je kognitivnu disfunkciju oboljelih od bipolarnog poremećaja, povezana s negativnom simptomatologijom i suicidalnim mislima. Socijalna izolacija i usamljenost posebno pogoda djecu i adolescente. Preopterećenje informacijama iz različitih izvora koje prati COVID-19 pandemiju, nazvano „infodemijom”, ugrožava mentalno zdravlje, posebno u osoba koje boluju od psihičkih poremećaja. SARS-CoV-2 virus, napadajući središnji živčani sustav, pogoršava mentalno zdravlje tijekom bolesti, a u nekih pacijenata zaostaje dugo-trajni neurološki i kognitivni deficit, uz pogoršani emocionalni status.

Obiteljski liječnik važan je čimbenik u edukaciji pacijenata o bolesti i suzbijanju teorija zavjere. Povjerenje u stručnu javnost neophodno je u očuvanju mentalnog zdravlja.

Zaključak: COVID-19 pandemija promjenila je način života ljudi na globalnoj razini. Protupandemijske mjere, posebno ograničavanje kretanja, socijalna izolacija i mrežna nastava s jedne strane, a teorije zavjere i širenje nepovjerenja prema cijepljenju, s druge strane, povećali su razinu stresa i incidenciju psihičkih poremećaja. Zadaća je obiteljskih liječnika savjetovanjem i edukacijom prevenirati pogoršanje mentalnog zdravlja pacijenata.

Mental disorders in the COVID-19 pandemic

Keywords: COVID-19, mental health, mental disorders

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Introduction and aim: The COVID-19 epidemic, began in the end of 2019 in the Chinese city of Wuhan. In March 2020, the WHO declared a pandemic, which is still ongoing and that has changed the way people live globally. Anti-epidemic measures were introduced: wearing masks and visors in public places, maintaining physical distance, avoiding large meetings, restricting movement, such as self-isolation, quarantine, or lockdown. Classes are often held online, with many employees working from home. These changes in daily life represent additional stress, which worsens the mental health of individuals, their families and the wider community. Vaccination against COVID-19 infection started at the end of 2020. The aim of this paper is to give a brief overview of research on mental disorders in the COVID-19 pandemic.

Discussion: Predictors of deteriorating mental health in the COVID-19 pandemic are ineffective ways of coping with stress, reduced social support, and physical inactivity. Misinformation, along with anti-epidemic measures and a changed way of life lead to a further increase in anxiety, depression and antisocial behavior, while at the same time an overload of information from various sources that accompanies the COVID-19 pandemic, called “infodemia”, also endangers mental health, especially in people suffering from mental disorders. Next, the fear of death, either from the disease itself or as a consequence of vaccination, causes cognitive and emotional confusion. The increased incidence of mental disorders correlates with the increased incidence of deaths from COVID-19 infection and the COVID-19 pandemic exacerbates symptoms in the mentally ill patients. Furthermore, insecurity, loneliness and financial problems are also predictors of the development of acute mental disorders during

the COVID-19 pandemic. In addition, a pandemic also affects an increased incidence of anxiety, depression, and insomnia, especially in the mentally ill patients. The COVID-19 pandemic has also exacerbated the cognitive dysfunction of patients with bipolar disorder, associated with negative symptomatology and suicidal thoughts. Social isolation and loneliness especially affect children and adolescents. The SARS CoV2 virus, by attacking the central nervous system, worsens mental health during illness, and in some patients lags with long-term neurological and cognitive deficits, along with worsened emotional status.

The family physician is an important factor in educating patients about the disease and combating conspiracy theories. Trust in the community of experts is essential in maintaining mental health.

Conclusion: The COVID-19 pandemic has changed the way people live globally. Anti-epidemic measures, in particular restriction of movement, social isolation and online teaching on one hand, and conspiracy theories and the spread of mistrust towards vaccination on the other hand have increased stress levels and the incidence of mental disorders. The task of family physicians is to prevent the deterioration of patients' mental health through counseling and education

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■ Postupci u zbrinjavanju akutnih psihijatrijskih stanja

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Ključne riječi: mentalno zdravlje, akutna psihijatrijska stanja, liječnik obiteljske medicine

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Uvod s ciljem: Svaki liječnik obiteljske medicine (LOM) tijekom svojega rada može se susresti s akutnim psihijatrijskim stanjima pacijenata o kojima skrbi. Akutno psihijatrijsko stanje predstavlja akutni poremećaj mišljenja, pažnje, raspoloženja, ponašanja ili socijalnih odnosa. Zbog specifičnog položaja LOM-a u zdravstvenom sustavu koji obuhvaća prvi kontakt i poznavanje pacijenata, omogućeno je istovremeno postavljanje dijagnoze, učinkovito liječenje i praćenje. Prepoznavanjem akutnih psihijatrijskih stanja mogu se sprječiti ozbiljne posljedice za zdravље, nepotrebna tjeskoba pacijenata i članova njihovih obitelji te negativne socijalne posljedice.

Cilj je rada definirati akutna psihijatrijska stanja i ulogu LOM-a u njihovu zbrinjavanju.

Rasprava: Mentalno zdravlje je „stanje dobrobiti u kojem pojedinac ostvaruje svoje potencijale, može se nositi s normalnim životnim stresom, može raditi produktivno i plodno te je sposoban pridonositi zajednici.“

Postoji uska veza između fizičkog i mentalnog zdravlja jer jedno na drugo izravno i neizravno utječe. Akutno stanje u psihijatriji svako je stanje koje zahtijeva da se odmah i bez odgađanja pruži pomoć, a koje neposredno ugrožava tjelesni integritet pacijenta i opasno je za pacijenta ili njegovu okolinu. U akutna psihijatrijska stanja ubrajuju se suicidno ponašanje, delirij, intoksikacija alkoholom, akutna anksiozna stanja, akutna psihotična reakcija, psihomotorni nemir i agresivno ponašanje (agitacija), maligni neuroleptički sindrom i intoksikacija psihootaktivnim tvarima. LOM može zbrinjavati velik dio navedenih stanja na temelju svoje stručnosti i poznavanja specifičnosti pojedinih pacijenata. Prilikom suočavanja s akutnim psihijatrijskim stanjima potrebno je verbalnim i neverbalnim ponašanjem prenijeti pacijentu stav koji će biti odraz odlučnosti, usmjerenosti na cilj, racionalnosti i empatije. Uspostavljanje individualnog pristupa prijateljskim, empatičnim stavom bitna je komponenta početnog tretmana i otvara put terapijskim postupcima koji će biti poduzeti kasnije.

Zaključak: Budući da se svaki LOM može susresti s akutnim psihijatrijskim stanjima koja zahtijevaju hitnu intervenciju, od iznimne je važnosti postojanje primjerene stručne osposobljenosti obiteljskih liječnika u pogledu dijagnostičkih

postupaka i zbrinjavanja akutnih psihijatrijskih stanja. Specijalistički obrazovan LOM kompetentan je pružati trajnu skrb pacijentima s poremećajima mentalnog zdravlja na primarnoj razini, uz prikladnu konzultaciju psihijatra sukladno zdravstvenim potrebama pacijenta.

■ Procedures in the care of acute psychiatric conditions

Keywords: mental health, acute psychiatric conditions, family medicine specialist

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Introduction and aim: Every family medicine specialist (FMS) can encounter patients with acute psychiatric conditions. Acute psychiatric condition is an acute disorder of thinking, attention, mood, behavior, or social relationships. Due to the specific position of FMS in the health care system, which includes the first contact and a knowledge of the patient, it is possible to simultaneously diagnose, effectively treat and monitor. Recognizing acute psychiatric conditions can prevent serious health consequences, unnecessary anxiety for patients and their family members, and negative social consequences. The aim of this paper is to define acute psychiatric conditions and the role of FMS in patient care.

Discussion: Mental health is “a state of well-being in which individuals realize their potentials, can cope with normal life stress, can work productively and fruitfully, and are able to contribute to the community.”

There is a close link between physical and mental health because they directly and indirectly affect each other. An acute condition in psychiatry is any condition that requires immediate help, which is directly endangering the patient's physical integrity and is dangerous to the patient or their environment. Acute psychiatric conditions include suicidal behaviors, deliriums, alcohol intoxications, acute anxiety conditions, acute psychotic reactions, psychomotor restlessness and aggressive behaviors (agitation), malignant neuroleptic syndrome and intoxications with psychoactive substances. FMS can treat many of these conditions based on the expertise and knowledge of the specifics of individual patients. When dealing with acute psychiatric conditions, it is necessary to convey to the patient through verbal and non-verbal behavior an attitude that will be a reflection of determination, goal-orientation, rationality and empathy. Establishing an individual approach through a friendly, empathetic attitude is an essential component of initial treatment and

paves the way for therapeutic procedures to be taken later.

Conclusion: Since any FMS can encounter acute psychiatric conditions that require urgent intervention, it is extremely important to have adequate professional training in terms of diagnostic procedures and care of patients suffering from acute psychiatric conditions. An educated FMS is competent to provide ongoing care to patients with mental health disorders at the primary level, including appropriate consultations with a psychiatrist in accordance with the health needs of the patient.

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■ Psihobiotici – drukčiji aspekt probiotika

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Ključne riječi: mikrobiota, prebiotici, probiotici, psihobiotici

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Uvod: Svaki dio ljudskoga organizma koji je u doticaju s okolišem koloniziran je mikroorganizmima, a broj tih mikroorganizama naziva se mikrobiota. Crijevna mikrobiota danas se smatra pravim organom s dobro definiranim metaboličkim i imunosnim funkcijama. Obostrana komunikacija između crijeva i mozga bitna je za uspostavljanje homeostaze, a mehanizmi komunikacije složeni su te su postupno otkriveni, uključuju imunosne, neurološke, endokrine i metaboličke puteve. Djelovanje probiotika na psihološke i neurološke funkcije relativno je novo područje znanosti.

Cilj je rada proširiti znanje LOM-a o probioticima, odnosno psihobioticima.

Metoda: U bazama PubMed i Medscape pregledani su sažetci radova o utjecaju mikrobiote na mentalno zdravlje u razdoblju od 2016. do 2021. godine. Od ukupno 76 pregledanih radova u analizu je uvršteno 28 radova.

Rezultati: Mikrobiota povoljno utječe na plastičnost mozga, dok na zdravlje crijeva i mozga nepovoljno i toksično djeluju komponente brze i procesuirane hrane, kao što su prehrambeni emulgatori, umjetna sladila i rafinirani šećeri. Približno 95 % serotonina podrijetlom je od crijevnih enterokromafinih stanica i crijevnih neurona, što je povezano s regulacijom gastrointestinalne sekrecije i s pokretljivošću. Moždani serotoninski putevi uključeni su u regulaciju kognicije i raspoloženja. Stoga disfunkcionalni serotoninski putevi mogu biti povezani s komorbiditetom gastrointestinalnih poremećaja i poremećaja raspoloženja. Nedavno se uvidio utjecaj mikrobiote na različita stanja, uključujući depresiju, demenciju, autizam, shizofreniju i Parkinsonovu bolest. Povećana propusnost crijeva može inducirati pojavu depresivnih simptoma. Primjena više vrsta probiotika tijekom četiri tjedana ima pozitivan učinak na kognitivnu reaktivnost na životne promjene te smanjuje agresivne i ruminirajuće misli. Snižene razine *Bifidobacterium* i/ili *Lactobacillus* primjećene su u osoba s velikim depresivnim poremećajem. Postoji vjerojatnost da će u budućnosti značajna pomoć u liječenju neuropsihijatrijskih poremećaja biti primjena ciljane transplantacije mikrobiote, antibioticima ili psihobioticima. Psihobiotici

su skupina probiotika koja utječe na središnji živčani sustav (SŽS), na funkcije i ponašanja koje posreduje os crijevo-mozak imunosnim, humoralnim, neuralnim i metaboličkim putevima. U definiciju valja uključiti i prebiotike, neprovabljive sastojke hrane, koji svojim djelovanjem potiču rast i/ili djelovanje bakterija. Prebiotici koji su najviše proučavani zbog svojih neuralnih učinaka jesu fruktani i oligosaharidi. Psihobiotici kao nova klasa probiotika otvaraju novu eru u neuroznanosti.

Zaključak: Sve više istraživanja pokazuju ulogu crijevne mikrobiote u stresu, anksioznosti, depresiji i drugim psihoneuronalnim promjenama. Smatra se da crijevna mikrobiota djeluje putem crijevnoga živčanog sustava što govori u prilog postojanju osi crijevo-mozak. Dosadašnja istraživanja pokazala su da se primjenom odgovarajućih probiotičkih sojeva u adekvatnoj dozi tijekom dovoljno dugog vremena može utjecati na različita mentalna i neurološka stanja te da dugotrajna primjena nema nuspojava.

■ Psychobiotics - a different aspect of probiotics

Keywords: microbiota, probiotics, prebiotics, psychobiotics

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Introduction. Every part of the human organism that is in contact with the environment is colonized by microorganisms, and the number of these microorganisms is called microbiota. The intestinal microbiota is today considered a true organ with well-defined metabolic and immune functions. Bilateral communication between the gut and the brain is essential for establishing homeostasis, and communication mechanisms are complex and have been gradually discovered, involving immune, neurological, endocrine, and metabolic pathways. The effect of probiotics on psychological and neurological functions is a relatively new field of science.

Aim The aim of this paper is to expand GP's knowledge of probiotics and psychobiotics.

Methods. We studied recent papers at PubMed and Medscape on the impact of microbiota on mental health over the past ten years with a focus on papers published from 2016 to 2021.

Out of a total of 76 papers, 28 papers were reviewed and included in the analysis.

Results: The microbiota has a beneficial effect on the plasticity of the brain, while the health of the gut and brain is adversely and toxically affected by fast and processed food components, such as food emulsifiers, artificial sweeteners and refined sugars. Approximately 95% of serotonin is derived from intestinal enterochromaffin cells and intestinal neurons, which is associated with regulation of gastrointestinal secretion and motility. Cerebral serotonin pathways are involved in the regulation of cognition and mood. Therefore, dysfunctional serotonin pathways may be associated with the comorbidity of gastrointestinal and mood disorders. The impact of the microbiota on a variety of conditions, including depression, dementia, autism, schizophrenia, and Parkinson's disease, has recently been recognized.

Increased bowel permeability may induce the onset of depressive symptoms. The use of several types of probiotics during 4 weeks has a positive effect on cognitive reactivity to life changes and reduces aggressive and ruminating thoughts. Decreased levels of *Bifidobacterium* and/or *Lactobacillus* have been observed in people with major depressive disorder. The use of targeted microbiota transplantation, antibiotics or psychobiotics is likely to be a significant help in the future in the treatment of neuropsychiatric disorders. Psychobiotics are a group of probiotics that affect the central nervous system (CNS), intestinal-brain-mediated functions and behaviors through immune, humoral, neural, and metabolic pathways. The definition should also include prebiotics, indigestible food ingredients, which by their action stimulate the growth and/or action of bacteria. The prebiotics most studied for their neural effects are fructans and oligosaccharides. Psychobiotics as a new class of probiotics open a new era in neuroscience.

Conclusion. More and more research is showing the role of the intestinal microbiota in stress, anxiety, depression and other psychoneuronal changes. The intestinal microbiota is thought to act through the intestinal nervous system, which speaks in favor of the existence of a gut-brain axis. Previous research has shown that the use of appropriate probiotic strains in an adequate dose for a sufficiently long time can affect various mental and neurological conditions and that long-term use has no side effects.

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■ Učinak „infodemije“ na mentalno zdravje stanovništva, aktivno suzbijanje infodemije

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Ključne riječi: mentalno zdravlje, infodemija, suzbijanje infodemije, obiteljski liječnik

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Uvod s ciljem: Pandemija COVID-19 prouzročila je značajne izazove zdravstvenim sustavima diljem svijeta, ali je istovremeno svratila posebnu pozornost na nekontroliran priljev brojnih dezinformacija preko medija i društvenih mreža (infodemija) o etiologiji, prevenciji, liječenju bolesti i cijepljenju. Nova infodemija ograničava zdravstvene vlasti i zdravstvene djelatnike u ispunjavanju postavljenih ciljeva te promiče pogrešne postupke, nastanak i proširenost zabluda, što u konačnici rezultira negativnim utjecajem na tjelesno i psihičko zdravlje pojedinaca.

Cilj je rada prikazati utjecaj dezinformacija na mentalno zdravlje stanovništva te potaknuti razmišljanje o izgradnji sustava za suzbijanje infodemije uključivanjem obiteljskog liječnika u educiranje pacijenata za pristup informacijama iz provjerjenih izvora.

Rasprava: Infodemija je, u prvome redu preko digitalnih medija, omogućila dostupnost velike količine informacija, uključujući lažne i/ili krije informacije, koje izazivaju pomutnju i negativan učinak na mentalno zdravlje stanovništva. Negativan utjecaj nije vezan uz određenu dobnu skupinu stanovništva, ali je najveći takav utjecaj uočen kod ranjivih skupina: odraslih osoba s komorbiditetom, djece i adolescenata, osoba izloženih nasilju u obitelji i osoba s ozbiljnim psihičkim poteškoćama. Utjecaj na mentalno zdravlje često uključuje emocionalne, bihevioralne i/ili somatske manifestacije, kao što su nove akutne ili egzacerbacije prijašnjih problema mentalnog zdravlja. Izgradnja sustava i alata za suzbijanje infodemije uz uključivanje zdravstvenih djelatnika, ponajprije obiteljskih liječnika, omogućiti će edukaciju pacijenata za pristup provjerjenim informacijama i povećati povjerenje u zdravstveni sustav, a time i zaštитiti mentalno zdravlje.

Zaključak: Borba protiv infodemije mora biti multidisciplinarna i multisektorska. Obiteljski liječnici u idealnoj su poziciji da aktivnom edukacijom stanovništva i slobodnim pristupom provjerjenim informacijama održavaju i povećavaju povjerenje javnosti u zdravstveni sustav te smanjuju psihosocijalni utjecaj infodemije.

■ The effect of “Infodemia” on the population mental health, the need for active infodemic management

Keywords: mental health, infodemia, infodemic management, family physician

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Introduction and aim: The COVID 19 pandemic has posed significant challenges to health systems around the world, but at the same time it has drawn particular attention to the uncontrolled influx of numerous misinformations through the media and social networks regarding the etiology, prevention, treatment of diseases and vaccination. The new “Infodemia” limits the health authorities and workers in achieving the set goals, promotes wrong practices and develops a confusion which ultimately results in a negative impact on the physical and mental health of individuals.

Aim is to present the impact of misinformation on the mental health of the population and to encourage thinking about building infodemic management by involving the family physician in educating patients how to access information from appropriate resources.

Discussion: Infodemia, primarily through the digital media, has enabled the availability of a large amount of information, including false and/or misleading information, causing confusion and a negative effect on the population mental health. The negative impact is not related to a certain age group of the population, the greatest impact being observed in vulnerable groups: adults with comorbidities, children and adolescents, people exposed to domestic violence and people with serious psychological difficulties. Impact on mental health often includes emotional, behavioral, and/or somatic manifestations, such as new, acute or exacerbations of previous mental health problems. Building infodemic management with the

involvement of health professionals, primarily the family physician, will enable educating patients to access verified information and increase trust in the health system, and thus protect their mental health.

Conclusion: Engagement against infodemia must be multidisciplinary and multisectoral. Family physicians are in an ideal position to maintain and increase public confidence in the health system and reduce the psychosocial impact of infodemia through active education of the population and a free access to verified information.

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4. Utjecaj pandemije Covid 19 na mentalno zdravlje pacijenata i liječnika

■ Utjecaj pandemije COVID-19 na mentalno zdravlje pacijenata i zdravstvenog osoblja – zapažanja obiteljskog liječnika

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Ključne riječi: pandemija COVID-19, obiteljska medicina, otoci, mentalno zdravlje, psihološke reakcije, karantena

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Uvod: Sve pandemije, pa tako i COVID-19, povezane su s lošijim mentalnim zdravljem i s povećanim rizikom za razvoj psihičkih poremećaja. Istovremena pojava pandemije COVID-19 i psihijatrijskih bolesti rezultira sinergijom čiji su zdravstveni ishodi lošiji od zbroja mogućih pojedinačnih negativnih utjecaja. Osim toga, pandemija COVID-19 izazvala je krizu javnog zdravstva i pokazala sve njegove slabe točke, prije svega u pogledu nejednake raspodjele zdravstvene skrbi. Cilj je rada prikazati najčešće psihološke posljedice izazvane pandemijom COVID-19 te zadaće liječnika obiteljske medicine u skribi za psihološko zdravlje u vrijeme pandemije COVID-19.

Rasprrava: Od početka pandemije COVID-19 u porastu su anksioznost, depresija, simptomi postrauatomskoga stresa i zlouporaba psihootaktivnih tvari, kako u općoj populaciji, tako i u zdravstvenog osoblja. Studije opće populacije pokazale su niže psihološko blagostanje i povisene rezultate na upitnicima anksioznosti i depresije u usporedbi s vremenom prije pandemije.

Istraživanje psiholoških aspekata krize COVID-19 na otoku Braču, tijekom vrhunca pandemije u prvom valu, u razdoblju od 14. do 23. svibnja 2020. godine, pokazalo je da su unatoč kratkom trajanju karantene psihološki učinci pandemije bili uočljiviji u njegovih stanovnika u odnosu na stanovnike otoka bez karantene. Stanovnici Brača pokazali su znatno veći stupanj depresije i stresa te su bili anksiozniji u usporedbi sa stanovnicima drugih otoka gdje karantene nije bilo. Niži sociodemografski status predviđao je višu razinu depresije, anksioznosti i stresa. Veća podrška partnera predviđala je nižu razinu anksioznosti i stresa, dok je veća podrška vjerske zajednice predviđala nižu tjeskobu.

Prisutna je bojazan da bi ova pandemija zauvijek mogla promijeniti obiteljsku medicinu i njezin način rada, ponajprije zbog sve više prisutnog rješavanja problema pacijenata izvan ordinacije (telefonski, e-poštom, messengerom i sl.), a bez fizičkog kontakta. Uz skrb o oboljelima od bolesti COVID-19 te uz kontinuirano provođenje preventivnih mjera, zadaća je liječnika obiteljske medicine i dalje raditi na prevenciji psihopatologije u smislu promocije zdravih stilova života i provoditi liječenje psihopatoloških stanja uključivanjem medikamentne terapije (antidepresiva,

anksiolitika i drugih lijekova). Edukacija pacijenata, u smislu razumijevanja odnosa između ljudskog tijela i uma (engl. *body-mind relationship*), te utjecaj na unutarnji doživljaj bolesti (u prvome redu na negativna vjerovanja), ponašanja i mehanizme nošenja s problemom (engl. *enablement*) dio je svakodnevнog rada kojem u doba bolesti COVID-19 treba posvetiti posebnu pažnju. Dodatni su naporci potrebni da komunikacija s profesionalcima iz područja mentalnog zdravlja bude što učinkovitija. Prevencija psihopatologije u liječnika obiteljske medicine i u drugih zdravstvenih radnika za sada je još uvijek na individualnoj razini. Jedan od primjera dobre prakse jest osnivanje tima za psihološku podršku zdravstvenim radnicima u Kliničkom bolničkom centru Zagreb koji nudi niz mogućnosti, od edukacije i relaksacijskih radionica do individualne i grupne terapije.

Zaključak: Za obiteljskog liječnika izazovi mentalnog zdravlja u pandemiji COVID-19 prije svega su djelovati preventivno na porast mentalnih poremećaja u svojoj populaciji te isto tako voditi računa o prevenciji psiholoških posljedica COVID-19 krize u zdravstvenih radnika.

The impact of the Covid-19 pandemic on the mental health of patients and healthcare professionals – observations of the family physician

Keywords: Covid-19 pandemic, family medicine, islands, mental health, psychological reactions, quarantine.

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Introduction. All pandemics, including the Covid-19, are associated with poorer mental health and an increased risk of developing mental disorders. The simultaneous occurrence of the Covid-19 pandemic and psychiatric diseases, results in synergies with worse health outcomes than is the sum of possible individual negative impacts. In addition, the Covid-19 pandemic has caused a public health crisis and showed all its weaknesses, primarily in terms of unequal distribution of health care. The aim is to show the most common psychological consequences caused by the Covid-19 pandemic, and the role of family physicians in mental health care during the Covid-19 pandemic.

Discussion. Since the beginning of the Covid-19 pandemic, anxiety, depression, symptoms of post-traumatic stress disorder and substance abuse have been on the rise, both in the general population and among healthcare professionals. General population studies have shown lower psychological well-being and increased scores on anxiety and depression questionnaires compared to pre-Covid-19. Research into the psychological aspects of the Covid-19 crisis on the island of Brač, during the peak of the pandemic in the first wave, in the period from 14 to 23 May 2020, showed that, despite the short duration of quarantine, the psychological effects of the pandemic were more noticeable in its inhabitants on this quarantined island than in non quarantined islanders. Residents of Brač showed a significantly higher degree of depression and stress, and were more anxious compared to residents of other islands where there was no quarantine. Lower sociodemographic status predicted higher levels of depression, anxiety, and stress. Greater support from partners predicted lower levels of anxiety and stress, and a greater support from the religious community predicted lower anxiety.

There is a fear that this pandemic could forever change family medicine and its way of working, primarily due to the increasing problem solving of patients conditions outside the office (phone, email, messenger, etc.), and without physical contacts. In addition to caring for patients with Covid-19 infection, and the continuous implementation of preventive measures, the role of family physicians is to continue to work on the prevention of psychopathology in terms of promoting healthy lifestyles and treatment of psychopathological conditions, including drug therapy (antidepressants, anxiolytics and other drugs). Educating patients in understanding of “body-mind” relationship, and the impact on the internal experience of the disease (primarily negative beliefs), behavior and mechanisms of coping with the problem (enablement) is part of daily work to which family physicians should dedicate their attention during the Covid-19 pandemic. Additional efforts are needed to make communication with mental health professionals as effective as possible.

Prevention of psychopathology in family physicians and other health professionals has so far been mostly provided only on individual level. One example of good practice is the establishment of a team for psychological support to health professionals at Clinical Hospital Centre Zagreb, which offers a range of opportunities, from education, relaxation workshops, to individual and group therapy.

Conclusion. For the family physician, the mental health challenges in the Covid-19 pandemic are primarily to prevent the increase in mental disorders in their population, and also to take care of the prevention of psychological consequences of the Covid-19 crisis in health workers.

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■ Pandemija i poremećaji spavanja – COVID-somnia

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Uvod s ciljem: Problemi spavanja, posebno nesanica, čine velik javnozdravstveni problem posljednjih godina. Utječu na kvalitetu života, ali su i rizik za nastanak brojnih bolesti. COVID-19 pandemija značajno je utjecala na svakodnevnicu pojedinca. Strah od moguće zaraze, česte samozolacije/izolacije, promjene i ograničenja u dosadašnjem svakodnevnom funkcioniranju vode nastanku sve veće tjeskobe među ljudima, mlađima i starijima, te veće prevalencije mentalnih poremećaja, uključujući i povećanu pojavnost nesanice.

Cilj je rada osvijestiti liječnike obiteljske medicine o sveprisutnome problemu nesanice, posebno o javljanju nesanice kao posljedice COVID-19 infekcije.

Rasprava: U brojnim radovima objavljenima diljem svijeta opisane su mentalne poteškoće za trajanja pandemije, uključujući povećanu prevalenciju anksioznosti, depresije, sindroma izgara na radnom mjestu, ali i poremećaje spavanja, odnosno nesanicu.

Rezultati istraživanja u Kini, kao početnom žarištu COVID-19 infekcije, u Kanadi i u europskim državama (Italija, Francuska, Španjolska, Grčka) pokazuju značajnu prisutnost nesanice, posebice u bolesnica, gradskog stanovništva, u bolesnika s prijašnjim evidentiranim psihijatrijskim poremećajima i u zdravstvenih djelatnika. U tijeku su istraživanja vezana uz javljanje nesanice u post-COVID sindromu, ali i istraživanja o kvaliteti spavanja bolesnika zaraženih SARS-CoV-2 virusom. Prema dosadašnjim istraživanjima vidljivo je da je lošija kvaliteta spavanja kod bolesnika češće povezana s težom kliničkom slikom zbog COVID-19 infekcije. Naime, manjak sna povezan je s otpuštanjem upalnih čimbenika, ali i s utjecajem na staničnu imunost, što povećava rizik od nastanka zaraznih bolesti.

Zaključak: Još uvijek prisutna pandemija COVID-19 uvelike utječe na svakodnevno funkcioniranje, na kvalitetu života, ali i na kvalitetu spavanja bolesnika i samo javljanje nesanice. U tijeku su brojna istraživanja koja dovode spavanje u vezu s COVID-19 infekcijom na razne

načine s ciljem ranijeg otkrivanja poremećaja, boljeg razumijevanja nastanka samog poremećaja, a time i boljeg liječenja bolesnika koji se sve češće javljaju u ordinacije obiteljskih liječnika s post-COVID problemima.

Pandemic and sleep disorders – COVID-somnia

Keywords: covidomnia, sleep disorders, insomnia, mental health

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Introduction Sleep problems, especially insomnia, have recently been a major public health problem. They affect the quality of life, but also represent a risk for many diseases. The COVID-19 pandemic has significantly affected individuals' daily life. Fear of possible infection, frequent quarantine, changes and limitations in the daily functioning have led to increased anxiety among people, young and old, and to a higher prevalence of mental disorders, including an increased incidence of insomnia.

The aim of this paper is to make family physicians aware of the insomnia issue, especially the occurrence of insomnia as a consequence of COVID-19 infection.

Discussion Numerous studies around the world have described mental difficulties during the pandemic, including increased prevalence of anxiety, depression, burnout syndrome at work, but also sleep disorders and insomnia.

The results of research in China, as the initial focus of COVID-19 infection, Canada and other European countries (Italy, France, Spain, Greece) show a significant presence of insomnia in women, urban population, patients with previous psychiatric disorders and healthcare workers. Studies are in progress on the occurrence of insomnia in post-COVID syndrome, as well as studies on the quality of sleep of patients and a correlation with SARS-CoV-2 infection. According to previous research it is evident that poorer sleep quality in patients is often associated with the severity of COVID-19 infection. Lack of sleep is associated with the release of inflammatory factors, as well as the impact on cellular immunity which increases the risk of infectious diseases.

Conclusion The still present COVID-19 pandemic has a strong impact on daily functioning, quality of life and on the quality of sleep of patients and the occurrence of insomnia. Numerous studies are underway that link sleep to COVID-19 infection in a variety of ways for the purpose of an early detection of insomnia, better understanding of the origin of insomnia and, consequently, a better treatment of patients who increasingly appear in the offices of family physicians with post-COVID problems.

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■ Psihoterapija u vrijeme bolesti COVID-19

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Ključne riječi: online psihoterapija, pandemija COVID-19

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Uvod s ciljem: Suočeni s pandemijom bolesti COVID-19 mnogi su psihoterapeuti prešli na *online* način rada kako bi nastavili terapijski proces uz minimalni rizik za obje strane. Prikazujemo različite moduse *online* psihoterapije, prema natrcu dokumenta o *online* psihoterapiji Europskog udruženja za psihoterapiju (engl. *European Association of Psychotherapy – EAP*) te vlastita iskustva i modifikacije navedenih preporuka u individualnom i grupnom dnevnom bolničkom okružju.

Rasprava: *Online* psihoterapija nije novost u psihoterapiji, a sporadično se u različitim situacijama primjenjuje već dulje vrijeme. Sustavno se i masovnije prakticira od početka pandemije bolesti COVID-19, otkada se i sustavno evaluiraju njezini učinci.

Prema preporukama EAP-a, potrebno je prije početka *online* terapije učiniti pažljivu procjenu rizika od samoubojstva i potencijalnog nanošenja štete drugima te procijeniti ego snage osobe, posebno ako se radi o osobi koja dotada nije bila u psihoterapijskom tretmanu.

Potrebno je posebno paziti na povjerljivost, sigurnost i diskreciju (npr. platforma Zoom općenito se smatra sigurnijom od Skypea), na pravila koja reguliraju *online* rad (GDPR, pravila za društvene mreže) te imati i pričuvni plan za slučaj tehničkih poteškoća.

Osim ovih tehničkih prepostavaka važno je za psihoterapeute imati na umu da se ljudi mogu drukčije ponašati *online* nego uživo i u tom smislu trebaju biti spremni prilagoditi vlastitu terapijsku tehniku i pristup.

Zasebna je situacija *online* vođenje grupe, kao što smo radili u dnevnim bolnicama Klinike za psihijatriju Sveti Ivan Jankomir tijekom nekoliko mjeseci na početku pandemije. Takav način rada bio je novost i za psihoterapeute i za ostalo osoblje, isto koliko i za pacijente.

Također je bilo zanimljivo zapažati različite vidove otpora koji su se manifestirali u *online* prostoru, kao npr. uključivanje kućnih ljubimaca, pokrivača, toplih napitaka i sl., a što je sve poslužilo kao dragocjen materijal za analizu.

S obzirom na to da se radilo o instituciji, bilo je osobito važno paziti na povjerljivost i diskreciju.

Svi su pacijenti potpisali informirani pristanak nakon što su bili detaljno upoznati s *online* načinom rada, a *online* platformu osigurali su bolnički informatičari.

Prema našim rezultatima, kao i prema rezultatima dostupne literature, učinci *online* psihoterapije ne zaostaju za onima u uživo psihoterapiji.

Zaključak: *Online* psihoterapija dokazano je učinkovita, premda pojedinim sudionicima može biti zahtjevna od ubojčajene, stoga je potrebno pažljivo odvagati omjer koristi i eventualne štete u svakom pojedinačnom slučaju. U instituciji je bez dileme *online* psihoterapija (privremena) metoda izbora u uvjetima pandemije ili drugih izvanrednih stanja.

■ Psychotherapy in covid-19 pandemic

Keywords: online psychotherapy, Covid-19 pandemic

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Introduction and aim. In order to maintain the contact with patients/clients during the Covid-19 pandemic, many psychotherapists decided to switch to online therapy. We present the European Association of Psychotherapy (EAP) guidelines for online psychotherapy, along with our own practice, both in individual and group therapy online in Daily Hospital setting.

Discussion. Online psychotherapy has been occasionally practised for some time now, but with the onset of covid-19 pandemic it became an important and widely used mode of psychotherapy. It allowed patients/clients to stay in contact with their therapist without risk of the Covid-19 infection. To help therapists and patients/clients managing different issues arising in an online setting, the EAP reacted immediately with a set of guidelines and recommendations.

According to the EAP Guidance, a careful assessment concerning suicide and self-harm risk and ego strength should be made. Special caution is needed if a therapist meets a patient/client for the first time.

Confidentiality and security issues, such as GDPR regulations and using Zoom in favour of Skype should be of utmost concern. Recovery options (back-up plan) in case technology fails should also be considered.

Psychotherapists should also bear in mind that patients/clients may act differently online and be prepared to adapt their technique and clinical approach accordingly.

A special situation was an online group setting, as we had in Daily Hospitals at University Psychiatric Hospital Sveti Ivan during several months when the pandemic began. Online group

therapy was a novelty for patients as well as the therapists. It was extremely interesting and educating for us to observe and analyze different types of resistance to therapy, for example patients bringing pets, blankets, hot beverages, etc. on screen.

Working in an institution, we paid special attention to discretion and confidentiality; after having explained all the details to our patients, they signed informed consent for participating in online therapy.

Our experience and results showed that online psychotherapy is as effective as in-person psychotherapy, which is in accordance with the results of other studies.

Conclusion. Online psychotherapy proved to be effective, although for some participants it may be more demanding than in-person psychotherapy. Therefore it is wise to consider the cost-benefit ratio for every single case. Nevertheless, as for the Daily Hospital setting, online psychotherapy is no doubt the therapy of choice in case of a pandemic or similar extreme situation, at least temporarily.

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■ Post-COVID sindrom – psihijatrijski aspekti

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Ključne riječi: post-COVID sindrom, prolongirani stres, psihičke komplikacije

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Uvod s ciljem: Post-COVID sindrom prvi je put opisan u proljeće 2020. godine kada je primjeno da simptomi perzistiraju tjednima nakon akutne infekcije. Post-COVID simptome javlja 10 – 35 % oboljelih, a u onih koji su bili hospitalizirani ta incidencija može rasti na više od 80 %. Najčešći među njima su umor, dispnea, smetnje okusa i mirisa, bol u prsima, malgijke, smetnje spavanja i mentalni poremećaji. Čini se da je post-COVID sindrom sistemsko stanje koje se događa čak i nakon relativno blage akutne bolesti. Cilj je rada razmotriti psihijatrijske aspekte post-COVID sindroma.

Rasprava: Velik broj COVID-19 pacijenata manifestira različite psihičke i neurološke simptome, kako u akutnoj fazi, tako i nakon dužeg razdoblja poslije infekcije. U akutnoj fazi česti su anksioznost, depresija i delirij, posebice u starijih i teže bolesnih osoba. Inficirani pacijenti često razvijaju neurološke simptome, te su prikazane abnormalnosti mozga kao što su hiperintenzitet i hipodenzitet bijele tvari, mikrohemoragiјe i infarkti. Pretpostavljeni mehanizmi kojima SARS-CoV-2 djeluje na mozak jesu putem neuroinvazivnog potencijala samog virusa i izravne neurotoksičnosti te indirektno putem imunološkog sustava domaćina. Smatra se da prolongirana sistemska upala ima ključnu ulogu. Nađeni su povišeni cirkulirajući citokini, posebice IL-6, koji može probiti krvno-moždanu barijeru i pridonjeti SŽS komplikacijama (promijenjen mentalni status i neurokognitivni poremećaji). Dodatno, s bolesti COVID-19 povezana upala može dovesti do poremećaja GABA-sustava što objašnjava neuromotorni i kognitivni umor te apatiju i izvršne deficite.

Psihički simptomi često perzistiraju mjesecima nakon oporavka od inicijalne infekcije. Među najčešćim su anksiozni i depresivni poremećaji, poremećaji spavanja i kognitivni deficiti. Zabilježeni su i psihotični simptomi u osoba bez ranijih psihijatrijskih morbiditeta. PTSP je opisan u različitim studijama, posebice kod bolesnika liječenih u jedinicama intenzivne skrbi. Među kognitivnim deficitima nađeni su, među ostalima, problemi koncentracije i pažnje, smetnje kratkotrajne ili generalne memorije. U nastanku psihičkih simptoma sudjeluje više čimbenika, pored djelovanja samog virusa i imunološkog odgovora domaćina, to su upotreba kortikosteroida i stres tijekom liječenja. Pacijenti s ranjom psihijatrijskom dijagnozom posebno su osjetljiva skupina, s lošijim ishodom same akutne infekcije i s većim rizikom težih psihopatoloških posljedica.

Zaključak: Zbog post-COVID psihičkih simptoma u osoba koje su preboljele infekciju te zbog dugotrajnog stresa u općoj populaciji uslijed socijalnog distanciranja, ekonomski neizvjesnosti, prolongirane anksioznosti i straha za vlastiti život i život bližnjih osoba, predviđa se „tsunami“ različitih psihijatrijskih stanja kao posljedice bolesti COVID-19, s time da bi učinak na mentalno zdravlje mogao trajati godinama nakon epidemije.

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5. Izazovi prevencije u obiteljskoj medicini u doba pandemije COVID 19

Sadržaj i značajke preventivnog rada u obiteljskoj medicini

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Ključne riječi: prevencija, obiteljska medicina, COVID-19 pandemija, propuštene preventivne aktivnosti

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Uvod s ciljem: Cilj je preventivne zaštite smanjiti preventibilni morbiditet i mortalitet, poboljšati kvalitetu života i općenito smanjiti potrebu pojedinca za medicinskom skrbi. Preventivna zaštita obuhvaća primarnu prevenciju (unaprjeđenje i očuvanje zdravlja, sprječavanje bolesti), sekundarnu prevenciju (rano otkrivanje bolesti), tercijarnu prevenciju (sprječavanje komplikacija bolesti primjerenim liječenjem, odgađanje invalidnosti i smrti) te kvartarnu prevenciju (smanjenje štetnih učinaka nepotrebnih ili neopravdanih dijagnostičkih i terapijskih postupaka). Preventivne aktivnosti moraju biti utemeljene na znanstvenim dokazima o njihovoj korisnosti, provedbi i efikasnosti. Preventivne aktivnosti definirane su kao dobro specifične preventivne intervencije koje mogu biti implementirane u posjetu zbog bilo kojeg razloga u obiteljskoj medicini. One su jedan od temeljnih zadataka liječnika obiteljske medicine (LOM).

Cilj je rada prikazati recentne postavke o sadržaju i značajkama preventivnog rada LOM-a te posljedicama pandemije COVID-19 na provedbu preventivnih aktivnosti.

Rasprrava: Iako većina liječnika obiteljske medicine smatra da je preventivni rad njihova primarna zadaća, u praksi postoji velika varijabilnost u provedbi preventivnih aktivnosti. Brojni čimbenici, primjerice svijest LOM-a o važnosti prevencije, implementacija smjernica, organizacijski uvjeti i suradljivost svih članova tima te značajke bolesnika, utječu na provedbu preventivnih aktivnosti. U savjetovanju o unaprjeđenju zdravlja liječnici obiteljske medicine nedostatno se koriste sustavnim pristupom koji obuhvaća i čimbenike rizika za mentalno zdravlje, radno okruženje, obiteljski i seksualni život te za širok spektar ovisnosti. Liječnici obiteljske medicine provode cijepljenje i njihov je stav prema cijepljenju glavni pozitivni čimbenik za bolesnikovo prihvaćanje cijepljenja. Stoga je njihova odgovornost u promociji cijepljenja, posebice protiv bolesti COVID-19, izuzetno velika.

LOM provodi prevenciju kardiometaboličkih rizičnih čimbenika sukladno smjernicama. Prema podatcima istraživanja provedenoga u pet europskih zemalja u kojem je sudjelovalo 575 liječnika obiteljske medicine, njih 71 % ponudilo je pacijentima u definiranim dobnim skupinama

procjenu kardiometaboličkog rizika aktivnim pozivanjem ili oportunističkim probirom. Izrada i implementacija smjernica za dijagnostiku i liječenje brojnih kroničnih bolesti te osposobljenost LOM-a da prilagodi preporuke bolesniku i njegovim specifičnim potrebama značajno pridonose uspješnom liječenju bolesti i prevenciji ili odgađanju komplikacija te prerane smrtnosti.

Pandemija COVID-19 utjecala je na dramatično smanjenje preventivnih aktivnosti, posebice u sekundarnoj i tercijarnoj prevenciji. Primjerice, u SAD-u je u odnosu na 2019. godinu u travnju 2020. godine učinjeno 89,2 % manje probira za rak dojke, a 84,5 % manje probira za kolorektalni rak. Procjenjuje se da će nedostatak probira raka dojke tijekom šest mjeseci u Kanadi povećati broj uznapredovalih slučajeva i uzrokovati dodatno 250 smrти; nedostatak probira raka kolona dovest će do novih 960 smrти, što čini ukupni gubitak od 40 000 godina života. Podatci iz brojnih istraživanja potvrđuju kako je u pandemiji otkriveno znatno manje i drugih kroničnih bolesti (šećerne bolesti, demencije, depresije i drugih) od očekivanog broja temeljem predikcije u odnosu na utvrđeni broj bolesti u razdoblju koje je prethodilo pandemiji. Nadalje, bolesnici koji boluju od kroničnih bolesti znatno su rjeđe dolazili na kontrolne pregledе koji su bili nužni za praćenje i kontrolu bolesti, prevenciju komplikacija i smrти.

Zaključak: Za unaprjeđenje preventivnog rada u obiteljskoj medicini bitno je osigurati više vremena, bolju izobrazbu LOM-a i njegovih suradnika, podršku javnosti, ravnopravnu suradnju s drugim dionicima preventivne zaštite te priznatiju ulogu u prevenciji. Kad se suszije COVID-19 pandemija, liječnicima obiteljske medicine velik će izazov biti kako nadoknaditi propuštene preventivne aktivnosti.

Content and characteristics of preventive work in family medicine

Keywords: prevention, family medicine, COVID 19 pandemic, missed preventive activities

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Introduction with aim Preventive care aims to reduce preventable morbidity and mortality, improve quality of life, and generally reduce an individual's need for medical care. It includes primary prevention (health promotion, disease prevention), secondary prevention (early detection of disease), tertiary prevention (prevention of disease complications with appropriate treatment, postpone a development of disability and death) and quaternary prevention (reduction of harmful effects of unnecessary or unjustified diagnostic and therapeutic procedures). Preventive activities (PAs) must be based on scientific evidence of their benefit, implementation and effectiveness. PAs are defined as age-specific preventive interventions that can be implemented in a visit for any reason in family medicine. PAs are one of the fundamental tasks of family physicians (FPs).

The aim of this paper is to present recent point of view about the content and characteristics of PPs' preventive work and the consequences of the COVID 19 pandemic on the PAs performance in family medicine.

Discussion Although most FPs consider preventive work to be their primary task, there is great variability in the implementation of PAs in practice. Numerous factors, such as FP's awareness of the importance of prevention, implementation of guidelines, organizational conditions, collaboration of all team members, and patient characteristics influence the implementation of PAs. In counseling on health promotion, FPs do not sufficiently use a systematic approach that includes risk factors for mental health, work environment, family and sexual life, and for a wide range of addictions. FPs carry out vaccination and their attitude towards vaccination is a major positive factor for the patient's acceptance of vaccination. Therefore, their responsibility in promoting vaccination, especially against COVID 19, is extremely high.

FPs carry out the prevention of cardiometabolic risk factors in accordance with the guidelines.

According to a survey conducted in five European countries, among 575 FPs, 71% offered patients in defined age groups a cardiometabolic risk assessment either by an active or an opportunistic approach. The development and implementation of guidelines for the diagnosis and treatment of many chronic diseases and the FP's competence to adapt recommendations to the patient and their specific needs significantly contribute to successful disease treatment and prevention or postponement of complications and premature mortality.

The COVID 19 pandemic has caused the dramatic reduction of PAs, especially in secondary and tertiary prevention. For example, in the United States, compared to 2019, in April 2020, 89.2% fewer screenings were made for breast cancer and 84.5% fewer screenings for colorectal cancer. It is estimated that a lack of breast cancer screening over six months in Canada will increase the number of advanced cases and cause additional 250 deaths, a lack of colon cancer screening will lead to 960 new deaths and a total loss of 40,000 years of life. Data from numerous studies confirm that during the pandemic significantly fewer other chronic diseases (diabetes, dementia, depression and others) were detected than expected based on predictions based on the number of diseases detected in the period before the pandemic. Furthermore, patients suffering from chronic diseases were much less likely to come for check-ups necessary for monitoring and control of disease, the prevention of complications and death.

Conclusion In order to improve preventive work in family medicine, it is important to provide more time, better training for FPs and their associates, public support, cooperation in preventive care on an equal basis with other stakeholders and a more recognized role in prevention. When the COVID 19 pandemic is suppressed, a big challenge for FPs how to compensate for missed PAs will still remain.

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Kvartarna prevencija i lijekovi za COVID-19 infekciju

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Ključne riječi: kvartarna prevencija, COVID-19 infekcija, lijekovi, obiteljska medicina

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Uvod s ciljem: Kvartarnom prevencijom označavamo preveniranje pretjeranoga, nepotrebnoga neučinkovitoga i potencijalno štetnog postupanja u dijagnostici i/ili terapiji. Od prvog slučaja infekcije SARS-CoV-2 (engl. *Severe Acute Respiratory Syndrome Coronavirus 2*) virusom, do tada nepoznatim uzročnikom, stručna i znanstvena javnost iskušavala je primjenu različitih lijekova. Cilj je rada prikazati djelovanje lijekova koji su se upotrebljavali ili se još uvijek upotrebljavaju u liječenju infekcije SARS-CoV-2, a da za to ne postoje znanstveni dokazi o učinkovitosti, kako bi se osvijestila njihova potencijalna štetnost.

Rasprrava: U infekciji SARS-CoV-2 virusom vrlo je rano uočena povećana trombogenost zbog aktivacije trombocita kao rezultata lokalne upale i pokretanja kaskade imunotrombotskih događaja. Zabilježena je incidencija venskih tromboembolijskih događaja u 5–30 % pacijenata, a u njih 3 % arterijskih embolijskih događaja. Slijedom navedenoga patofiziološkog mehanizma činilo se logičnim da bi davanje acetilsalicilne kiseiline (ASK) i/ili inhibitora P2Y12 (clopidogrel, ticagrelor, prasugrel) moglo poboljšati ishode. Posljednja objavljena studija RECOVERY (*Randomised Evaluation of COVID-19 Therapy*), koja je usporedivala smrtnost i progresiju bolesti u pacijenata koji su dobivali 150 mg ASK-a s onima koji su dobivali samo standardnu skrb, opovrgava očekivanja. Iste rezultate za primjenu inhibitora P2Y12 donijele su tri velike kolaborativne studije koje su usporedivale iste ishode uz davanje inhibitora P2Y12. Jedini pozitivni efekt uočen je kod hospitaliziranih kritično bolesnih pacijenata koji su dobivali heparin. Pokušalo se preveniranje i liječenje blažih oblika bolesti chloroquinom i njegovim analogom hydroxychloroquinom temeljeno na istraživanjima provedenima *in vitro*. Dodatna istraživanja opovrgnula su očekivanja i rezultirala su ranijim prekidom i dodatnim upozorenjem da se pri primjeni obaju lijekova može očekivati produljenje QT intervala zbog direktnog učinka na repolarizaciju te posljedično pojavu ventrikularnih aritmija. Azitromicin i drugi makrolidi također su se pokušali koristiti u liječenju SARS CoV-2 zbog potencijalnog protuupalnog i imunomodulacijskog djelovanja poznatoga iz ranijih studija. Međutim, učinkovitost primjene u ranom stupnju infekcije u SARS CoV-2 je izostala. Za sada se smatra da se zbog nedjelotvornosti, nuspojava i razvoja rezistencije ti lijekovi ne trebaju propisivati.

Uporaba ivermectina temeljila se na *in vitro* dokazima inhibicije replikacije virusa. Iako je do sada objavljeno 18 studija o djelovanju ivermectina, i to kao lijeka za prevenciju, liječenje blagih oblika bolesti i za primjenu u srednje teškim oblicima, zbog nedovoljne kvalitete navedenih studija i dalje je preporuka da se taj lijek koristi samo u randomiziranim kliničkim studijama (RCT). Za famotidin se pretpostavlja da veže papain proteazu koja je neophodna za ulazak virusa u stanicu, a za fluvoksamin da veže sigma-1-receptor koji prekida upalnu kaskadu u endoplazmatskom retikulumu stanica. S obzirom na to da se radi o jeftinim lijekovima s malim brojem nuspojava, dalje se nastavljaju opservacije i u tijeku su RCT ispitivanja za oba lijeka.

Zaključak: Za ASK, inhibitore P2Y12, azitromicin i chloroquin postoje dokazi temeljeni na RCT-u kojima je dokazana nedjelotvornost i potencijalna štetnost primjene, dok za ivermectin, famotidin i fluvoksamin postoje opservacijske studije koje govore u prilog primjene, međutim za kliničku primjenu, posebno u ambulantnim uvjetima, treba pričekati završetak RCT ispitivanja koja su u tijeku i ne treba ih primjenjivati u rutinskoj kliničkoj praksi.

■ Quaternary prevention and drugs used for COVID 19 infection

Keywords: quaternary prevention, covid 19 infection, drugs, family medicine

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Introduction and aim. Quaternary prevention is the prevention of excessive, unnecessary, ineffective and potentially harmful treatment in diagnosis and/or therapy. Since the first case of infection with SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) virus, at that time with unknown cause, the professional and scientific public has tried to use various drugs. The aim of this paper is to give an overview of drugs that have been used or are still being used without scientific evidence of efficacy in order to raise awareness of their potential harmfulness.

Discussion. Increased thrombogenicity due to a platelet activation as a result of local inflammation and initiation of a cascade of immunothrombotic events was observed very early. The incidence of venous thromboembolic events has been reported in 5-30% of patients and of arterial embolic events in 3% of patients. Due to the above, it was expected that the use of acetylsalicylic acid (ASA) and / or P2Y12 inhibitors (clopidogrel, ticagrelor, prasugrel) could improve outcomes. A recently published RECOVERY study (Randomized Evaluation of COVID-19 Therapy) comparing mortality and disease progression in patients receiving 150mg of ASA with those receiving standard care alone refuted the expectations. The same results for the use of P2Y12 inhibitors were obtained by three large collaborative studies comparing the same outcomes with the administration of P2Y12 inhibitors. The only positive effect was observed in hospitalized critically ill patients receiving heparin. Efforts to prevent and treat milder forms of the disease with chloroquine and its analogue hydroxychloroquine have been used based on in vitro studies. Additional studies have refuted expectations and resulted in an earlier discontinuation and additional warning

that QT prolongation may be expected with both drugs due to a direct effect on repolarization and consequent ventricular arrhythmias. The use of the mentioned drugs should be continued in the basic indications without an interruption even in case of confirmed SARS CoV-2 infection. Azithromycin and other macrolides have also been used in the treatment of SARS CoV-2 due to the potential anti-inflammatory and immuno-modulatory effects known from previous studies. However, the efficacy of their administration at any stage of SARS CoV-2 infection was lacking. So far, it is considered that, due to ineffectiveness, side effects and the development of resistance, they should not be prescribed. Proposed use of ivermectin was based on in vitro evidence of the inhibition of virus replication. Although 18 studies have been published so far on the effects of ivermectin as a prevention drug, the treatment of mild forms of disease as well as the use in moderate forms, due to the poor quality of these studies is still recommended to be used only in randomized clinical trials (RCT). Proposed action of famotidine is to bind the papain protease which is necessary for virus entry into the cell while for fluvoxamine it is binding the sigma-1 receptor that breaks the inflammatory cascade in the endoplasmatic reticulum. As these are cheap drugs with a small number of side effects, observations continue and RCTs for both drugs are underway.

Conclusion. ASA, P2Y12 inhibitors, azithromycin and chloroquine are ineffective and potentially harmful based on RCT. Some observational studies support the use of ivermectin, famotidine and fluvoxamine, however, for clinical use, especially in outpatient settings, the completion of ongoing RCTs should be awaited and these drugs should not be used in routine clinical practice.

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■ Oportunistički probir

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Uvod s ciljem: Oportunistički probir (OP) jest vrsta preventivne aktivnosti (PA) pri kojoj se inicijativa provedbe donosi na individualnoj razini od strane samog pacijenta ili zdravstvenog djelatnika. Ovakva vrsta probira predstavlja priliku za liječnika obiteljske medicine (LOM) da iskoristi svoje brojne kontakte s pacijentima kako bi provodio preventivne aktivnosti.

Cilj ovog rada bio je upozoriti na dostupnost praktičnih alata za poboljšanje provođenja preventivnih aktivnosti u praksi LOM-a – preventivnih panela i panela kroničnih bolesti, te motivirati liječnike na provođenje oportunističkog probira u ambulantama obiteljske medicine.

Rasprava: U literaturi se preventivne aktivnosti mogu podijeliti na one koje se provode organizirano i one koje se provode oportunistički. Organizirani javnozdravstveni programi imaju određene prednosti pred OP-om kada se radi o ranom otkrivanju karcinoma. Osim nedostatka centraliziranih podataka i individualnog pristupa kod provođenja OP-a, postoje podaci kako ova vrsta probira ne postiže dovoljan obuhvat s obzirom na to da ovisi o učestalosti posjeta pacijenata ambulantama i aktivnosti zdravstvenog osoblja u pružanju informacija o probiru. Međutim, unatoč svojim nedostacima, OP je pokazao svoju učinkovitost na smanjenje mortaliteta te zadрžava ulogu u probiru na karcinome u kliničkoj praksi. Također, rutinski OP na kronične nezaražne bolesti kao što su hipertenzija ili kronična opstruktivna plućna bolest može pomoći ranom otkrivanju, liječenju i sprječavanju komplikacija te pružiti jednostavan i pouzdan način za podizanje svijesti o ovim bolestima. Štoviše, ovakav pristup probiru ima dodanu prednost korištenja postojećih resursa i infrastrukture zdravstvenog sustava, a potiče direktni prijelaz od točke postavljanja dijagnoze do stručnog savjetovanja i skrbi za bolesnike kojima je tek postavljena dijagnoza. Preduvjeti za uspješno provođenje OP-a u obiteljskoj medicini jesu prikladna edukacija i trening zdravstvenog osoblja koje provodi probir, uzorak financiranja preventivnih aktivnosti koji služi kao poticaj, prikladan organizacijski okvir medicinskih praksi koje provode probir te provođenje preventivnih programa u skladu sa smjernicama. U informatičkim aplikacijama u obiteljskoj medicini u Hrvatskoj oblikovani su preventivni paneli i paneli kroničnih bolesti, upravo kako bi se potaknulo provođenje PA-e i kako bi se lakše

zadovoljili preduvjeti za uspješno provođenje probira kao što su kvantificiranje i vrednovanje ovakve vrste rada. Nažalost, literatura pokazuje kako se od početka pandemije COVID-19 bolesti preventivne aktivnosti LOM-a jako smanjuju. Prema istraživanju provedenome među liječnicima obiteljske medicine u Istri, broj provedenih preventivnih panela i panela kroničnih bolesti statistički je značajno bio manji u 2020. godini u odnosu na 2019. godinu. I druga istraživanja pokazala su smanjenje obuhvata pacijenata probirima za karcinome te smanjenje postavljenih novih dijagnoza kroničnih bolesti. Ovakvi rezultati iz literature su donekle očekivani s obzirom na promjenu modaliteta rada liječnika obiteljske medicine koji se u pandemiji više oslanjaju na telefonske i e-konzultacije, a manje na osobne konzultacije u ambulantama, što ujedno smanjuje priliku za provođenje OP-a.

Zaključak: U Hrvatskoj su dostupni praktični alati za pomoći pri provođenju OP-a u praksi obiteljske medicine. Oportunistički probir ima važan značaj u smanjenju tereta mortaliteta i morbiditeta bolesnika od karcinoma i kroničnih bolesti te je potrebno osigurati preduvjeti za njegovo uspješno provođenje. Smanjeno provođenje preventivnih aktivnosti od strane obiteljskih liječnika u sklopu pandemije COVID-19 može imati dalekosežne posljedice na zdravlje populacije i može dovesti do većeg opterećenja zdravstvenog sustava teretom bolesti u budućnosti.

■ Opportunistic screening

Keywords: opportunistic screening, preventive activities, preventive panels, chronic disease panels

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Introduction and aim: Opportunistic screening (OS) is a type of preventive activity (PA) in which the implementation initiative is taken on an individual level by the patient or healthcare professional. This type of screening represents an opportunity for family physicians (FPs) to use their numerous contacts with patients to perform PAs.

The aim of this paper was to draw attention to the availability of practical tools to improve the implementation of PAs in the practice of FPs - preventive panels and panels of chronic diseases and motivate physicians to conduct opportunistic screenings in family medicine practices.

Discussion: In literature, PAs can be divided into those that are conducted in an organized manner and those that are conducted opportunistically. Organized public health programs have certain advantages over OS when it comes to early detection of cancer. In addition to the lack of centralized data and individual approach to the implementation of the OS, there is evidence that this type of screening does not achieve sufficient coverage as it depends on the frequency of patient visits to clinics and the activities of health staff in providing screening information. However, despite its shortcomings, OS has shown its effectiveness in reducing mortality and retains a role in the screening for cancer in clinical practice. Also, routine OS on chronic non-communicable diseases such as hypertension or chronic obstructive pulmonary disease can help early detection, treatment and prevention of complications and provide an easy and reliable way to raise awareness about these diseases. Moreover, this approach to screening has the additional advantage of using the existing health system resources and infrastructure, and encourages a direct transition from the point of diagnosis to professional counseling and care for newly diagnosed patients. Prerequisites for successful implementation of OS in family medicine are

appropriate education and training of medical staff conducting screening, a pattern of funding for PAs that serves as an incentive, appropriate organizational framework of medical practices conducting screening and implementation of prevention programs in accordance with guidelines. Preventive panels and panels of chronic diseases have been designed in IT applications in family medicine in Croatia, precisely in order to encourage the implementation of PAs and to more easily meet the prerequisites for successful screening such as quantification and evaluation of this type of work. Unfortunately, the literature shows that since the onset of the COVID-19 pandemic, PAs conducted by FPs have been greatly reduced. According to a survey conducted among family physicians in Istria, the number of conducted preventive panels and panels of chronic diseases was statistically significantly lower in 2020 compared to 2019. Other studies have shown a reduction in the number of patients screened for cancer and a reduction in new diagnoses of chronic diseases. Such results from the literature are somewhat expected given the change in work modalities of FPs, which, in the pandemic, rely more on telephone and e-consultations and less on personal consultations in clinics, also reducing the opportunity to implement OS.

Conclusion: Practical tools are available in Croatia to help implement OS in the practice of family medicine. Opportunistic screening has an important role in reducing the burden of mortality and morbidity of patients with cancer and chronic diseases, and it is, therefore, necessary to ensure the preconditions for its successful implementation. Reduced implementation of PAs by family physicians during the COVID-19 pandemic could have far-reaching consequences for the population health and increase the burden on the health care system in the future.

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Cijepljenje protiv bolesti COVID-19

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Uvod: Pandemija koronavirusne bolesti (COVID-19) negativno utječe na zdravstveni sustav, a ostavlja posljedice i na društvo u cjelini. Cijepljenje protiv bolesti COVID-19 učinkovita je preventivna mjeru kojom se smanjuje rizik zaraze virusom SARS-CoV-2, intenzitet širenja virusa, a time i vjerojatnost njegove mutacije, te sprječavaju teški oblici bolesti, hospitalizacije i smrti od ove bolesti. S obzirom na platformu kojom se koriste i na mehanizam djelovanja, u kliničkim ispitivanjima i primjeni postoje četiri kategorije cjepiva: cijeli virus, proteinska podjedinica, virusni vektor i nukleinska kiselina (RNA i DNA). Četiri navedene vrste cjepiva razlikuju se po tome što neke od njih djeluju tako da unose antigen u tijelo čovjeka, dok se druge koriste vlastitim tjelesnim stanicama za stvaranje virusnog antigena.

Cilj je rada prikazati vrste cjepiva protiv bolesti COVID-19 odobrenih u Republici Hrvatskoj (RH), njihove karakteristike te dosadašnja iskustva i rezultate cijepljenja protiv bolesti COVID-19 u RH.

Materijali i metode: Rad se temelji na deskriptivnim metodama, pri čem se koriste podaci Hrvatskog zavoda za javno zdravstvo (HZJZ), Hrvatske agencije za lijekove i medicinske proizvode (HALMED) i međunarodnih izvora. Podaci su dobiveni iz izvještaja nacionalnih registara praćenja cijepljenja i iz baze podataka praćenja nuspojava (HALMED).

Rezultati: U Europskoj uniji i u RH za sada su odobrena i dostupna četiri cjepiva protiv bolesti COVID-19: Comirnaty (Pfizer-BioNTech), Spikevax (Moderna), Vaxzevria (AstraZeneca-Oxford) i Janssen (Johnson & Johnson). Vrsta cjepiva preporuča se ovisno o dobi, pojedinoj populacijskoj skupini, osnovnim bolestima i epidemiološkoj situaciji. Na primjer, za one mlađe od 50 godina i za trudnice Vaxzevria, koja je adenovirusno cjepivo, ne preporučuje se zbog vrlo rijetke, ali ozbiljne nuspojave imunotrombotičke trombocitopenije izazvane cjepivom (VITT), dok su za djecu odobrena samo mRNA cjepiva. Dana 27. prosinca 2021. jednom dozom cijepljeno je 55,37 % ukupnog stanovništva, odnosno 65,99 % odraslog stanovništva. Udio cijepljenih raste od nižih prema višim dobnim skupinama do dobi 70–74 godine, te je u dobi 70–74 godine najviši udio cijepljenih, koji iznosi 91,82 % za prvu

dозу. U dobi 65 godina i više cijepljeno je 78,7 % jednom dozom. HALMED je zaključno s 21. prosincem 2021. zaprimio 6164 prijava nuspojava na COVID-19 cjepiva (0,13 % od primjenjenih doza): 3450 – Comirnaty, 716 – Spikevax (Moderna), 1646 – Vaxzevria (AstraZeneca), 345 – COVID-19 Vaccine Janssen i 7 prijava za koje nije zaprimljena informacija o proizvođaču. Među zaprimljenim izvješćima o nuspojavama oko 25 % ih je klasificirano kao ozbiljne. Podatci o nuspojavama u odnosu na broj primjenjenih doza pojedinih vrsta cjepiva pokazuju da je najveći broj prijava nuspojava zaprimljen za Vaxzevriju, a najmanji za Comirnaty.

Zaključak: Učinkovitost cjepiva nije tako visoka za sprječavanje infekcije virusom SARS-CoV-2 kako se na početku najavlivalo, no i dalje se smatra da cijepljenje pruža vrlo dobru zaštitu od težih oblika bolesti i smrti, uključujući i infekcije novim varijantama virusa. Učinkovitost zaštite cijepljenjem s vremenom opada, te je svim punoljetnim građanima preporučeno poboljšati zaštitu dodatnom (*booster*) dozom tri do šest mjeseci nakon primarnog cijepljenja. Kako se do sada pokazalo da je najbolja zaštita kombinacija različitih intervencija (farmaceutske i nefarmaceutske mјere) i cijepljene osobe trebaju se pridržavati propisanih preventivnih mјera.

Vaccination against COVID-19 disease

Keywords: COVID-19, vaccination, Croatia

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Introduction and aim. Coronavirus disease (COVID-19) pandemic has had a negative impact on the health system and influences social and economic aspects of society. Vaccination against COVID-19 is an effective preventive measure for decreasing the risk of infection by SARS-CoV-2, decreasing the intensity of the virus spread and thus the likelihood of its mutation and preventing severe forms of as well as hospitalizations and deaths from this disease. With regards to the platform used and the functioning mechanisms in clinical studies and application, there are four categories of vaccines: whole virus vaccines, protein subunit vaccines, viral vector vaccines and nucleic acid vaccines (RNA and DNA).

The four mentioned types of vaccines differ in their functioning mechanisms, some bring the antigen into the human body while others use human's own body cells for creating the viral antigen.

Aim is to show types of vaccines approved for use, their characteristics and experience as well as the results of vaccinations conducted using these vaccines against COVID-19 in the Republic of Croatia.

Materials and methods This paper is based on descriptive methods using data obtained from the Croatian National Institute of Public Health (CNIPH), the Agency for medicinal product and medical devices of Croatia (HALMED) and other international sources. Data have been collected from reports in the National vaccinations database (eVac) and from the system of monitoring unwanted side-effects (HALMED).

Results. In the European Union (EU) and in the Republic of Croatia four vaccines against COVID-19 have so far been approved for use: mRNA Comirnaty (Pfizer-BioNTech) and Spikevax (Moderna) and adenoviral: Vaxzevria (AstraZeneca-Oxford) and Janssen (Johnson&Johnson). The type of vaccine is recommended depending on age, particular population group, underlying illnesses

and epidemiological situation. For example for those under the age of 50 and for pregnant women Vaxzevria that is adenoviral vaccine is not recommended due to a very rare but serious side-effect of the vaccine – induced immune thrombotic thrombocytopenia (VITT) while only mRNA vaccines have been approved for children.

Until 27 December 2021 one dose was received by 55.37 % of the total population and 65.99 % of the adult population. The share of vaccinated persons is increasing from younger to older age groups up to the group of 70-74 years of age in which the share of vaccinated persons lies highest at 91.82% for the first dose. For those aged 65 and older the share of those vaccinated by one dose lies at 78.7%. Until 21 December 2021 HALMED received 6164 reports of side-effects (0.13 % of the administered doses): 3450 – Comirnaty, 716 – Spikevax, 1646 – Vaxzevria, 345 – COVID-19 Vaccine Janssen and 7 reports with no information of the vaccine manufacturer provided.

Among received reports on side-effects about 25% have been classified as serious. Data on side-effects in relation to the number of administered doses of particular types of vaccines show that the largest number of reports on side-effects have been received for Vaxzevria and the smallest number for Comirnaty.

Conclusion. Vaccine efficacy is not as high for preventing infection with SARS-CoV-2 as has initially been announced but vaccination is still considered to provide very good protection from severe forms of disease and deaths including new virus mutations. The effectiveness of vaccination decreases with time and thus all citizens aged 18 and older have been recommended to increase their protection by receiving booster doses three to six months after primary vaccination. Thus far a combination of pharmaceutical and non-pharmaceutical measures has proven to be most effective, while vaccinated persons should also observe mandatory preventive measures.

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Sadržaj i značajke preventivnog rada u obiteljskoj medicini

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Ključne riječi: prevencija, obiteljska medicina, COVID-19 pandemija, propuštene preventivne aktivnosti

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Uvod s ciljem: Cilj je preventivne zaštite smanjiti preventabilni morbiditet i mortalitet, poboljšati kvalitetu života i općenito smanjiti potrebu pojedinca za medicinskom skrbi. Preventivna zaštita obuhvaća primarnu prevenciju (unaprjeđenje i očuvanje zdravlja, sprječavanje bolesti), sekundarnu prevenciju (rano otkrivanje bolesti), tercijarnu prevenciju (sprječavanje komplikacija bolesti primjerenoj liječenjem, odgadanje invalidnosti i smrti) te kvartarnu prevenciju (smanjenje štetnih učinaka nepotrebnih ili neopravdanih dijagnostičkih i terapijskih postupaka). Preventivne aktivnosti moraju biti utemeljene na znanstvenim dokazima o njihovoj korisnosti, provedbi i efikasnosti. Preventivne aktivnosti definirane su kao dobro specifične preventivne intervencije koje mogu biti implementirane u posjetu zbog bilo kojeg razloga u obiteljskoj medicini. One su jedan od temeljnih zadataka liječnika obiteljske medicine (LOM).

Cilj je rada prikazati recentne postavke o sadržaju i značajkama preventivnog rada LOM-a te posljedicama pandemije COVID-19 na provedbu preventivnih aktivnosti.

Rasprrava: Iako većina liječnika obiteljske medicine smatra da je preventivni rad njihova primarna zadaća, u praksi postoji velika variabilnost u provedbi preventivnih aktivnosti. Brojni čimbenici, primjerice svijest LOM-a o važnosti prevencije, implementacija smjernica, organizacijski uvjeti i suradljivost svih članova tima te značajke bolesnika, utječu na provedbu preventivnih aktivnosti. U savjetovanju o unaprjeđenju zdravlja liječnici obiteljske medicine nedostatno se koriste sustavnim pristupom koji obuhvaća i čimbenike rizika za mentalno zdravlje, radno okruženje, obiteljski i seksualni život te za širok spektar ovisnosti. Liječnici obiteljske medicine provode cijepljenje i njihov je stav prema cijepljenju glavni pozitivni čimbenik za bolesnikovo prihvatanje cijepljenja. Stoga je njihova odgovornost u promociji cijepljenja, posebice protiv bolesti COVID-19, izuzetno velika.

LOM provodi prevenciju kardiometaboličkih rizičnih čimbenika sukladno smjernicama. Prema podatcima istraživanja provedenoga u pet europskih zemalja u kojem je sudjelovalo 575 liječnika obiteljske medicine, njih 71 % ponudilo je pacijentima u definiranim dobnim skupinama procjenu kardiometaboličkog rizika aktivnim

pozivanjem ili oportunističkim probirom. Izrada i implementacija smjernica za dijagnostiku i liječenje brojnih kroničnih bolesti te osposobljenost LOM-a da prilagodi preporuke bolesniku i njegovim specifičnim potrebama značajno pridonose uspješnom liječenju bolesti i prevenciji ili odgađanju komplikacija te prerane smrtnosti.

Pandemija COVID-19 utjecala je na dramatično smanjenje preventivnih aktivnosti, posebice u sekundarnoj i tercijarnoj prevenciji. Primjerice, u SAD-u je u odnosu na 2019. godinu u travnju 2020. godine učinjeno 89,2 % manje probira za rak dojke, a 84,5 % manje probira za kolorektalni rak. Procjenjuje se da će nedostatak probira raka dojke tijekom šest mjeseci u Kanadi povećati broj uznapredovalih slučajeva i uzrokovati dodatno 250 smrти; nedostatak probira raka kolona dovest će do novih 960 smrти, što čini ukupni gubitak od 40 000 godina života. Podatci iz brojnih istraživanja potvrđuju kako je u pandemiji otkriveno znatno manje i drugih kroničnih bolesti (šećerne bolesti, demencije, depresije i drugih) od očekivanog broja temeljem predikcije u odnosu na utvrđeni broj bolesti u razdoblju koje je prethodilo pandemiji. Nadalje, bolesnici koji boluju od kroničnih bolesti znatno su rjeđe dolazili na kontrolne pregledne koji su bili nužni za praćenje i kontrolu bolesti, prevenciju komplikacija i smrti.

Zaključak: Za unaprjeđenje preventivnog rada u obiteljskoj medicini bitno je osigurati više vremena, bolju izobrazbu LOM-a i njegovih suradnika, podršku javnosti, ravnopravnu suradnju s drugim dionicima preventivne zaštite te priznati ju ulogu u prevenciji. Kad se suzbije COVID-19 pandemija, liječnicima obiteljske medicine velik će izazov biti kako nadoknaditi propuštene preventivne aktivnosti.

Content and characteristics of preventive work in family medicine

Keywords: prevention, family medicine, COVID 19 pandemic, missed preventive activities

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Introduction with aim Preventive care aims to reduce preventable morbidity and mortality, improve quality of life, and generally reduce an individual's need for medical care. It includes primary prevention (health promotion, disease prevention), secondary prevention (early detection of disease), tertiary prevention (prevention of disease complications with appropriate treatment, postpone a development of disability and death) and quaternary prevention (reduction of harmful effects of unnecessary or unjustified diagnostic and therapeutic procedures). Preventive activities (PAs) must be based on scientific evidence of their benefit, implementation and effectiveness. PAs are defined as age-specific preventive interventions that can be implemented in a visit for any reason in family medicine. PAs are one of the fundamental tasks of family physicians (FPs).

The aim of this paper is to present recent point of view about the content and characteristics of PPs' preventive work and the consequences of the COVID 19 pandemic on the PAs performance in family medicine.

Discussion Although most FPs consider preventive work to be their primary task, there is great variability in the implementation of PAs in practice. Numerous factors, such as FP's awareness of the importance of prevention, implementation of guidelines, organizational conditions, collaboration of all team members, and patient characteristics influence the implementation of PAs. In counseling on health promotion, FPs do not sufficiently use a systematic approach that includes risk factors for mental health, work environment, family and sexual life, and for a wide range of addictions. FPs carry out vaccination and their attitude towards vaccination is a major positive factor for the patient's acceptance of vaccination. Therefore, their responsibility in promoting vaccination, especially against COVID 19, is extremely high.

FPs carry out the prevention of cardiometabolic risk factors in accordance with the guidelines. According to

a survey conducted in five European countries, among 575 FPs, 71% offered patients in defined age groups a cardiometabolic risk assessment either by an active or an opportunistic approach. The development and implementation of guidelines for the diagnosis and treatment of many chronic diseases and the FP's competence to adapt recommendations to the patient and their specific needs significantly contribute to successful disease treatment and prevention or postponement of complications and premature mortality.

The COVID 19 pandemic has caused the dramatic reduction of PAs, especially in secondary and tertiary prevention. For example, in the United States, compared to 2019, in April 2020, 89.2% fewer screenings were made for breast cancer and 84.5% fewer screenings for colorectal cancer. It is estimated that a lack of breast cancer screening over six months in Canada will increase the number of advanced cases and cause additional 250 deaths, a lack of colon cancer screening will lead to 960 new deaths and a total loss of 40,000 years of life. Data from numerous studies confirm that during the pandemic significantly fewer other chronic diseases (diabetes, dementia, depression and others) were detected than expected based on predictions based on the number of diseases detected in the period before the pandemic. Furthermore, patients suffering from chronic diseases were much less likely to come for check-ups necessary for monitoring and control of disease, the prevention of complications and death.

Conclusion In order to improve preventive work in family medicine, it is important to provide more time, better training for FPs and their associates, public support, cooperation in preventive care on an equal basis with other stakeholders and a more recognized role in prevention. When the COVID 19 pandemic is suppressed, a big challenge for FPs how to compensate for missed PAs will still remain.

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■ Impact of the COVID-19 pandemic on routine childhood immunization in Macedonia

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Key words: COVID-19 pandemic, routine immunization, barriers

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Introduction. The COVID-19 pandemic has affected the routine vaccine program in Macedonia and globally. The first case of COVID-19 in Macedonia was reported on 18 March 2020; until today, over 226 000 COVID-19 cases and 8000 deaths were registered. Despite WHO recommendations regarding vaccination in late March 2020, immunization coverage decreased during the pandemic in most countries. That temporary interruption of routine immunization services can lead to secondary health crises such as outbreaks of vaccine preventable diseases.

Aim: to assess the impact of the COVID-19 pandemic on routine childhood vaccination coverage in Macedonia.

Methods: Observational study to evaluate the routine immunization in 2020 compared with 2019. Regional workshops were organized with discussion to identify the barriers and priorities to improve routine immunization.

Results: Immunization coverage for 2020 is below 90% for all vaccines. A 12.1% reduction was estimated in the primary immunization coverage and 4.8% in the revaccination coverage among Macedonian children in 2020 compared with the same period in 2019. The greatest declines in the coverage were observed among children for MRP, i.e. by 30.1% for the first dose and 24.9% for revaccination, the pentavalent vaccine first revaccination at the age of 18 months by 22.2% and HPV by 15.3%.

The COVID-19 pandemic affected the key determinants of vaccination—facility readiness, the intent to vaccinate and the community access.

Preventive services were reduced due to the redistribution of health staff, rotations of health workers as well as to COVID-19 disease among

health staff. Growing vaccine hesitancy emerged as a major challenge, with rumors and misinformation about safety of routine immunization during the COVID-19 pandemic. Parents also have fear of being infected and have often been advised by health workers to delay the routine immunization. Preventive services were also affected due to the lockdown and isolation measures issued by the government at the national level as well as to school closures and online school.

Conclusions: Reduced uptake of immunizations during the COVID-19 pandemic represents a serious risk of vaccine-preventable disease outbreaks. Routine immunization should become priority to our health authority: the implementation of communication activities to address misinformation and strength the trust in routine immunization activities, undertaken catch - up vaccination activities and continual monitoring of the immunization programme coverage and disease outbreaks at the national and regional levels.

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6. Zaštita starijih ljudi u doba pandemije Covid-19

■ Zdravstvena zaštita starijih ljudi u vrijeme pandemije COVID-19

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Uvod s ciljem: Starost je posljednje razdoblje u životnom vijeku pojedinca, koje se može odrediti prema kronološkoj dobi (nakon 65 godine života), prema socijalnim ulogama i statusu (nakon umirovljenja) ili prema funkcionalnom statusu (nakon određenog stupnja opadanja sposobnosti). Svjetska zdravstvena organizacija stariju životnu dob kronološki dijeli na raniju (65 – 74 godine), srednju (75 – 84 godine) i duboku starost (starije od 85 godina).

Starost je prirodna, normalna i fiziološka pojava koja je specifična za svakog pojedinca, te se podjele i teorije koje daju objašnjenja o fiziologiji starenja često isprepliću. Stoga je pri planiranju i provođenju zdravstvene zaštite potrebna individualna procjena osoba starije životne dobi.

Najvažnija mjera zdravstvene zaštite starijih ljudi u vrijeme pandemije COVID-19 jest prije svega spriječiti pojavu infekcije. Pri tome se koriste sve dostupne epidemiološke mjere, a posebice potpuno cijepljenje. Ako se infekcija pojavi, nužno je bolest što prije dijagnosticirati i učinkovito liječiti s posebnim naglaskom na komorbiditet.

Cilj je rada prikazati specifičnosti zdravstvene zaštite i posebne zadaće liječnika obiteljske medicine u zaštiti starijih osoba, posebice u pandemiji COVID-19.

Rasprava: Starenjem nastaju brojne promjene u organizmu, ali se povećava i učestalost kroničnih bolesti te komplikacija njima uzrokovanih. Stopa smrtnosti u bolesnika starijih od 70 godina u odnosu na broj kroničnih bolesti od kojih bolesti značajno raste. Infekcija bolešću COVID-19 značajno povećava stopu smrtnosti u starijoj dobi. Zdravstvena zaštita stoga ima brojne specifičnosti koje liječnici obiteljske medicine (LOM) moraju poznavati. Temeljno je potrebno savladati predrasude i neznanja o starenju i starosti kao bolesti, nemoći i ovisnosti o drugima jer je samo svaka peta starija osoba ovisna o tuđoj skrbi zbog funkcionalne onesposobljenosti. Potrebno je motivirati starije osobe na mjere samopomoći, motivirati ih na pridržavanje uputa liječenja i uzimanja lijekova pod nadzorom liječnika.

Iako stariju dob često prate brojni zdravstveni problemi, sve je više dokaza da osobe u toj životnoj dobi imaju više tjelesne i psihičke snage nego što zamišljamo. U pandemiji COVID-19 nerijetko je starija osoba ključni član obitelji koji mudrošću i savjetima potiče na cijepljenje i pridržavanje

epidemioloških mjera. Svojim primjerom starije osobe također iskazuju motiviranost da surađuju u liječenju i rehabilitaciji u pandemiji.

Depresija u starijih osoba usporava i procese rehabilitacije tijekom oporavka od COVID-19 infekcije. Mentalno zdravlje i socijalne komponente često se zanemaruju i tu je uloga LOM-a nezamjenjiva.

Zaključak: U pandemiji COVID-19 starija populacija osobito je izložena infekciji, ali i težem obliku bolesti, kao i pogoršanju ostalih, uglavnom kroničnih bolesti. Stoga je zadaća LOM-a u skrbi starijih osoba najprije učiniti detaljnu analizu i procjenu stanja svakog pojedinca. Starije osobe imaju i neka posebno propisana prava koja proizlaze iz specifičnosti starije dobi. Nikako se ne smije zanemariti činjenica da i stariji pacijenti imaju pravo na potpunu obaviještenost o svojem zdravstvenom stanju, uključujući medicinsku procjenu rezultata i ishoda određenoga dijagnostičkoga ili terapijskog postupka na način koji im je razumljiv s obzirom na dob, izobrazbu i mentalne sposobnosti, kako bi s liječnikom mogli aktivno sudjelovati u očuvanju i poboljšanju svojega zdravlja.

■ Health care of the elderly population in the time of the COVID 19 pandemic

Keywords: health care of the elderly, covid 19 pandemic

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Introduction and aim Late adulthood is the final stage of an individual's lifespan, which can be determined by chronological age (after 65 years of age), by social roles and status (after retirement) or by functional status (after a certain degree of decline in ability). The World Health Organization chronologically divides old age into earlier (65-74 years), middle (75-84 years) and late (over 85 years).

Late adulthood is a natural, normal and physiological phenomenon that is specific to each individual, and the divisions and theories that give explanations about the physiology of aging are often intertwined. Therefore, the planning and implementation of health care requires an individual assessment of the elderly.

The goal of health care for the elderly at the time of the covid 19 pandemic is primarily to prevent the occurrence of infection. While applying all available epidemiological measures, in particular full vaccination, if an infection occurs, the goal of health care is to diagnose and respond therapeutically as early and as efficiently as possible, with special emphasis on comorbidities.

Discussion Aging causes many changes in the organism, but also increases the incidence of chronic diseases and complications which they cause. The mortality rate in patients above 70, in relation to the number of chronic diseases they suffer from, increases significantly. Covid 19 infection significantly increases mortality rates in late adulthood. Health care therefore has a number of specifics that family physicians (FPs) need to be aware of. It is necessary to thoroughly overcome prejudices and ignorance about aging and old age as a disease, helplessness and dependence on others, because only every fifth elderly person is dependent on other people's care due to functional disability. It is necessary to encourage the elderly to take self-help measures, motivate them

to follow the instructions for treatment and take medication under the supervision of a physician.

Although late adulthood is often accompanied by a number of health issues there is growing evidence that people at that age have more physical and mental strength than we imagine. Even during the pandemic, an elderly person is often a key member of the family, who, with wisdom and advice, encourages vaccination and adherence to epidemiological measures. They also show motivation to cooperate in treatment and rehabilitation during the pandemic.

However, depression in the elderly also slows down the rehabilitation processes during the recovery from covid 19 infection. Mental health and social components are often neglected and here the role of the FP is irreplaceable. One of the therapeutic measures for patients is certainly the introduction of regular meals of appropriate energy and nutritional content in the daily diet, along with other therapeutic guidelines and supervision of the patient.

Conclusion: In the covid 19 pandemic, the elderly population is particularly exposed to infection, but also to a more severe form of the disease as well as the worsening of other, mostly chronic diseases. Therefore, the task of the FP is to approach the protection of the elderly analyzing and assessing the condition of each individual in detail. In addition to the usual health problems and the right to be treated, the elderly also have some specially defined rights arising from the specifics of old age. The fact that an elderly patient is also entitled to full information about their state of health, including a medical assessment of the results and outcomes of a particular diagnostic or therapeutic procedure in an understandable way according to their age, training and mental abilities, should not be overlooked, so that they can actively participate in maintaining and improving their health.

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Kućno liječenje bolesnika s COVID-19 infekcijom

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Uvod s ciljem: Najveći broj bolesnika oboljelih od koronavirusa imat će samo blage simptome i mogu se liječiti kod kuće. Bolesnici s umjerenim simptomima mogu se liječiti kod kuće uz odgovarajuće praćenje. Oni mogu dobiti holističku skrb od liječnika obiteljske medicine (LOM) što minimizira utjecaj na bolnički zdravstveni sustav. Brz rast bolesnika oboljelih od koronavirusa rezultirao je nedostatkom kreveta u bolnicama te situacijom da se ipak i neki bolesnici s težim oblicima bolesti liječe kod kuće. Kućni posjeti i **kućno liječenje specifičan su dio rada LOM-a**. Oni su svojevrstan izazov svakom LOM-u, jer bez visoke tehnologije, svojim umijećem i znanjem LOM mora doći do kvalitetnog rješenja za bolesnikove poteškoće. Cilj je rada prikazati kako bi prema dostupnim prepukama trebalo provoditi kućno liječenje i kućne posjete bolesnika oboljelih od koronavirusa.

Rasprava: Iako su liječnici obiteljske medicine u većini zemalja sudjelovali u liječenju bolesnika zaraženih koronavirusom, tijekom prve godine pandemije objavljeno je malo istraživanja iz obiteljske medicine. Također, vrlo je malo prepukama koje se bave zbrinjavanjem tih bolesnika na primarnoj razini zdravstvene zaštite te kućnim posjetima i kućnim liječenjem tih bolesnika. U bolesnika oboljelih od koronavirusa ili pod sumnjom da bi mogli biti zaraženi koronavirusom, treba pažljivo procijeniti potrebu za kućnim posjetom i ići u posjet samo ako se ne može obaviti telefonsko ili videosavjetovanje ili se fizikalni pregled smatra neophodnim, a bolesnik ne može doći. Preferira se da bolesnici dođu u ordinaciju umjesto da se ide u kućni posjet. Svi zahtjevi za kućne posjete trebali bi se trijažirati na isti način kao i u ordinaciji – ponajprije procjenom na daljinu. Obvezno je nošenje zaštitne opreme i pridržavanje svih uputa za kontrolu infekcije što uključuje najmanje moguće zadržavanje u kući bolesnika, održavanje distance i ne sjedanje. Torba za kućne posjete mora sadržavati samo nužnu opremu (obvezno pulsni oksimetar, stetoskop, topломjer, tlakomjer), dodatnu zaštitnu opremu i vrećice za otpad. Oprema mora biti na odgovarajući način dekontaminirana. Važno je da LOM posjeti bolesnike jer je najvjerojatnije razdoblje za razvoj respiratornog oštećenja od petog do desetog dana od početka bolesti, osobito u starijih bolesnika i bolesnika s postojećim kroničnim stanjima. Prilikom odluke o kućnom liječenju vrlo je važno opće pravilo da se mora uzeti u obzir postojanje podrške ostalih ukućana te prikladnih uvjeta za

kućno liječenje. Dio bolesnika odbija upućivanje u bolnicu unatoč prepukama liječnika te se u tom slučaju ponekad i bolesnici s težim oblicima bolesti zbrinjavaju kod kuće. Osim uobičajenih lijekova za simptomatsko liječenje, lijekovi koji se često koriste prilikom liječenja bolesnika oboljelih od koronavirusa kod kuće su kortikosteroidi i antibiotici (kod bakterijskih komplikacija). Antiviralni lijekovi se u ovom trenutku ne mogu primjenjivati prilikom kućnog liječenja.

Zaključak: U kućnim posjetima bolesnicima oboljelim od koronavirusa treba se držati triju osnovnih načela: racionaliziraj, minimiziraj i dezinficiraj. Kućni posjeti i kućno liječenje sastavni su dio rada LOM-a i treba ih provoditi i u bolesnika oboljelih od koronavirusa. Postojanje i pridržavanje ovih prepukama u velikoj mjeri mogu ublažiti strah i zabrinutost liječnika obiteljske medicine za vlastito zdravlje i olakšati im odlazak u kućni posjet bolesnicima oboljelim od koronavirusa.

■ Home treatment of patients with Covid-19 infection

Keywords: Covid-19, house calls, family physicians

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Introduction and aim: Most patients infected with coronavirus will only have mild symptoms and can be treated at home. Patients with moderate symptoms can be treated at home with appropriate monitoring. They can get holistic care from a family doctor (FD) which minimizes the impact on the hospital health system. The rapid growth of patients infected with coronavirus has resulted in a lack of beds in hospitals and the situation that some patients with more severe forms of the disease are still treated at home. Home visits and home treatment are a specific part of the work of FD. They are a kind of challenge to every FD, because without high technology, with their skills and knowledge, a FD must come up with a quality solution to the patient's problems. The aim of this paper is to show how, according to available recommendations, home treatment and home visits of patients with coronavirus should be managed.

Discussion: Although FDs in most countries were involved in managing patients infected with coronavirus, little research from family medicine was published during the first year of the pandemic. Also, there are very few recommendations that deal with the management of these patients at the primary level of health care and home visits and home treatment of these patients. In patients infected with coronavirus or suspected of being infected with coronavirus, the need for a home visit should be carefully assessed and only performed if telephone or video counseling cannot be performed or a physical examination is considered necessary and the patient cannot come. It is preferred that patients come to the practice instead of going for home visit. All requests for home visits should be triage in the same way as in the practice - primarily by remote assessment. It is

mandatory to wear protective equipment and adhere to all instructions for infection control, which includes staying in the patient's house as short as possible, maintaining distance and not sitting. The medical bag must contain only the essential equipment (mandatory pulse oximeter, stethoscope, thermometer, pressure gauge), additional protective equipment and waste bags. Equipment must be properly decontaminated. It is important that FDs monitor patients because in the period of day five to ten from the onset of the disease, respiratory impairment is most likely to develop, particularly in elderly patients and patients with preexisting chronic conditions. When making decision about home treatment, it is very important that the general rule of the existence of support from other family members and appropriate conditions for home treatment must be taken into account. Some patients refuse to be referred to the hospital despite the doctor's recommendations and in that case patients with more severe forms of the disease are sometimes treated at home. In addition to the usual drugs for symptomatic treatment, drugs often used in the treatment of patients with coronavirus at home are corticosteroids and antibiotics (for bacterial complications). Antiviral drugs cannot be used at home at this time.

Conclusion: Three basic things should be adhered to when home visiting coronavirus patients: rationalize, minimize and sanitise. Home visits and home treatment are an integral part of the work of FD and should be performed in patients with coronavirus. The existence and adherence to these recommendations can greatly alleviate the fears and concerns of FD for their own health and make it easier for them to go on a home visit to patients with coronavirus.

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Ključne riječi: COVID-19, krhkost, starije osobe, liječnik obiteljske medicine

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Uvod s ciljem: Demografski podatci govore o globalnom starenju stanovništva, a u sljedećih 30 godina očekuje se povećanje udjela starijeg stanovništva na 24 % populacije. Starenjem se povećava krhkost odnosno osjetljivost pojedinca na različite podražaje koji mogu rezultirati nepovoljnim ishodima. Pojam krhkosti uveden je prije 30-ak godina da bi se bolje razumjеле promjene zdravstvenog stanja starijih osoba s ciljem prepoznavanja najranjivijih bolesnika. U gerijatriji se krhkost definira kao biološki sindrom klinički karakteriziran sporijim i/ili nepotpunim oporavkom od stresora koji uključuje interakciju bioloških, psiholoških i društvenih čimbenika, a povezan je s većim rizikom od štetnih ishoda, s padom funkcionalne sposobnosti, s delirijem, padovima, institucionalizacijom, hospitalizacijom i sa smrтi. Mjerenje krhkosti pomaže u odabiru pojedinih intervencija za pojedinca s ciljem poboljšanja ishoda. Cilj je rada razjasniti pojam krhkosti u starijih osoba te ukratko prikazati alate koji se primjenjuju pri njegovoј procjeni.

Rasprava: Prevalencija krhkosti u starijih veća je u žena nego u muškaraca, povezana je s nižim obrazovanjem i prihodima, sa slabijim zdravstvenim stanjem i s većom stopom komorbidnih kroničnih bolesti i invalidnosti. Postoje različiti alati za procjenu krhkosti. Validirani upitnik kliničke ljestvice krhkosti (engl. *Clinical Frailty Scale*) izrađen u Kanadi temelji se na kliničkoj prosudbi, procjenjuje kogniciju, komorbiditet i funkcije, sadrži devet čestica, a rezultat ≥ 5 označava krhkost. Lako primjenjiv u kliničkom okruženju, taj se upitnik koristi za predviđanje ishoda u hospitaliziranih starijih osoba s akutnim bolestima te u predviđanju bolničke smrtnosti. Upitnik fenotipa krhkosti (engl. *The Frailty Phenotype*) definira krhkost kao klinički sindrom u kojem su prisutna tri ili više kriterija: nemjeran gubitak težine, iscrpljenost, mišićna slabost, spora brzina hodanja i niska tjelesna aktivnost. Na razini primarne zdravstvene zaštite postoje različiti modeli procjene krhkosti temeljeni na multidimenzionalnom pristupu. Iako su razvijeni brojni specifični alati za procjenu slabosti, njihova je klinička uporaba ograničena. U uvjetima pandemije potvrđeno je da su starije osobe izložene povećanom riziku zbog smanjene imunološke funkcije, višestrukog morbiditeta i produljenog vremena upalne reakcije. Studije upućuju na to da prisutnost dvaju i više komorbiditeta, osobito

dijabetes, KOPB, hipertenzija, koronarna bolest srca, bubrežna bolest i neke maligne bolesti, u starijih povećavaju rizik od štetnih kliničkih ishoda, uključujući težinu bolesti COVID-19, prijam u jedinicu intenzivne njegе, primjenu invazivne mehaničke ventilacije, dugotrajni boravak u bolnici te smrtnost od svih uzroka. Zdravstvena skrb za koronavirusne pandemije zahtijeva od kliničara da donose medicinske i etičke odluke o liječenju starijih osoba uzimajući u obzir koliko krhkost povećava rizike od nepovoljnog ishoda bolesti COVID-19. U oboljelih je potrebno prikupiti podatke o povijesti bolesti, koje će najbolje predočiti obiteljski liječnik, što pomaže identificirati bolesnike kojima treba pružiti veću skrb. Bolest uvjetuje smanjenje fizičke snage i mišićne mase, mijenja način života i pogoršava životne uvjete, stoga je potrebno analizirati somatske, kognitivne i emocionalne promjene, pružiti psihološku podršku bolesnicima te odrediti koristi i potencijalne rizike svih lijekova koji se uzimaju tijekom liječenja COVID-19 infekcije.

Zaključak: Procjenu krhkosti u starijih treba implementirati u kliničku praksu kao dodatni alat liječnicima u planiranju skrbi. Standardizirani protokoli za procjenu primjenjivi za liječnike obiteljske medicine nisu u širokoj uporabi, stoga bi buduća istraživanja trebala pridonijeti razvijanju alata koji će predviđjeti negativne zdravstvene ishode u starijih.

■ Frailty in the elderly

Keywords: COVID-19 pandemics, elderly, frailty, general practitioner

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Introduction and aim: Demographic data show the global aging of the population, the share of the elderly population in the next 30 years is expected to increase to 24%. Aging increases the frailty or sensitivity of an individual to various stimuli that can result in adverse outcomes. The concept of frailty was introduced about 30 years ago to better understand the changes in the health status of the elderly in order to identify the most vulnerable patients. In geriatrics, fragility is defined as a biological syndrome clinically characterized by slower and / or incomplete recovery from stressors, involving the interaction of biological, psychological and social factors, associated with higher risk of adverse outcomes, decreased functional ability, delirium, falls, institutionalization, hospitalization and death. Measuring fragility helps select individual interventions for an individual with the goal of improving outcomes. The aim of this paper is to clarify the concept of fragility in the elderly and to briefly present the tools used in the assessment.

Discussion: The prevalence of fragility in the elderly is higher in women than in men. It is associated with lower education and income, poorer health, and a higher rate of comorbid chronic diseases and disabilities. There are various tools for assessing fragility. The Clinical Frailty Scale (Canada,) validated questionnaire based on clinical judgment, assesses cognition, comorbidity and function. It contains 9 points, where a score ≥5 indicates fragility. Easily applicable in the clinical setting, it is used to predict outcomes in hospitalized elderly people with acute illness and to predict hospital mortality. The Frailty Phenotype questionnaire defines fragility as a clinical syndrome in which three or more criteria are present: unintentional weight loss, exhaustion, muscle weakness, slow walking speed, and low physical

activity. At the primary health care level, there are different fragility assessment models based on a multidimensional approach. . Although a number of specific weakness assessment tools have been developed, their clinical use is limited. In a pandemic, it has been confirmed that the elderly are at increased risk due to reduced immune function, multiple morbidity, and prolonged inflammatory response times. Studies indicate that the presence of two or more comorbidities, especially diabetes, COPD hypertension, coronary heart disease, renal disease, some malignancies in the elderly increase the risk of adverse clinical outcomes, including COVID-19 weight, intensive care unit, invasive mechanical ventilation , long hospital stays and all-cause mortality. Healthcare in the COVID-19 era requires clinicians to make medical and ethical decisions about the treatment of the elderly, taking into account how fragility increases the risks of adverse outcomes of COVID-19. Patients need to collect medical history data, which will be best presented by the family physician. It helps to identify patients who need more care. The disease causes a decrease in physical strength and muscle mass, changes lifestyles and worsens living conditions, so it is necessary to analyze somatic, cognitive and emotional changes, provide psychological support to patients and determine the benefits and potential risks of all drugs used to treat COVID-19 infection.

Conclusion: Fragility assessment in the elderly frailty should be implemented in clinical practice, as an additional tool to physicians in care planning. Standardized assessment protocols applicable to family physicians are not widely used, so future research should contribute to the development of tools that predict negative health outcomes in the elderly

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■ Osobe starije životne dobi i institucionalizirana skrb

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Uvod s ciljem: U vremenu u kojem živimo, u kojem je gotovo nemoguće odvojiti vrijeme za adekvatnu 24-satnu skrb za naše najmilije kod kuće (iako bi naša tradicija rado slijedila taj obrazac), dolazimo do trenutka kada je smještaj u odgovarajuće ustanove jedina opcija.

U Republici Hrvatskoj (RH) u ovom se trenutku suočavamo s vrlo lošom demografskom slikom. Smanjuje se ukupan broj stanovnika uz trend iseljavanja mladoga i radno sposobnog stanovništva, a konstantan je porast broja starijih od 65 godina s udjelom od 20,6 % u ukupnom stanovništvu RH u 2019. godini. Zbog toga je veća razina invalidnosti nastalih kao posljedica kroničnih bolesti, a u skladu s tim povećana je potreba i potražnja za institucijskom skrbi koja osobama pruža potrebljenu njegu i skrb 24 sata dnevno. Također se uviđa potreba za izvaninstitucijskom skrbi koja uključuje pružanje usluga u domu starije osobe kao što su pomoći u kući i oko liječenja, pomoći u hranjenju, nabavci hrane itd. Pad udjela mlađog stanovništva i porast starog otežava provođenje izvaninstitucijske skrbi i opterećuje sustav institucijske skrbi, što dovodi do povećanih i pretjerano dugih lista čekanja za državne ili nedržavne domove i ustanove za starije osobe. Cilj je rada prikazati značajke institucijske skrbi starijih osoba te upozoriti na postojeće probleme u organizaciji takve skrbi.

Rasprava: Godine 2019. u RH u domovima je bilo smješteno oko 17 000 starijih osoba, od čega je oko 6000 starijih osoba bilo smješteno u obiteljskim domovima, a više od njih 70 000 čeka na svoje mjesto u domu. Velik je broj starijih osoba koje čekaju smještaj u državnim domovima za starije osobe, a to nekada zna potrajati i do desetak godina. Zbog velike potrebe za institucionaliziranom skrbi i nedostatne stručne i finansijske kontrole potrebno je taj sustav bolje zakonski uređiti. No promjene moraju uvažavati ekonomske mogućnosti, racionalno korištenje resursa i izvedivost. U pilot-projektu na određenom području potrebno je ispitati djelotvornost i izvedivost novih modela organizacije institucijske skrbi za starije osobe.

Brojni korisnici u domovima za starije tijekom napredovanja bolesti i nemoći dolaze u fazu kada im je potrebna palijativna skrb. Osim toga, često se zbog nepostojanja specijaliziranih ustanova za palijativnu skrb u RH u dom za starije smještaju

i bolesnici kojima je takva skrb potrebna, a to dodatno otežava redovitu skrb ostalih korisnika doma za starije.

LOM vodi brigu o medicinskoj skrbi korisnika domova, educira osoblje koje će znati u ključnom trenutku prepoznati promjenu i odstupanje u poнаšanju korisnika te reagirati po uputi liječnika u pravom trenutku, a liječnik uputiti na odgovarajuće dalje postupanje. Kako su korisnici domova za starije najčešće osobe s multimorbiditetom, liječnik obiteljske medicine treba za svaki dijagnostički i terapijski postupak procijeniti realnu dobrobit i potencijalnu štetu za bolesnika te aktivno i programirano provoditi zdravstvenu skrb.

Zaključak: Nužno je da se mjerama u demografskom i zdravstvenom sustavu poboljša i olakša pristup izvaninstitucijskoj i institucijskoj skrbi i budućim korisnicima i zdravstvenim radnicima koji sudjeluju u provođenju te skrbi.

■ Older people and institutionalized care

Keywords: elderly, institutionalized care, family medicine

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Introduction and aim We live in a time when it is almost impossible to provide adequate 24-hour care for our loved ones at home (although our tradition would gladly follow this pattern), we come to the point where accommodation in appropriate institutions is the only option.

In the Republic of Croatia, we are currently facing an unfavourable demographic situation. The total number of inhabitants is decreasing with the trend of the emigration of young and able-bodied population and there is a constant increase in the number of people over 65 with a share of 20.6% in the total population of the Republic of Croatia in 2019. As a result, the level of disability resulting from chronic diseases is higher, and the need and demand for institutional care, which provides people with the necessary and 24 hour care has increased accordingly. It also recognizes the benefits and needs of extra-institutional care, which includes the provision of services in the home for the elderly such as home and treatment assistance, feeding assistance, food procurement, etc. The decline in the institutional care is leading to increased and excessively long waiting lists for municipal or private nursing homes and institutions. The aim of this paper is to present the features of institutional care for the elderly and to point out the existing problems in the organization of institutional care.

Discussion In 2019, in the Republic of Croatia, about 17,000 elderly people were placed in homes, of which about 6,000 were placed in family owned homes and over 70,000 are on waiting lists. There is a large number of elderly people waiting for accommodation in municipal homes for the

elderly, and it can sometimes take up to ten years. Due to the great need for institutionalized care and insufficient professional and financial control, the system needs to be better regulated. Change must also take into account economic opportunities, a rational use of resources and feasibility. In addition, a pilot project in this specific area needs to examine the effectiveness and feasibility of new models of institutional care for the elderly.

Numerous users of nursing homes during the progression of illness and infirmity, come to the stage when they need palliative care. In addition, due to the lack of specialized institutions for palliative care in the Republic of Croatia, patients in need are often accommodated in nursing homes, which further complicates the regular care of other users of nursing homes.

The family physician provides medical care of home users, educates staff who will be able to recognize changes and deviations in user behaviour at crucial moments, responds to doctor's instructions at the right time, and refers the doctor to appropriate further action. As the users of homes for the elderly are most often people with multimorbidity, the family physician should assess the real well-being and potential harm to the patient for each diagnostic and therapeutic procedure and actively and programmatically conduct health care.

Conclusion It is necessary to improve and facilitate access to extra-institutional and institutional care, both for future users and for health professionals involved in its implementation, through measures in the demographic and health system.

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7. Organizacija rada

■ Organizacija i funkcioniranje primarne zdravstvene zaštite – može li bolje?

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Ključne riječi: obiteljski liječnici, primarna zdravstvena zaštita, nedostatak liječnika, radno opterećenje

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Uvod s ciljem: Hrvatski zdravstveni sustav ima velikih finansijskih, organizacijskih, tehničkih, kadrovske i upravljačkih problema. Još se uvijek traži rješenje kako za ista sredstva postići veću efikasnost i efektivnost te pružanje optimalne razine kvalitete, dostupnosti, sveobuhvatnosti, kontinuiteta i solidarnosti zdravstvene zaštite cijelokupnom stanovništvu.

U tom nastojanju cilj je rada istaknuti važnost dobre organizacije i provedbe primarne zdravstvene zaštite što se pozitivno odražava na funkcioniranje preostalih razina zdravstvenog sustava i pridonosi značajnoj racionalizaciji potrošnje.

Rasprrava: U Republici Hrvatskoj (RH) u primarnu se zdravstvenu zaštitu (PZZ), glavninu koje čini obiteljska medicina (OM), godinama ulaze sve manje, a očekivanja su sve veća. Nevjerojatna je lakota kojom se godinama zanemariva nedostatak liječnika u PZZ-u, koji svakodnevno postaje sve veći, što otežava dostupnost zdravstvene zaštite. Zakonodavac je posljednje 23 godine taj problem rješavao povećanjem maksimalnog standardnog broja osiguranika po timu liječnika obiteljske medicine (LOM), do potpuno absurdnog broja od dvije tisuće do 2800 osiguranika po timu OM-a u nekim slabije razvijenim područjima RH, uz olako delegiranje brojnih novih administrativnih obveza, što onemogućuje i otežava stručni rad kao i uspješnu implementaciju brojnih stručnih smjernica. Istovremeno se bilježi kontinuirani rast usluga i posjeta u OM-u. Smanjenje broja liječnika obiteljske medicine, osobito specijalista, a time posljedično i smanjenje dostupnosti i kvalitete zdravstvene zaštite stanovništvu, najočitiji je i najvažniji uzrok krize OM-a. Zbog nedovoljnog broja izvršitelja postojićem zdravstvenom kadru nameće se prevelik opseg rada. Sami liječnici unatoč toj činjenici ne shvaćaju važnost Programa mjera zdravstvene zaštite i nisu u većem broju uključeni u njegovu izradu, a to je temeljni stručni alat koji je bitan za ugovaranje s Hrvatskim zavodom za zdravstveno osiguranje i bez kojeg se ne mogu osigurati optimalni uvjeti rada i sigurnost rada kako za pacijente, tako i za liječnike. Rad se odvija bez stručnih standarda i normativa kojima se objektivizira sam rad, osigurava kvaliteta i svako planiranje. Posljedica je nefunkcionalan i neučinkovit oblik rada ove vrlo potentne skupine te loši zdravstveni ishodi. Liječnički rad mora se planirati u opsegu

koji liječniku omogućuje dovoljno vremena za obradu bolesnika i skrb o bolesnicima, a bolesniku jamči najveći mogući stupanj sigurnosti.

Nužno je smanjiti dosadašnji standard osiguranika u skrbi na 1500 osoba kako bi se mogla pružiti sadržajno bogatija i kvalitetnija zdravstvena zaštita. Uključivanjem patronažnih medicinskih sestara u timove omogućila bi se aktivnija uloga liječnika PZZ-a u primarnoj i sekundarnoj prevenciji, ranoj dijagnostici i multidisciplinarnom liječenju, kao i učinkovitije sudjelovanje u nacionalnim preventivnim programima te psihološkoj potpori i palijativnoj skrbi opredijeljenih osiguranika.

Povezivanje liječnika u grupne prakse zasigurno može pridonijeti unaprjeđenju rada u PZZ-u. U grupi liječnici mogu bolje iskoristiti specifična znanja i interes, biti stručna podrška jedan drugome, međusobno se konzultirati i proširiti spektar rada i usluga koje mogu pružiti. U mreži javne zdravstvene službe ne postoji model prijenosa stičenog znanja u ordinacijama na sljedeću generaciju, niti kontinuitet rada tih ordinacija. Mreža se smanjuje i otežava dostupnost zdravstvene zaštite. S druge strane, mladi liječnici ne pokazuju interes za rad u PZZ-u.

Zaključak: Posebnu pozornost nužno je posvetiti položaju, dovoljnom broju, optimalnom opterećenju, trajnoj izobrazbi, profesionalnom razvoju, kao i zaštiti zdravstvenih djelatnika bez kojih nije moguće ostvariti odgovarajuću primarnu zdravstvenu zaštitu.

■ Organisation and functioning of Primary Health Care – could it be better?

Keywords: family physicians, primary health care, lack of physicians, workload

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Introduction and aim. Croatian Health system has financial, organisational, technical, human resources and management problems. Solution is still being sought to achieve greater efficiency and effectiveness with same resources trying to retain optimal levels of quality, accessibility, comprehensiveness and continuity of health care for the entire population.

Bearing in mind those efforts the aim of this review is to emphasize the importance of good organisation and implementation of Primary Health Care (PHC), which has a positive impact on functioning of all levels of the health system and contribution to rationalization of health consumption.

Discussion. In the Republic of Croatia (ROC), investments in PHC, where general practice (GP) is the main part, are lower while expectations higher with time. The lack of doctors in PHC which is growing by day, has been neglected with an incredible ease alongside making access to health care more difficult. For the last 23 years, health authority has solved this problem by increasing the maximum standard number of patients on the FMD list to an absurd number of 2000-2800 and in the same time by delegating of numerous new administrative tasks to FMD team which makes daily professional work almost impossible and difficult as well as the successful implementation of professional guidelines. At the same time, there is continuous growth of services and visits to the FMD. Reducing the number of FMD, especially specialists, and consequently reducing the availability and quality of health care to the population is the most obvious and most important cause of the crisis in PHC.

Consequently, the existing FMD teams are overburdened. Despite this fact, doctors themselves do not understand the importance and are not involved in the Program of Health Care Measures, basic professional tool that has great importance for contracting with Croatian Institute for Health

Insurance and without which optimal working conditions and safety could not be ensured. FMD teams works without professional standards and norms that objectify the work itself ensuring quality and good planning. The result is a dysfunctional form of work and finally inferior health outcomes. Medical work must be planned to an extent that allows the physician sufficient time for care and process of the patient while providing the patient with the greatest possible degree of safety.

It is necessary to reduce the current standard of insured persons in care to 1500 people in order to provide better health care. The integration of community nurses in FMD teams would allow for more active role of doctors in PHC in primary and secondary prevention, early diagnosis and multidisciplinary work, as well as more effective participation in National Prevention Programs, better palliative care and psychological support.

Organizing group practices can improve work in PHC and enable physicians to use specific knowledge and skills on a larger scale, be professional support to each other and broaden the services they can provide. Now there is no model of transferring acquired knowledge to the next generation, nor the continuity of work of each practice. This kind of network organisation results in further reduction and making access to health care more difficult. As the result of all mentioned young doctors has no interest in working in PHC.

Conclusion. Special attention should be dedicated to the position, sufficient number, optimal scope of work, continuing education, professional development and protection of health care workers without whom achieving adequate health care for all patients could not be possible.

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■ Programirani rad s kroničnim bolesnicima – naručivanje

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Ključne riječi: kronični bolesnik, naručivanje, odnos liječnik-pacijent

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Uvod s ciljem: Kronični bolesnici, posebice oni s multimorbiditetima, poseban su izazov u ordinacijama obiteljske medicine (OM). Bolesnici s kroničnim bolestima čine glavninu posjeta u ordinacijama OM-a. Uz redovite i planirane posjete brojni su i neplanirani posjeti. Neplanirani posjeti zbog pojave akutnih stanja kod kroničnih bolesnika dodatno su opterećenje u radu OM-a. U kroničnih bolesnika svaka akutna, makar i samolimitirajuća bolest, može dovesti do pogoršanja kronične bolesti i ugroziti bolesnika. Kronični bolesnik stoga zahtjeva posebnu pažnju i vrijeme, što je osobito postalo izazov u vrijeme aktualne pandemije. Cilj je rada prikazati važnost naručivanja kroničnih bolesnika te prikazati osnovne principe naručivanja koji omogućuju poboljšanje učinkovitosti njihova programiranog praćenja.

Rasprava: Iako je naručivanje pacijenta u ordinacijama OM-a već neko vrijeme u praksi, još uvijek nije provedeno u svim ordinacijama. Razlozi su višestruki, od odabira samih liječnika do nesuradljivosti medicinske sestre ili pritiska pacijenata koji se teško privikavaju na novouvedeno naručivanje. U slučaju pojave akutnog stanja zbrinjavanje pacijenta mora biti brzo i nerijetko neodgodivo. No, kad je riječ o kroničnim bolesnicima, od neopisive je koristi programirano osigurati vrijeme koje će biti posvećeno kroničnom bolesniku i njegovu zdravstvenom problemu. U vrijeme pandemije dodatna važnost naručivanja očituje se i u smanjenju istovremenog boravka pacijenata u čekaonicama.

Uglavnom kod akutnih stanja postoji potreba za brzim zaprimanjem pacijenta bez naručivanja. Ponekad se takve pacijente zaprili i zbog pritiska koji oni sami vrše, jer su prestrašeni unatoč benignoj naravi stanja, primjerice zbog kašlja ili temperature usred prehlade. Ipak, kad je riječ o kroničnim bolesnicima, mogu se – i moraju se – poštovati

principi programiranog rada s pacijentima, što uključuje i njihovo naručivanje.

Zaključak: Kronični bolesnici zahtjevaju posebno prilagođen, individualizirani program praćenja. Kako bi on bio osiguran na najkvalitetniji način, za kronične bolesnike potrebno je osigurati dovoljno vremena u radnom danu, što se najbolje može osigurati naručivanjem na pregled.

■ Programmed work with chronic patients – appointment scheduling

Keywords: chronic patient, appointment scheduling, doctor-patient relationship

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Introduction and aim. Chronic patients, especially those with multimorbidities, are a particular challenge in family medicine (FM) practices. Patients with chronic illnesses make up the majority of visits to FM doctors. In addition to regular and planned visits, there are numerous unplanned visits, as well. Unplanned visits due to the occurrence of acute conditions in chronic patients are an additional challenge in FM's work. Any acute, even self-limiting disease can lead to exacerbation of chronic disease and endanger the chronic patient. Therefore, chronic patients require special attention and time. This has become a particular challenge at the time of the current pandemic. The aim of this work is to emphasize the importance of appointment scheduling (AS) for chronic patients, and to present the basic principles of AS that can improve the effectiveness of their programmed follow-up.

Discussion. Although AS in FM clinics has been in practice for some time now, it has not yet been carried out in all the clinics. The reason for this may be the choice of the FM doctors themselves, uncooperative nurse, or the pressure of patients not yet used to the newly introduced way of work. In the event of an acute condition, health care must be prompt and often immediate. But in the case of chronic patients, it is beneficial to program the time to be devoted to them. At the time of the ongoing pandemic, the additional importance of AS is to reduce the number of patients staying in waiting rooms at the same time. In the case of acute condition, there is a great pressure to receive the patient quickly, without AS. The

reason for this may be the very nature of the acute condition, but also the pressure from the patients themselves who are frightened despite the benign nature of the condition, for example, cough or fever due to simple cold. However, in the case of chronic patients, it is a must to follow the principles of programmed work with patients, which includes AS.

Conclusion. Chronic patients require a specially tailored, individualized follow-up program. In order to ensure it in the best possible way, it is necessary to provide enough time for chronic patients during the workhours. This can best be ensured by AS.

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■ Vođenje ordinacije

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Ključne riječi: vođenje ordinacije, vještine upravljanja, liječnik obiteljske medicine, obiteljska medicina

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Uvod s ciljem: Zdravstvena zaštita na razini obiteljske medicine oduvijek je bilo pitanje na koje se moralo odgovarati stručno, iskustveno, ali s ekonomskom, društvenom, političkom i socijalnom podlogom. Svaka komponenta zdravstvenog sustava mora imati svoj specifični način upravljanja (management), odnosno modele i alate za proučavanje potreba, izradu projekcije, upravljanje procesima i izvedbom te za evaluaciju. Vođenje ambulante obiteljske medicine (OM) čini niz postupaka koji nikada nisu do kraja isti, već se prilagođavaju vremenu i prostoru. Cilj je rada predložiti optimalne načine upravljanja ordinacijom, vodeći računa o mogućnostima liječnika, tehničkoj opremljenosti i specifičnosti vremena i pacijenata na određenom prostoru.

Rasprava: Uloga liječnika primarne razine kao „čuvara vrata“ zdravstva danas je posebno zahtjevna i odgovorna. Pacijentima treba pružiti adekvatnu zdravstvenu zaštitu prema svim smjernicama, a pri tome ne ugroziti njihova prava. Veliko je umijeće ostvariti ravnotežu između potreba, prava i očekivanja pacijenata, ograničenja osiguravatelja, ali i vlastite finansijske održivosti. Sve se više nameće i pitanje psihofizičkih granica liječnika, jer je dnevni rad doživio znatna povećanja u kvantiteti i opsegu.

Vođenje-ordinacije podrazumijeva efikasnu upotrebu resursa i omogućivanje ljudima da rade zajedno kako bi postigli specifične ciljeve. U maloj organizacijskoj jedinici kao što je ordinacija OM-a potrebno je kontinuirano učiti i prilagodavati znanja i komunikacijske i organizacijske vještine te dostići optimalno stanje poslovanja. Stoga se liječnici obiteljske medicine (LOM) moraju dodatno educirati iz tog područja tijekom specijalizacije i trajne izobrazbe. Vođenje ordinacije podrazumijeva istovremeno vođenje preventivnih aktivnosti, dijagnostiku, terapiju i rehabilitaciju. Sindemija uzrokovanu bolesti COVID-19 znatno komplicira postupke vođenja ambulante i upravljanja procesima planiranja, realizacije i održivosti. Moderno i racionalno vođenje ordinacije OM-a podrazumijeva vrhunske stručne i komunikacijske vještine, odličan timski rad, detekciju „uskih grla“ i neiskorištenih mogućnosti. Mnogi liječnici nedostatno evidentiraju svoj rad i pri tome propuštaju iskoristiti sve mogućnosti naplate učinjenih postupaka. Važno je naglasiti kako projekt „ordinacija s pet zvjezdica“

nije zaživio tako da značajno promovira kvalitetu rada. Zbog niza paramedicinskih poslova liječnici značajno manje ulazu u osobnu edukaciju, evaluaciju, stručno napredovanje, svladavanje novih vještina i dostizanje željenih ishoda svojih postupaka. Edukacija LOM-a za procese vođenja ordinacije treba biti kontinuirana, ciljana, vođena od osoba i ustanova koje imaju potrebna znanja i iskustva.

Zaključak: Kontrola kvalitete, etička i pravna odgovornost, novi komunikacijski kanali, struktura radnog vremena, nove kliničke vještine, planiranje, organiziranje, upravljanje ljudskim resursima, vođenje, autoritet, motivacija, kontrola (monitoring) vještine su koje se kontinuirano trebaju usavršavati i primjenjivati. U današnje vrijeme kada se sustav zdravstvene zaštite uopće, ali i svaki njegov sastavni dio suočavaju s nizom procesa koji donose korjenite promjene u načinu pružanja usluga zdravstvene zaštite, kao što su ubrzani napredak novih tehnologija u medicini, gotovo neograničena dostupnost svih vrsta i oblika informacija stanovništvu i sve veći značaj mehanizama zaštite ljudskih prava, a posebno prava pacijenata, očekivanja od zdravstvenih radnika postaju sve veća, a samim time otvara se i veći prostor za unaprjeđivanje procesa u vođenju ordinacije.

■ Running a doctoral practice

Keywords: office management, management skills, family medicine doctor, family medicine

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Introduction and aim. Health care at the level of family medicine has always been a question to be answered professionally, experientially, taking into account the economic, social, political and social background. Each component of the health system must have its own specific way of management, ie models and tools for the study of needs, process design and management, performance and evaluation. Running a family medicine clinic (FM) covers a series of procedures that are never completely the same, but adapt to time and space. The aim of this paper is to propose the optimal ways of managing an office, taking into account the capabilities of doctors, technical equipment, specifics of time and patients in a particular area.

Discussion: The role of the primary care physician as the “gatekeeper” of health care is particularly difficult and responsible today. It is necessary to provide patients with adequate protection according to all guidelines without compromising their rights. It requires a great skill to balance the needs, rights and expectations of patients, the limitations of insurers and financial sustainability. The question of the psychophysical limits of physicians is also becoming more and more important, because there are significant increases in the amount and scope of their daily work routine.

Running a practice means using resources efficiently and enabling people to work together to achieve specific goals. In a small organizational unit such as the FM office, it is necessary to continuously learn and adapt knowledge, communication and organizational skills, and achieve an optimal state of business. Therefore, family physicians (FPs) need additional education in this area during their specialization and continuing education. Running an office means conducting prevention, diagnostics, therapy and rehabilitation at the same time. The syndrome caused by

covid -19, significantly complicates the procedures of running an outpatient clinic and managing the process of planning, implementation and maintaining sustainability. Modern and rational management of the FM office includes top professional and communication skills, excellent teamwork, detection of “bottlenecks” and untapped opportunities. Many doctors do not record their work enough and fail to use all the possibilities of charging for the procedures performed. It is important to emphasize that the “five-star practice” project has not come to life in a way that significantly promotes the quality of work. Due to a number of paramedical jobs, doctors invest significantly less in personal education, evaluation, professional advancement, mastering new skills and achieving the desired outcomes of their procedures. FP education for the processes of running a practice should be continuous, targeted, led by people and institutions having the necessary knowledge and experience.

Conclusion: Quality control, ethical and legal responsibility, new communication channels, working hours structure, new clinical skills, planning, organizing, human resource management, leadership, authority, motivation and monitoring are skills that need to be continuously improved and applied. Nowadays, when the health care system in general, but also each component of this system individually, are facing a series of processes that bring radical changes in the provision of health care services, such as accelerated progress of new medical technologies, almost unlimited availability of all the types and forms of information to the population and the growing importance of human rights protection mechanisms, especially the rights of patients, expectations from health professionals are growing, thus opening more space for improving the process of running the office.

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Promjena strukture rada timova obiteljske medicine u zapadnom dijelu Zagreba zbog COVID-19 pandemije

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Ključne riječi: COVID-19, obiteljska medicina, struktura rada, opterećenje radom

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Uvod: COVID-19 pandemija promjenila je naš svakodnevni život što je utjecalo i na rad timova obiteljske medicine (OM). Grad Zagreb obilježava velike varijacije broja osiguranika po timu OM-a ovisno o lokaciji gradske četvrti čime je kvalitetno pružanje zdravstvene skrbi u pojedinih dijelovima grada dovedeno u pitanje.

Cilj: je rada utvrditi postoji li promjena u strukturi rada timova OM-a u administrativnom poslu, pregledima, konzultacijama i ostalim postupcima tijekom COVID-19 pandemije u odnosu na 2019. godinu.

Metode: Radi se o presječnom istraživanju u kojem su na temelju mjesečnih izvješća za ožujak i travanj 2019. i 2021. godine u 65 ordinacija OM-a (njih 45 u domu zdravlja i 21 privatna) zapadnog dijela grada Zagreba analizirani svi obavljeni dijagnostičko-terapijski postupci podijeljeni u četiri glavne kategorije (administracija, telefonske i e-mail konzultacije, pregledi i konzultacije uživo te ostali dijagnostički postupci u ordinaciji). Dodatno, podatci su analizirani prema danu u tjednu i smjeni u radnom danu te lokaciji gradske četvrti kojoj ordinacija pripada.

Rezultati: U ispitivanom razdoblju došlo je do smanjenja administrativnog posla za 5,43 % i fizičkih kontakata i pregleda u ordinaciji za 29,17 % te povećanja telefonskih i e-mail konzultacija za 114,98 % kao i ukupnog broja osiguranika koji su koristili zdravstvenu skrb ordinacije obiteljske medicine za 8,38 %. Opseg ukupnog posla timova OM-a, od čega se 25 % ukupnog tjednog posla obavljalo ponedjeljkom, ovisio je o četvrti grada Zagreba, a povećan je u 2021. godini za 10,68 % u odnosu na 2019. godinu. Udio pregleda u broju svih konzultacija u ordinaciji za pandemije značajno je manji, za 29 – 58 % ovisno o gradskoj četvrti. Tri četvrtine timova OM-a u pandemiji obavljalo je kućne posjete (medijan 2,5 posjeta mjesечно), a njih 61,53 % radilo je EKG (medijan 7 u domskim vs. 20 EKG zapisa u privatnim ordinacijama; $p < 0,01$).

Zaključak: Struktura rada timova OM-a značajno se promjenila u COVID-19 pandemiji što je najizraženije u udvostrućenju učinjenih telefonskih i e-mail konzultacija te padu pregleda bolesnika u ordinaciji za trećinu. Struktura rada

ovisila je također o lokaciji ordinacije u gradu Zagrebu i o smjeni u radnom danu u tjednu.

The practice management change in family practice teams in the western part of Zagreb due to the COVID-19 pandemic

Keywords: COVID 19, family practice, practice management, workload

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Introduction: COVID-19 pandemic has changed our everyday life and impacted the family medicine practice (FMP) workload. The number of patients per one family medicine practice in Zagreb significantly varies with its location which can limit the quality of healthcare in particular parts of the city.

Aim: The aim was to determine whether there are changes in the FMP management in administrative work, check-ups, consultations, and other diagnostic procedures during the COVID-19 pandemic compared to 2019.

Methods: In this cross-sectional study 65 FMPs from the western part of Zagreb (45 from Health centre Zagreb – West and 21 private practices) were analysed by monthly work reports for March and April of 2019 and 2021. All noted diagnostic-therapeutic procedures were divided into four main groups (administration, telephone and e-mail consultations, check-ups and live consultations, and other diagnostic procedures) and analysed comparing the day of the week, shift, and neighbourhood.

Results: The amount of administrative work as well as the number of check-ups and live consultations dropped by 5.43 % and 29.17 % respectively, whereas the number of telephone and e-mail consultations increased by 114.98 %, just as the total number of patients per day increased by 8.38 % in the analysed period. The amount of total work done by an average FMP depended on the location, 25 % of it was done on Mondays and was increased by 10.68 % in 2021 compared with 2019. The ratio of check-ups in the number of all consultations was decreased by 29 to 58 % depending on the neighbourhood where the FMP was located. Three-quarters of family medicine teams did home visits (median 2.5 visits

monthly), and 61.53 % of all analysed teams performed ECG (median 7 in practices in Health centre vs. 20 ECGs in private practices, $p < 0.01$).

Conclusion: The FMP management was significantly changed in the COVID-19 pandemic which was demonstrated by a double number of telephone and e-mail consultations whereas the number of live check-ups was decreased by one-third. Workload also depended on the FMP location in Zagreb, the working shift, and the day of the week.

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■ Podučavanje/učenje obiteljske medicine tijekom pandemije COVID-19: presječna studija

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Ključne riječi: obiteljska medicina, učenje, nastava na daljinu, pandemija COVID-19

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Pandemija COVID-19 promjenila je obrazovanje i nastavnicima i učenicima. Donijela nam je više izazova, uključujući rizike poučavanja u kliničkom okruženju. Istovremeno, ubrzala je usvajanje informacijske tehnologije kao snažnog alata za komunikaciju i nastavu. Cilj je ovog presječnog istraživanja saznati kakva su bila iskustva nastavnika i studenata s nastavom na daljinu i koji su bili nedostatci ili prednosti nastave na daljinu iz obiteljske medicine. Konačan je cilj utvrditi koje bi nastavne metode vrijedilo zadržati i nakon završetka pandemije.

Prikupljanje podataka započelo je u prosincu 2021., predviđeno trajanje prikupljanja bilo je tri mjeseca, a provodilo se na svim medicinskim fakultetima odnosno katedrama obiteljske medicine koje su članice Splitske inicijative (n = 21). Svim predstojnicima poslana je povezница na mrežni upitnik sa zamolbom da ju prosljede dvojici nastavnika koji su u prethodnoj akademskoj godini najviše bili uključeni u dodiplomskoj nastavi iz obiteljske medicine na daljinu. Nadalje, ako su njihovi nastavnici sudjelovali i na specijalističkom studiju iz obiteljske medicine, dva su nastavnika pozvana da se uključe. Isto tako, predstojnici su pozvani uključiti po dvoje studenata koji su slušali predmet Obiteljska medicina, kao i po dvoje specijalizanata obiteljske medicine (ako imaju specijalistički studij), a koji su studirali u akademskoj godini 2020./2021. Istraživanje je odobrilo Etičko povjerenstvo Medicinskog fakulteta u Splitu.

Upitnik sadrži ukupno 24 pitanja, od kojih je devet otvorenog tipa, te obuhvaća sljedeće teme: priprema za nastavu na daljinu, samopouzdanje u izvođenju nastave na daljinu, prepreke i olakšavajući čimbenici kod nastave na daljinu te primjerakost takve nastave za podučavanje obiteljske medicine. Prilikom obrade podataka rabit će se deskriptivna statistika za kvantitativne podatke i induktivna tematska analiza kvalitativnih podataka. Podatci će biti prikupljeni i obrađeni u prvoj polovici 2022. godine, a zatim objavljeni u međunarodno recenziranoj literaturi.

8. Virtualna konzultacija sa sekundarnom zdravstvenom zaštitom u vrijeme pandemije – kako ju poboljšati

■ A5 uputnica: retrospektiva i budućnost

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Ključne riječi: konzultacija bez prisutnosti pacijenta (A5 uputnica), obiteljski liječnik, Hrvatski zavod za zdravstveno osiguranje

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Uvod s ciljem: Tijekom rada s pacijentima izabrani liječnik obiteljske medicine (LOM) povremeno ima potrebu za stručnom konzultacijom sa specijalistima drugih specijalnosti. Za jedan dio tih savjetovanja konzultantima nije potrebna prisutnost pacijenta, jer se npr. radi o praćenju poznatih pacijenata, jer su potrebni samo nalazi dodatnih dijagnostičkih pretraga da se složi potrebna klinička slika o stanju pacijenta, ili pacijent ne želi fizički otici na pregled kod konzilijarnog specijalista, ali se slaže da se njegov izabrani liječnik konzultira s kolegom o njegovu stanju, ili je pacijent u takvu stanju da su pregledi mogući i željeni samo u kući pacijenta što je u djelokrugu rada samo izabranog liječnika obiteljske medicine. Zahvaljujući nastojanju stručnih udrug obiteljske medicine i istaknutih profesionalaca liječnika obiteljske medicine, kako i u takvim situacijama pacijenti ne bi bili zakinuti, osnovane su radne skupine te Hrvatski zavod za zdravstveno osiguranje (HZZO) uvodi 2014. godine A5 uputnicu kao siguran način komunikacije LOM-a i specijalističko-konzilijarne zdravstvene zaštite (SKZZ) bez prisutnosti pacijenta, a korištenjem informatičko-komunikacijske tehnologije. Cilj je rada prikazati ostvarenje komunikacije PZZ-a i SKZZ-a preko A5 uputnica od njihova uvođenja do danas te utvrditi na koji je način i u kojoj mjeri pandemija utjecala i utječe na ovaj oblik komunikacije.

Rasprrava: Uvidom u podatke koje je ustupio Hrvatski zavod za javno zdravstvo (HZZJZ) vidljivo je da se početkom pandemije 2020. drastično smanjio broj pregleda u SKZZ-u, prvi i kontrolnih pregleda, za više od 27 % u odnosu na prethodnu (nepandemijsku) godinu. Istovremeno je rastao broj kontakata s pacijentima u ordinacijama LOM-a za više od 13 %. Broj kućnih posjeta 2020. u odnosu na 2019. porastao je za dodatnih 5 %. Među uslugama SKZZ-a raste jedino broj odgovora na upućena klinička pitanja preko A5 uputnice, u 2020. za više od 939 % u odnosu na 2019., a u 2021. za više od dodatnih 62 % u odnosu na 2020., odnosno za 1527 % u odnosu na pretpandemijsku 2019. godinu. Među djelatnostima SKZZ-a najviše odgovora na A5 uputnice ostvarile su nuklearna medicina, fizikalna medicina, endokrinologija i onkologija. Među stacionarnim ustanovama najviše odgovora na A5 uputnice ostvarili su klinički bolnički centri Osijek, Zagreb i Rijeka te Opća bolnica Pula.

Zaključak: Iz dobivenih podataka vidljivo je da je broj zahtjeva za A5 konzultacijama rastao kontinuirano od početka uvođenja takva oblika komunikacije, u nekim županijama više, a u nekim manje. Početak pandemije COVID-19 doveo je do višestrukog porasta zahtjeva za A5 konzultacijama, 15 puta više nego prije pandemije. Određen broj zahtjeva za A5 konzultacijom ostaje neodgovoren od SKZZ-a, ali u sve manjem postotku. HZZO kontinuirano prati ove podatke. Hoće li HZZO prepoznati nejednakost u broju zahtjeva za A5 konzultacijama po županijama i broj neostvarenih konzultacija unatoč upitima obiteljskih liječnika i ima li HZZO alata da poboljša stanje na terenu što se tiče jednakosti dostupnosti A5 konzultacija za sve liječnike obiteljske medicine te potpunog ostvarenja zatraženih A5 konzultacija?

A5 referral: retrospective and future

Keywords: consultation without the patient's presence (A5 referral), family physician Croatian Health Insurance Fund

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Background and aim. During his work with patients, the family physician (FP) occasionally needs professional consultation with specialists in other medical fields. For some of these consultations, consultants do not need the patient to be present because, e.g., it is about monitoring known patients, because only the findings of additional diagnostic tests are needed to complete the clinical picture of the patient's condition, or the patient does not want to go to the specialist, but agrees that his FP consults with a colleague about their condition, or the patient is in such a condition that physical examinations are possible and desired only in the patient's home, which is the domain of the FP. Through the efforts of professional associations of family medicine and prominent family medicine professionals and especially established working groups, the Croatian Health Insurance Fund (CHIF) as a safe way of communication among FPs and health care specialists (SHC) without patient presence, using information and communication technology, introduced A5 referral in 2014. The aim of this paper is to investigate the realization of the FP and SHC communication, and in which way and to what extent the pandemic has affected and is influencing this form of communication using A5 referrals from the beginnings to the present day

Discussion. Insight into the data provided by the Croatian Public Health Institute (CPHI) shows that in the beginning of the pandemic in 2020, the number of examinations in SHC, first visits and control visits drastically decreased by over 27%, compared to the previous (non-pandemic) year. At the same time, the number of contacts between FPs and patients increased by over 13%. The number of home visits in 2020 compared to 2019 increased by additional 5%. Among the services of SHC, only the number of answers to clinical questions sent via A5 referral increased by over 939 % in 2020 compared to 2019, by over 62% in 2021 compared to 2020, and by 1527 % compared to pre-pandemic 2019. Among the activities of SHC, the most responses to A5 referrals were achieved by Nuclear Medicine, Physical Medicine,

Endocrinology and Oncology. Among inpatient institutions, the Clinical Hospital Centers Osijek, Zagreb and Rijeka and the General Hospital Pula achieved the most responses to A5 referrals.

Conclusion From the obtained data it is evident that the number of requests for A5 consultations has grown continuously since the introduction of this form of communication, in some countries more, in some less. The onset of the Covid 19 pandemic has led to a multiple increase in the demand for A5 consultations, 15 times more than before the pandemic. A number of requests for the A5 consultation remain unanswered by the SHC , but in a decreasing percentage. CHIF continuously monitors this data. Will CHIF recognize the inequality in requests for A5 consultations in certain regions and the number of unfulfilled consultations despite inquiries from family physicians (FPs) and does CHIF have tools to improve the situation regarding an equal availability of A5 consultations for all FPs and full realization of requested A5 consultations?

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■ Telemedicinske konzultacije liječnika primarne i sekundarne zdravstvene zaštite korištenjem A5 uputnice: prilike i nedostatci

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Ključne riječi: telemedicina, specijalističke konzultacije, obiteljska medicina

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Uvod s ciljem: Prema definiciji Svjetske zdravstvene organizacije (SZO) iz 1997. telemedicina je pružanje zdravstvenih usluga od zdravstvenih profesionalaca preko komunikacijskih tehnologija izmjenom vrijednih informacija za dijagnozu, terapiju i prevenciju bolesti tamo gdje je udaljenost kritični čimbenik za dobivanje zdravstvene usluge te za kontinuiranu edukaciju pružatelja zdravstvenih usluga, za istraživanja i evaluaciju, sve u interesu poboljšanja zdravlja pojedinaca i zajednice, uz uvjet sigurnih komunikacijskih kanala. Pandemija COVID-19, u vrlo kratko vrijeme, pružanje zdravstvenih usluga na daljinu postavila je kao svakodnevnu nužnost radi održavanja distance, sprječavanja širenja bolesti i očuvanja zdravstvenih resursa. Na početku pandemije liječnik obiteljske medicine (LOM) u lokalnoj zajednici bio je jedini dostupan bilo telefonski, e-poštom ili za pregled licem u lice. Brojni terapijski zahvati, dijagnostičke pretrage i pregledi specijalističko-konzilijske zdravstvene zaštite (SKZZ) bili su otkazani. Uz trajno nastojanje profesionalnih i akademskih organizacija obiteljske medicine da se iskoriste novije tehnološke mogućnosti za unaprjeđenje komunikacije između liječnika primarne i sekundarne zaštite, Hrvatski zavod za zdravstveno osiguranje (HZZO) uvažio je potrebu sigurne telemedicinske konzultacije između primarne i sekundarne konzilijske zdravstvene zaštite. Stoga je i prije pandemije kao zdravstvena usluga uvedena konzultacija sa SKZZ-om preko A5 uputnice. Cilj je rada istražiti zadovoljstvo LOM-a ostvarenim konzultacijama preko A5 uputnica i uputiti na potekoće tijekom ostvarivanja konzultacija.

Rasprava: Tijekom trajanja pandemije rasla je potreba za takvom komunikacijom u koju se uključivalo sve više liječnika obiteljske medicine i liječnika specijalističko-konzilijskih djelatnosti. Telemedicinska komunikacija zdravstvenih profesionalaca zaista štedi vrijeme i putne troškove pacijenta, ali zahtijeva dodatno ulaganje i vrijeme liječnika za pripremu konzultacije koja sadržava pregled dokumentacije, kratki opis dijagnostičkih i terapijskih postupaka koji su do tada učinjeni, jasno formuliranje razloga konzultacije te pitanja konzultantu. HZZO ne prepoznaje potrebu postojanja određenog vremena u organizaciji radnog vremena za telemedicinsku konzultaciju sa SKZZ-om. Problem je i u tome što ne postoji obveza SKZZ-a da na pitanje postavljeno preko A5 uputnice pošalje odgovor ili

da odgovori u određenom roku. Također, različita medicinska programska rješenja u ordinacijama obiteljske medicine pružaju različite mogućnosti vezano za A5 upućivanja, a različita su i programska rješenja i organizacija rada u SKZZ-u. Navedeni, ali i drugi čimbenici razlog su nejednakе dostupnosti telemedicinske konzultacije LOM-a i SKZZ-a.

Zaključak: Ostvarenje potrebe za konzultacijom preko A5 uputnice oslanja se na entuzijazam i dobru volju sudionika konzultacije preko A5 uputnica, a ovisi i o kvaliteti različitih programskih rješenja. Različita dostupnost konzultacije sa SKZZ-om preko A5 uputnice znači nejednaku dostupnost zdravstvene zaštite za pacijente u skrbi. Nacionalno osiguravajuće društvo moralo bi prepoznati ove probleme i strukturirano ih rješavati.

■ Telemedicine consultations of primary and secondary health care physicians using the A5 referral: opportunities and disadvantages

Keywords: telemedicine, specialist consultations, family medicine

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Background and goal: According to the 1997 definition by the World Health Organization (WHO), telemedicine is the delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment, and prevention of disease and injuries, research, and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and communities, subject to secure communication channels. The COVID 19 pandemic has, in a very short time, made the delivery of remote health services a daily necessity to maintain distance, prevent the spread of disease and save health resources. At the start of the pandemic, a family physician (FP) in the local community was the only one available, either by phone, email or for face-to-face examinations. Numerous therapeutic procedures, diagnostic tests and specialist consultative health care (SCHC) examinations were cancelled. With the constant efforts of professional and academic family medicine organizations to use new technological opportunities to improve communication between primary and secondary care physicians, the Croatian Health Insurance Fund (CHIF) has recognized the need for safe telemedicine consultations for primary and secondary health care. Therefore, even before the pandemic, consultation with SCHC via the A5 referral was introduced as a health service. The aim of this paper is to investigate the satisfaction of FPs with the achieved consultations via A5 referrals and to point out the difficulties during the realization of consultations.

Discussion: During the pandemic, the need for such communication grew and more and more FPs and specialist consultative doctors became involved. Telemedicine communication of health professionals really saves time and travel costs of the patient but requires additional investment and time of the doctor in preparing the consultation, which includes a review of documentation, a brief description of diagnostic and therapeutic procedures performed so far, clear statement of reasons and questions to the consultant. CHIF does not recognize the need for a certain amount of time in organizing telemedicine consultation with SCHC. Another problem is the lack of obligation on the part of SCHC to send an answer to the question asked via the A5 referral or to answer it within a certain deadline. Different medical software solutions in family medicine offices have different possibilities related to A5 referrals, and there are different software solutions and organization of work in SCHC. This, as well as other factors, are the reason for the unequal availability of telemedicine consultations between FMD and SCHC.

Conclusion: So far, the realization of the need for consultation through A5 referrals relies on the enthusiasm and good will of the participants in the consultation through A5 referrals and depends on the quality of various software solutions. Different availability of consultation with SCHC via A5 referral means unequal availability of health care for patients in care. The national insurance company should recognize these problems and solve them in a structured way.

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Mogućnost konzultacije liječnika primarne zdravstvene zaštite korištenjem A5 uputnice – pogled iz kuta konzilijskog liječnika

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Ključne riječi: telemedicine, A5 uputnice, specijalističke konzultacije

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Uvod s ciljem: Nacionalni osiguravatelj u Republici Hrvatskoj još je 2015. godine uveo A5 uputnicu kako bi liječnicima primarne zdravstvene zaštite omogućio brže i jednostavnije konzultiranje liječnika specijalističko-konzilijske zdravstvene zaštite u svezi s dalnjim liječenjem ili obradom njihovih bolesnika. Želja osiguravatelja bila je da takvim modelom upućivanja smanji nepotrebne dolaske bolesnika u ordinacije specijalističko-konzilijske zdravstvene zaštite i samim tim smanji liste čekanja. Iako je ideja u osnovi bila dobra, u početku nije zaživjela jer su nedostajali osnovni preduvjeti. Nije naime bio razrađen način na koji će A5 uputnica biti „vidljiva“ liječnicima u specijalističko-konzilijskoj zdravstvenoj zaštiti, kao ni način na koji će se potrebni anamnestički podatci ili nalazi dostaviti. U sljedećih nekoliko godina ništa se nije mijenjalo iako je i dalje mogućnost pisanja A5 uputnica bila prisutna. Na nacionalnoj razini pokušao se provesti pilot-projekt implementiranja A5 uputnica, u kojem je sudjelovala i naša bolnica, koji također nije doveo do značajnijeg pomaka. Prekretnica se dogodila 2020. godine kad je COVID-19 pandemija zahvatila i Republiku Hrvatsku. Ta epidemiološka katastrofa donijela je i nešto dobro, ubrzano digitalizaciju našeg društva, uključujući i zdravstveni sustav. Ono što se nije pomaknulo s mjesta godinama, sada se razrijesilo u nekoliko mjeseci. Tijekom 2020. i 2021. godine broj A5 uputnica upućenih specijalističko-konzilijskoj zdravstvenoj zaštiti postupno je rastao. Cilj ovog rada bio je analizirati podatke bolničkoga informatičkog sustava (BIS) naše ustanove vezane za broj A5 uputnica upućenih prema različitim specijalnostima te upozoriti na još uvijek prisutne manjkavosti ovog modela upućivanja iz perspektive konzilijskog liječnika.

Rasprrava: Konzultacija preko A5 uputnice omogućuje liječniku primarne zdravstvene zaštite da dobije preporuku liječnika određene specijalnosti u svezi s obradom ili liječenjem bolesnika, a bez potrebe da bolesnik fizički bude pregledan. Preporuka se izdaje na osnovi anamnestičkih podataka, kliničkog statusa i medicinske dokumentacije koju liječnik primarne zdravstvene zaštite priloži uputnici. Kvaliteta preporuke koju konzilijski liječnik izdaje u velikoj mjeri ovisi o kvaliteti priložene medicinske dokumentacije, dobro formuliranom kliničkom pitanju, kao i o točno postavljenoj indikaciji za ovakav vid konzultacije. S druge strane, određene specijalnosti, odnosno određena stanja i bolesti, prikladniji su

za konzultaciju posredstvom telemedicine od drugih. Specijalističko-konzilijske ordinacije u ustanovama diljem Hrvatske, kao i unutar iste ustanove, na različite su načine organizirali odgovaranje na A5 uputnice, što također pridonosi različitoj kvaliteti odgovora koju liječnik primarne zdravstvene zaštite dobije.

Zaključak: Uvođenje i implementacija A5 uputnica u konzilijsko-specijalističku zdravstvenu zaštitu zasigurno je unaprijedilo zbrinjavanje naših bolesnika, osobito u uvjetima pandemije u kojoj živimo posljednje dvije godine. Koliko god se situacija u proteklim dvjema godinama poboljšala, još uvijek postoji potreba za poboljšanjem u smislu definiranja potrebnih podataka koje treba dostaviti uz uputnicu, obvezu postavljanja jasnog kliničkog pitanja, ujednačivanja načina davanja konzilijskog mišljenja, kao i vremena u kojem je mišljenje potrebno dostaviti.

Possibility for a primary care physicians to seek consultation using A5 referral - from the perspective of the consultative physician

Keywords: telemedicine, A5 referrals, specialist consultations

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Introduction and aim The National Insurer in the Republic of Croatia introduced the A5 referral in 2015 with the aim of enabling primary care physicians to consult specialists and consultative health care physicians faster and easier, regarding further treatment of their patients. The final goal was to reduce unnecessary visits of patients to the offices of specialist health care and thus to reduce waiting lists. Although the idea was basically good, it did not take root at first because the basic preconditions were missing. Namely, the manner in which the A5 referral will be "visible" to physicians in specialist health care is not elaborated enough, nor is the manner in which the necessary anamnestic data or findings are provided. Nothing changed in the following few years, although the possibility of writing A5 referrals was still present. Attempts were made at the national level to implement a pilot project for the implementation of A5 referrals, in which our hospital also participated, which did not lead to a significant change either. The turning point happened in 2020 when the Covid-19 pandemic also affected the Republic of Croatia. That epidemiological issue has also brought something good, the accelerated digitalization of our society, including the health care system. What had not changed in years was resolved in a couple of months. Between 2020 and 2021, the number of A5 referrals to specialist consultative health care gradually increased. This paper aims to analyze the data of the hospital information system (BIS) of our institution related to a number of A5 referrals sent to different specialists and to point out the still present shortcomings of this referral model from the perspective of a physician.

Discussion A5 referral consultation allows the primary care physician to obtain a recommendation from a physician of a particular specialty regarding the treatment of their patient, without the need to physically examine the patient. The recommendation is issued based on anamnestic

data, clinical status, and medical documentation attached to the referral by the primary care physician. The quality of the recommendation issued by the consultation doctor depends largely on the quality of the attached medical documentation, a well-formulated clinical question, and the exact indication for this type of consultation. On the other hand, certain specialties, ie certain conditions and diseases are more suitable for consultation through telemedicine than others. Specialist counseling clinics in institutions throughout Croatia, as well as within the same institution, have organized responses to A5 referrals in different ways, which also results in different quality of responses that primary care physicians receive.

Conclusion The introduction and implementation of A5 referrals in consultative specialist health care have certainly improved the care of our patients, especially in the conditions of the pandemic in which we have been living for the last two years. However, no matter how much the situation has improved in the past two years, there is still a need for improvement in terms of defining the necessary data to be submitted with the referral, the obligation to ask a clear clinical question, harmonizing the way of giving a consultative opinion.

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9. MLADI NASTAVNICI

■ Timski rad – temelj integrirane skrbi

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Ključne riječi: timski rad, integrirana skrb, obiteljska medicina

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Uvod s ciljem: Cjelovita skrb te koordinacija zdravstvenog zbrinjavanja pojedinca, obitelji i lokalne zajednice zahtjeva multidisciplinarni pristup i timski rad. Timski rad može se opisati kao zajednički napor brojnih pojedinaca koji zajedno izvode niz konkretnih zadataka s rezultatom ostvarivanja zajedničkog cilja, koji bi trebao biti integrirana skrb za bolesnika. Integrirana skrb je koncept koji okuplja ulaze (*input*), izlaze (*output*), upravljanje i organizaciju usluga vezanih uz dijagnozu, liječenje, rehabilitaciju i promicanje zdravlja. Postoji mnoštvo pojmove koji se koriste kako bi se opisala integrirana skrb. Iz perspektive obiteljskog liječnika bila bi to osobi orientirana i kontinuirana skrb. Timski rad, kao i koncept integrirane skrbi nedostatno se prepoznaju u svakodnevnoj praksi obiteljskog liječnika. Cilj je rada pokazati kako dobar timski rad rezultira kvalitetnijom zdravstvenom zaštitom.

Rasprrava: Osnovni, nazuži tim obiteljske medicine čine liječnik i medicinska sestra/tehničar. Pridruženi članovi su patronažna sestra i medicinske sestre iz ustanove za kućnu njegu kao najčešći suradnici. Članovi šireg tima mogu biti iz zdravstvenoga sustava, ali i iz drugih društvenih djelatnosti. Oni se uključuju u rad tima povremeno, kada je njihovo sudjelovanje potrebno zbog prirode zdravstvenog problema. Svi članovi tima odgovorni su za njegovo funkcioniranje sukladno razini obrazovanja i iskustvu, a uloga voditelja tima pripada liječniku obiteljske medicine (LOM), koji koordinira više medicinskih i nemedicinskih pojedinaca i/ili ustanova, koji imaju značajnu ulogu u provođenju integrirane skrbi za pacijenta. Specifičnosti svakog pacijenta određuju razinu integrirane skrbi. Temeljni preduvjeti za učinkovit timski rad usmjeren potreba bolesnika jesu jasno definirane kompetencije i zadaće svakoga od članova, otvorena i redovita komunikacija, uvjerenost članova tima u važnost zajedničkog cilja i stalno provjeravanje kvalitete i ishoda rada.

Na učinkovitost rada tima obiteljske medicine utječu i brojni propisi koje liječnik mora dobro poznavati. Kako bi postigao najbolje moguće ishode, LOM kao koordinator tima trebao bi posjedovati specifična medicinska znanja i vještine, ali isto tako i vještine koje proizlaze iz umijeća dobro vođene prakse.

Zaključak: Timski rad i međusobna povezanost članova tima jesu temelj integrirane skrbi. Integracija skrbi kao koncept objedinjuje sve razine zdravstvenog sustava sa zdravstvenim radnicima te drugim dionicima u zdravstvu. Uz to integrirana skrb omogućuje zdravstvenim radnicima kvalitetniji rad i poboljšava ishode te pridonosi racionalizaciji troškova.

■ Teamwork - the foundation of integrated care

Keywords: teamwork, integrated care, family medicine

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Introduction and aim: For a comprehensive care and, above all, a coordination of health care of the individual, the family and the local community require a multidisciplinary approach and teamwork. Teamwork can be described as the joint effort of many individuals who perform a series of specific tasks together, resulting in the achievement of the common goal, the integrated patient care. Integrated care is a concept that brings together the input, output, management, and organization of services related to diagnosis, treatment, rehabilitation and health promotion. There are multiple terms referring to the term integrated care. From the perspective of a family medicine practitioner, this would actually be person-centered and longitudinally continuous care. Teamwork as well as the concept of integrated care are insufficiently recognized in the daily practice of the family physician. The aim of this paper is to show how good teamwork results in better health care.

Discussion: The basic team of family medicine practice consists of a physician and a nurse or technician. Associate members are the community nurse and nurses from the home care facility as the most frequent ones. Members of the wider team can be from the health system, but also from other social activities. They are involved in the work of the team from time to time, especially when their participation is necessary due to the nature of the health problem. All team members are responsible for its functioning in accordance with the level of their respective education and experience. The role of the team leader belongs to the family physician, who coordinates several medical and non-medical individuals and/or institutions which play significant roles in implementing integrated patient care. The specifics

of each patient determine the level of integrated care. Basic preconditions for effective teamwork directed to patients' needs are clearly defined competencies and tasks of each team member, open and regular communication, determination of all team members to accomplish the common goal and the constant checking of work quality and outcomes. The effectiveness of the family medicine team is also affected by a vast number of regulations that the physician must be well acquainted with. To achieve the best possible outcomes, the family physician as the team coordinator should possess not only specific medical knowledge and skills, but also the skills originating from the well-conducted practice work..

Conclusion: Teamwork and the connection among team members are the foundation of integrated care. Integration of care as a concept unites all levels of the health system with health workers and other health stakeholders. In addition, integrated care enables health professionals to work better, improves the outcomes and contributes to the rationalization of health care costs.

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■ Utječe li šećerna bolest na mišićno-koštane bolesti?

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Ključne riječi: šećerna bolest, hiperglikemija, mišićno-koštane komplikacije, mišićno-koštane bolesti

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Uvod s ciljem: Šećerna bolest (ŠB) postaje sve veći svjetski zdravstveni problem sa stalnim povećanjem broja oboljelih. Smatra se da će u razdoblju od 2010. do 2030. godine prevalenciju ŠB-a porasti za 73 % u zemljama u razvoju te za 20 % u razvijenim zemljama. Zdravstveni djelatnici, ali i bolesnici, dobro su upoznati s mikrovaskularnim i makrovaskularnim komplikacijama ŠB-a, no rijetko se obraća pozornost na povezanost ŠB-a i brojnih mišićno-koštanih komplikacija. Mišićno-koštane bolesti obuhvaćaju raznolik skup poremećaja mekog tkiva, zglobova, mišića, kostiju, a prema podatcima Hrvatskog zavoda za javno zdravstvo za 2019. godinu činile su 11,8 % zabilježenog morbiditeta u djelatnosti obiteljske medicine što ih prema učestalosti svrstava na visoko drugo mjesto. Iako mišićno-koštane bolesti nisu životno ugrožavajuće, kroničnog su tijeka i značajno utječu na kvalitetu života bolesnika. Cilj je rada prikazati najčešće mišićno-koštane komplikacije u osoba oboljelih od ŠB-a kako bismo njihovim ranim prepoznavanjem i adekvatnim liječenjem utjecali na kvalitetu života bolesnika.

korištenje nesteroidnih antireumatika ili kortikosteroida može nepovoljno djelovati na bubrežnu funkciju, ali i na kontrolu glikemije.

Zaključak: Za razliku od ostalih makrovaskularnih i mikrovaskularnih komplikacija ŠB-a kod kojih se koristimo različitim dijagnostičkim metodama, dijagnoza mišićno-koštanih komplikacija temelji se na detaljnoj anamnezi i kliničkoj slici. Većina mišićno-koštanih komplikacija nastaje kao posljedica suboptimalne kontrole glikemije. Bez obzira na to što mišićno-koštane komplikacije izravno ne ugrožavaju život, one dovode do značajne tjelesne onesposobljenosti i tako narušavaju kvalitetu života bolesnika. Njihovo pravodobno dijagnosticiranje i optimalno liječenje svakako će rezultirati smanjenjem boli i morbiditeta te povećanjem kvalitete života u bolesnika oboljelih od ŠB-a.

Rasprrava: Podatci o mišićno-koštanim komplikacijama ŠB-a većinom se prikupljaju iz promatračkih studija. Pokazalo se da oboljeli od ŠB-a čak 1,7 do 2,1 puta češće prijavljuju mišićno-koštani bol u odnosu na populaciju koja ne boluje od ŠB-a. Patogenetski mehanizam njihova nastanka nije u potpunosti razjašnjen, no povezuje se s duljinom trajanja ŠB-a i lošom kontrolom glikemije. Smatra se da razvoju komplikacija pridonosi akumulacija završnih produkata glikacije proteina i njihovo umrežavanje s kolagenom. Mišićno-koštane komplikacije dijele se u četiri velike skupine ovisno o zahvaćenosti mišićno-koštanoj sustavu: fibroproliferativni poremećaji mekog tkiva, zglobni poremećaji, mišićni poremećaji i koštani poremećaji. Fibroproliferativni poremećaji mekog tkiva najčešće se uočavaju na šakama i ramenima, zglobni poremećaji na koljenima i stopalima, mišićni poremećaji na mišićima natkoljenice, a koštani poremećaji na kralježnici. Neki su poremećaji jedinstveni u osoba oboljelih od ŠB-a poput dijabetičkog infarkta mišića ili dijabetičke mionekroze, dok se drugi javljaju i u općoj populaciji, ali imaju veću prevalenciju u bolesnika sa ŠB-om. Osnovni simptomi ovih poremećaja su bol i smanjenje ili gubitak funkcije zahvaćenog dijela mišićno-koštanoj sustava, što izravno dovodi do smanjenja tjelesne aktivnosti, važnog elementa liječenja ŠB-a. Ujedno,

■ Does diabetes have an effect on musculoskeletal disorders?

Keywords: diabetes, hyperglycemia, musculoskeletal complications, musculoskeletal disorders

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Introduction and aim: Diabetes is becoming a growing world health problem with a steady increase in the number of patients. It is estimated that in the period from 2010 to 2030, the prevalence of diabetes will increase by 73% in developing countries and by 20% in developed countries. Healthcare workers, as well as patients, are well acquainted with the microvascular and macrovascular complications of diabetes but the connection between diabetes and numerous musculoskeletal complications is rarely paid attention to. Musculoskeletal disorders include a diverse set of soft tissue, joint, muscle, and bone disorders, and according to the Croatian Institute of Public Health for 2019, they accounted for 11.8% of recorded morbidities in family medicine, which ranks them second in frequency. Although musculoskeletal disorders are not life-threatening, they are chronic and significantly affect the quality of life of the patients. The aim of this paper is to present the most common musculoskeletal complications in people with diabetes so that their early recognition and adequate treatment can positively affect the quality of their life.

Discussion: Data on musculoskeletal complications of diabetes are mostly collected from observational studies. It has been shown that people with diabetes report musculoskeletal pain 1,7 to 2,1 times more often than the population that does not have diabetes. The pathogenetic mechanism of their occurrence is not fully understood, but it is associated with the duration of diabetes and poor glycaemic control. Accumulation of the end product of protein glycation and their crosslinking with collagen are thought to be contributing to the development of complications.

Musculoskeletal complications are divided into four major groups depending on the involvement of the musculoskeletal system: fibroproliferative soft tissue disorders, joint disorders, muscle disorders, and bone disorders. Fibroproliferative soft tissue disorders are most commonly seen on the hands and shoulders, joint disorders on the knees and feet, muscle disorders on the thigh muscles, and bone disorders on the spine. Some disorders are unique in people with diabetes such as diabetic muscle infarction or diabetic myonecrosis, while others occur in the general population but have a higher prevalence in patients with diabetes. The main symptoms of these disorders are pain and reduction or loss of function of the affected part of the musculoskeletal system, which directly leads to a decrease in physical activity, an important element in the treatment of diabetes. At the same time, the use of nonsteroidal anti-inflammatory drugs or corticosteroids may adversely affect the renal function, but also the glycaemic control.

Conclusion: Unlike other macrovascular and microvascular complications of diabetes in which we use different diagnostic methods, the diagnosis of musculoskeletal complications is based on a detailed medical history and clinical picture. Most musculoskeletal complications result from suboptimal glycaemic control. Although musculoskeletal complications do not directly endanger life, they lead to significant physical disability and thus impair the quality of life of the patients. Their timely diagnosis and optimal treatment will certainly result in a reduction of pain and morbidity and the quality of life increase in diabetic patients.

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■ Domene opterećenja njegovatelja prepoznate psihometrijskom validacijom hrvatske verzije upitnika Zarit Burden Interview

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Ključne riječi: demencija, opterećenje njegovatelja, obiteljska medicina

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Uvod: Njegovatelji bolesnika oboljelih od demencije suočeni su sa znatnim novonastalim problemima i zadatcima prilikom skrbi za bolesnika, a koji od njih zahtijevaju sveobuhvatnu reorganizaciju i prilagodbu načina života. Cilj je rada prikazati utjecaj karakteristika njegovatelja i bolesnika oboljelih od demencije na opterećenje njegovatelja.

Ispitanici i metode: U istraživanje je uključena 131 obitelj koja se sastojala od njegovatelja (jednog člana obitelji koji je dominantan njegovatelj) i bolesnika oboljelog od demencije kojem je dijagnoza postavljena od neurologa ili psihijatra. Presječno istraživanje provedeno je u Domu zdravlja Zagreb – Zapad od listopada 2017. do rujna 2018. godine. Prikupljeni su podaci o demografskim i socioekonomskim obilježjima njegovatelja i bolesnika. Za procjenu opterećenja njegovatelja korišten je upitnik Zarit Burden Interview (ZBI), za procjenu stupnja demencije test Mini Mental State Examination, a za procjenu funkcionalnog statusa bolesnika Barthelov indeks. Za procjenu neuropsihijatrijskih simptoma u bolesnika korišten je upitnik Neuropsychiatric Inventory questionnaire (NPI-Q).

Rezultati: Prosječna dob njegovatelja bila je 62 godine, a prosječna dob bolesnika 79 godina. Većina njegovatelja bile su žene (68 %) i djeca bolesnika (51 %). Medijan ukupnog ZBI-ja bio je 27 bodova, što je u razini blagog do umjerenog opterećenja. Psihometrijskom validacijom hrvatske verzije ZBI upitnika prepoznate su četiri dimenzije opterećenja koje su nazvane osobno opterećenje, frustracija, sram i krivnja. Međusobno nezavisni prediktori većeg ukupnog opterećenja njegovatelja bili su kraće trajanje njegovanja, veći broj sati njegovanja bolesnika tjedno, njegovatelj nije supružnik bolesnika, muški spol bolesnika i viši ukupni NPI-Q skor bolesnika. Pojedine karakteristike bolesnika i njegovatelja bile su različito prediktivne za pojedine domene opterećenja.

Zaključak: Ordinacija liječnika obiteljske medicine mjesto je gdje se može procijeniti trenutačno opterećenje njegovatelja te im se pružiti individualna psihološka podrška i učenje vještina kako se suočiti s problemima, a time i smanjiti opterećenje njegovatelja.

■ Caregiver burden domains identified by psychometric validation of the Croatian version of the Zarit Burden Interview questionnaire

Keywords: dementia, caregiver burden, family medicine

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Introduction: Caregivers of patients with dementia are faced with significant emerging problems and tasks in patient care, which require them to comprehensively reorganize and adjust their lifestyle. Aim of this work is to show the influence of the characteristics of caregivers and patients with dementia on the workload of caregivers.

Subjects and methods: The study included 131 families consisting of a caregiver (one family member who is the dominant caregiver) and a patient with dementia diagnosed by a neurologist or psychiatrist. A cross-sectional study was performed in Health Center Zagreb-Zapad in the period 10/2017 – 9/2018. Data on the demographic and socioeconomic characteristics of caregivers and patients were collected. Zarit Burden Interview (ZBI) was used to assess caregiver burden, the Mini Mental State Examination was used to assess the level of cognitive impairment, and the Barthel Index was used to assess patient functional status. The Neuropsychiatric Inventory questionnaire (NPI-Q) was used to assess neuropsychiatric symptoms in patients.

Results: The caregivers' mean age was 62 years and patients' mean age was 79 years. They were mostly women (67.9%) and patients' children (51.1%). The median overall ZBI score was 27, which corresponds to a mild to moderate perceived burden. Psychometric validation of the Croatian version of the ZBI questionnaire identified four dimensions corresponding to personal strain, frustration, embarrassment, and guilt. In multivariate analysis significant predictors of higher overall burden were the shorter duration of caregiving, the higher number of hours caring per-week, non-spouse relationship, the male sex of the patient, and the higher NPI-Q of the patient. Individual characteristics of patients and

caregivers were differently predictive for individual burden domains.

Conclusion: Family medicine practice is a place where a family doctor can assess the caregiver's burden at that time and provide caregivers individual psychological support and learning skills in dealing with problems, thus reducing their burden.

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■ Kvaliteta života uvjetovana zdravljem u osoba sa sindromom donjeg mokraćnog sustava

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Ključne riječi: simptomi donjih mokraćnih puteva, kvaliteta život

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Uvod s ciljem: Simptomi su donjih mokraćnih puteva (LUTS, engl. *lower urinary tract symptoms*) višefaktorski. LUTS može biti pokazatelj patoloških procesa i drugih organskih sustava te sistemskih procesa. U starijoj populaciji gotovo svaka druga osoba ima barem jedan LUTS. Ipak, većina populacije ne prepoznaže prisutnost LUTS-a. Kvaliteta života može se procijeniti standardiziranim kratkim upitnikom o zdravlju s 12 čestica, SF12 (engl. *12-Item Short Form Survey*). Upitnik rezultira procjenom kvalitete općeg zdravlja (engl. *General health GH*), zatim kvalitete domene fizičke komponente zdravlja (engl. *Physical health composite score PCS*) i mentalne komponente (engl. *Mental health composite score MCS*) te specifičnim domenama PCS-a i MCS-a. Cilj ovog rada bio je procijeniti utjecaj LUTS-a na kvalitetu života u osoba koje su svjesne i u osoba koje nisu svjesne prisutnosti LUTS-a.

Ispitanici i metode: Ovo presječno randomizirano istraživanje provedeno je na 444 ispitanika Primorsko-goranske županije koji su posjetili liječnika obiteljske medicine neovisno o razlogu posjeta. Prvo se metodom samoprocjene odredilo imaju li ispitanici LUTS. Potom je provedena edukacijska anketa u kojoj je ispitanicima objašnjena klinička slika najčešćih tipova LUTS-a te je zabilježen broj LUTS-a prepoznatih nakon provedene edukacijske ankete. Kvaliteta života procijenjena je SF12 upitnikom.

Rezultati: Ispitanici imaju razvijena **četiri** simptoma LUTS-a prije nego što postanu svjesni problema u usporedbi s ispitanicima koji su bili svjesni LUTS-a prije edukacijske ankete (Kruskal-Wallis test, $p < 0,0001$). Pronađena je statistička povezanost sposobnosti uočavanja simptoma LUTS-a u ovisnosti o edukacijskoj anketi ($\chi^2 (1, N = 241) = 92,01, p < 0,0001$ i $\chi^2 (1, N = 258) = 119,01, p < 0,0001$ za muškarce i žene). Osobe pogodjene LUTS-om imaju lošije rezultate GH ($p < 0,0001$), osobito ako imaju više od četiriju LUTS-a ($p < 0,0001$). LUTS narušava zdravlje i u fizičkoj i u mentalnoj komponenti (PCS $p = 0,0002$, MCS $p < 0,0001$). Svaka domena PCS-a i MCS-a značajno je narušena ($p \leq 0,002$), osim boli ($p = 0,1445$). Prisutnost LUTS-a nije snizila komponente ili domene ispod norme (-3 T score).

Zaključak: Ispitanici u prosjeku prepoznavaju LUTS tek nakon što su razvili barem četiri simptoma, kada je kvaliteta života već značajno narušena. Posebnost ovih rezultata jest u činjenici da je kvaliteta života osoba s LUTS-om usporedjivana s ispitanicima koji su se javili LOM-u jer im je zdravlje od ranije narušeno nekim čimbenikom, a ne samo usporedbom s općom zdravom populacijom.

■ Health related quality of life in patients with lower urinary tract symptoms

Keywords: lower urinary tract symptoms; health related quality of life

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Introduction and aim. Lower urinary tract symptoms (LUTS) are multifactorial. Therefore, LUTS can be the indicator of pathological processes in any organ system. In elderly population, almost every other person has at least one LUTS. However, patients are usually unaware of LUTS, until clinical manifestations become severe. Quality of life (QOL) can be assessed by standardized survey, SF12 (12-Item Short Form Survey). SF12 displays scores of general health (GH), its physical health component score (PCS), mental health component score (MCS), and PCSs and MCSs specific domains' scores. The aim of this study was to assess the presence of LUTS on QOL in patients who are aware as well as in those who are unaware of their LUTS.

Subjects and methods. This cross-sectional randomized study was conducted on 444 patients in Primorje-Gorski kotar County, who have visited GP's office, regardless of the reason. First, patients self-reported whether they had LUTS or not. Then, they were informed about the clinical manifestations of the LUTS in an educational interview (EI). After that, it was noted whether subjects recognized LUTS after given explanation. QOL was assessed using SF12.

Results. On average, a person that recognizes LUTS already has at least 4 LUTS, compared to patients that were already aware of their LUTS before EI ($p<0.0001$). Subjects reported more LUT symptoms after EI ($\chi^2(1, N=241) = 92.01$, $p<0.0001$ and $\chi^2(1, N=258) = 119.01$, $p<0.0001$ for men and women, respectively). People with LUTS have lower GH scores ($p<0.0001$), especially if they have had more than 4 LUTS ($p<0.0001$). LUTS impaired both PCS and MCS (PCS $p=0.0002$, MCS $p<0.0001$). Each domain of PCS and MCS was impaired by LUTS ($p\leq 0.002$),

except pain ($p= 0.1445$). The presence of LUTS has not lowered neither of the QOL components, nor their domains bellow the norm (-3 T score).

Conclusion. A person who recognizes LUTS has usually already had 4 LUT-symptoms and impaired QOL. The peculiarity of these results is the fact that the QOL of people with LUTS was compared to QOL of respondents who contacted GP because their health was already impaired by some issue, and not just general healthy population.

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■ Funkcionalna bliska infracrvena spektroskopija u dijagnostici velikog depresivnog poremećaja

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Uvod s ciljem: Veliki depresivni poremećaj je globalna psihijatrijska dijagnoza koja nema biomarkera. Danas postoji sve više dokaza kako funkcionalna bliska infracrvena spektroskopija (fNIRS) može pomoći u dijagnostici i predviđanju terapijskog odgovora velikog depresivnog poremećaja. Cilj je rada upoznati obiteljske liječnike o koristi funkcionalne bliske infracrvene spektroskopije u svrhu postavljanja dijagnoze i praćenja terapijskog odgovora velikog depresivnog poremećaja.

Rasprava: Pretraženi su radovi objavljeni u razdoblju od 1980. do 2019. godine na tražilicama PubMed, EMBASE, ScienceDirect i Cochrane Library u kojima je korištena metoda funkcionalno bliske infracrvene spektroskopije u svrhu (i) razlikovanja depresivnih od nedepresivnih pojedinaca, (ii) korelacije sa simptomima, (iii) praćenja terapijskog odgovora. Istraživanja su analizirala cerebralne hemodinamske varijacije u bolesnika s velikim depresivnim poremećajem u svim dobnim skupinama. Kvaliteta dokaza provjerena je pomoću Newcastle-Ottawa ljestvice. Ovaj pregled pruža sveobuhvatne ažurirane dokaze o dijagnostičkoj i prediktivnoj primjeni funkcionalne bliske infracrvene spektroskopije u bolesnika s velikim depresivnim poremećajem. Ovaj pregledni rad obuhvaća 64 studije, od kojih je 12 studija bilo longitudinalno, a ostale su bile presječne. Funkcionalna bliska infracrvena spektroskopija dosljedno pokazuje atenuirane cerebralne hemodinamske promjene u depresivnih u odnosu na zdrave osobe. Signali funkcionalne bliske infracrvene spektroskopije pokazali su razlike u korelaciji s pojedinačnim simptomima depresije te omogućuju praćenje terapijskog odgovora.

Zaključak: Primjena fNIRS-a u praksi bi donijela objektivne podatke o stupnju i tipu depresivnog poremećaja. Nadalje, primjena bi omogućila objektivno praćenje odgovora na liječenje. Iako u Republici Hrvatskoj trenutačno nije dostupna, ova nova dijagnostička metoda postala je

zlatni standard u postavljanju dijagnoze depresije u Japanu, Velikoj Britaniji i Njemačkoj. Potrebno je provesti buduća longitudinalna ispitivanja na većem broju ispitanika standardiziranom metodologijom u kojima bi se obuhvatilo više moždanih regija.

■ Functional near-infrared spectroscopy in the diagnosis of major depressive disorder

Keywords: fNIRS- near-infrared spectroscopy, MDD- major depressive disorder, family medicine

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Introduction and aim. Major Depressive Disorder is a global psychiatric diagnosis that has no biomarkers. Today, there is growing evidence that functional near-infrared spectroscopy can be helpful in diagnosing and in predicting the therapeutic response of patients suffering from the disorder. The aim of this paper is to analyze studies that evaluated the usefulness of functional near-infrared spectroscopy for the purpose of diagnosing major depressive disorder, correlation with symptoms, and monitoring the therapeutic response.

Discussion. The papers published in the period from 1980 to 2019 on the publishers PubMed, EMBASE, ScienceDirect and Cochrane Library, which used the method of functional close infrared spectroscopy for (i) distinguishing depressed from non-depressed individuals, (ii) correlation with symptoms, (iii) monitoring the therapeutic response. Studies have analyzed cerebral hemodynamic variations in patients with major depressive disorder in all age groups. The quality of evidence was checked using the Newcastle-Ottawa scale. This review provides comprehensive up-to-date evidence on the diagnostic and predictive application of functional near-infrared spectroscopy in patients with major depressive disorder. This review

includes 64 studies, of which 12 studies were longitudinal, the rest were cross-sectional. Functional near-infrared spectroscopy consistently shows attenuated cerebral hemodynamic changes in depressed versus healthy individuals. Functional near-infrared spectroscopy signals have shown differences in correlation with individual symptoms of depression and allow monitoring of the therapeutic response.

Conclusion. The application of fNIRS in practice would yield objective data on patients with a depressive disorder such as the severity and type of depressive disorder. Furthermore, the application would allow objective monitoring of responses to drugs and other therapeutic methods, which would help physicians to assess the success of treatment and modify it. Although currently unavailable in the Republic of Croatia, this newer method of diagnosing depression has already become the gold standard in diagnosing depression in countries such as Japan, Great Britain and Germany. Future studies are needed that include standardized methodology, larger sample size, multi-region brain testing by an integrative approach, and longitudinal monitoring.

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■ Utjecaj kombiniranoga konzervativnog i endovenuskog liječenja u cijeljenju kroničnih rana miješane vensko-arterijske etiologije

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Ključne riječi: ablacija cijanoakrilatnim ljepilom, endovenski zahvati, kompresivna terapija, kronična rana miješane etiologije

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Uvod s ciljem: U 10 – 30 % pacijenata s venskim potkoljeničnim ranama prisutna je i arterijska insuficijencija pa govorimo o ranama miješane etiologije za koje ne postoji konsenzus o optimalnom terapijskom pristupu te se on donosi temeljem predominantnih simptoma i znakova bolesti i dijagnostičkih nalaza primarno arterijske perfuzije. Cilj ovog rada bio je prikazati uspješnost konzervativnog i endovenuskog liječenja bolesnika s kroničnim ranama potkoljenice miješane etiologije.

Metode: Prikaz dviju pacijentica, jedne s ranom na desnoj potkoljenici nastalom prije tri mjeseca, druge s ranom na lijevoj potkoljenici nastalom prije dvije godine.

Prva pacijentica (81 g.) godinama ima varikozite, prvo pojavljivanje rane uz obilno vensko krvarenje koje je zbrinuto kirurški. Unazad šest mjeseci bolovi u listovima pri hodanju, hodna pruga 300 m. Boluje od arterijske hipertenzije i fibrilacije atrija, u terapiji su apiksaban, amlodipin, metoprolol, amiodaron i valsartan. U desnoj retromaleolarnoj jami rana veličine 2 x 2 cm, u dnu fibrin, oskudne sekrecije uz varikozite i *corona phlebectatica*. Ultrazvučnim pregledom obojenim doplerom utvrđi se insuficijencija vene safene magne (VSM) uz refluks gradus IV, gležanjski indeks nemjerljiv. MSCT angiografijom nogu prikazane su difuzne aterosklerotske promjene. Provedeno je lokalno liječenje rane pokrivalima s dodatcima uz kompresivnu terapiju kratkoelastičnim zavojem vrlo niske doze kompresije uz svakodnevno hodanje. Mjesec dana kasnije učinjena je endovenска ablacija VSM-a cijanoakrilatnim ljepilom te skleroterapija varikoziteta pjenom. Zahvat nije zahtijevao tumescentnu anesteziju ni prekid antikoagulantne terapije, prošao je bez nuspojava. Rana je zaraslza za pet tjedana.

Druga pacijentica (74 g.) ima recidivnu ranu na lijevoj potkoljenici koja unatoč postupku re-vaskularizacije (ljevostrano femoropoplitealno premoštenje i transkutana endarterektomija poplitealne arterije) i hiperbarične oksigenoterapije nije zacijelila godinu dana. Boluje od arterijske hipertenzije, kronične venske insuficijencije, pušač, u terapiji varfarin. Rana je veličine 7 x

5 cm, u dnu fibrin, oskudne sekrecije, uz edem, lipodermatosklerozu i hemosiderozu potkoljenice. Ultrazvučnim pregledom obojenim doplerom ustanovi se refluksni bataljak VSM-a uz ostatni VSM s refluksom do maleola te blizak položaj VSM-a uz premosnicu na natkoljenici koja je funkcionalna, gležanjski indeks 1,31. Nakon triju mjeseci primjene općih mjera, prestanka pušenja, lokalne terapije pokrivalima za rane uz doziranu kompresivnu terapiju sustavom zavoja kratkog vlaka potkoljenično u lokalnoj je anesteziji učinjena laserska ablacija bataljka VSM-a, a potom ablacija cijanoakrilatnim ljepilom ostalog VSM-a. Ablacija ljepilom učinjena je zbog bliskog položaja VSM-a i arterijske premosnice, a s ciljem prevencije moguće jatrogene lezije premosnice kod primjene tumescentne anestezije i ožiljka duž natkoljenice. Naknadno je provedena skleroterapija pjenom periulcerozno. Rana je zacijelila pet tjedana nakon endovenuskog zahvata, bez recidiva godinu dana. Pacijentica nosi kompresivnu dokoljenku, ne puši, redovito hoda.

Rezultati: U pacijentica su rane miješane etiologije u potpunosti zacijelile pet tjedana nakon endovenuskog zahvata korekcije venskog refluka. Nije bilo nuspojava zahvata, nije prekidana antikoagulantna terapija, kratkotrajno i dozirano korištena je kompresivna terapija.

Zaključak: Terapija potkoljenične rane miješane etiologije zahtijeva dijagnostičku obradu arterijske i venske cirkulacije, planiranje i provođenje zahvata s ciljem reperfuzije i korekcije venske hipertenzije. Uz lokalno liječenje pokrivalima za rane, doziranu kompresivnu terapiju isključivo pomagalima kratkog vlaka i provođenje općih mjera, rana miješane etiologije pokazuje akceleraciju cijeljenja nakon endovenuskog zahvata i zacijeljuje za pet tjedana.

The influence of combined conservative and endovenous treatment in the healing of chronic wounds of mixed venous arterial etiology

Keywords: chronic mixed ulcer; compression therapy; cyanoacrylate glue ablation; endovenous procedures

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Background: Arterial insufficiency is present in 10-30% of patients with venous leg ulcers, so we are talking about mixed ulceration for which there is no consensus on the optimal treatment modality. Therefore, it is based on the predominant symptoms and signs of disease and diagnostic findings of primary arterial perfusion.

Aim: to show the success of conservative and endovenous treatment of patients with chronic mixed leg ulcers.

Methods: presentation of two patients, one with a wound on the right lower leg that occurred 3 months ago, the other with a wound on the left lower leg that occurred 2 years ago.

The first patient (81 years old) has had varicose veins for years, the first appearance of a wound with abundant venous bleeding was taken care of surgically. Back 6 months feels pain in the calves when walking, walking track being 300m. She suffers from arterial hypertension and atrial fibrillation, and is treated with apixaban, amlo-dipine, metoprolol, amiodarone and valsartan. Wound is in the right retromaleolar pit, 2x2 cm in size, fibrin on the wound bed, weak leakage, varicose veins and corona phlebectatica. Doppler ultrasound findings show great saphenous vein (GSV) insufficiency with grade IV reflux, ankle brachial index immeasurable. Diffuse atherosclerotic changes are shown by MSCT angiography of the legs. Local treatment is performed with wound dressings, compression therapy with a short-stretch bandage of a very low dose of compression, daily walking is performed. One month later, endovenous ablation of GSV with cyanoacrylate glue and foam sclerotherapy of varicose veins are performed. The procedure does not require tumescent anesthesia or discontinuation of anticoagulant therapy, it passes without side effects. The wound heals in 5 weeks.

Another patient (74 years old) has had a recurrent wound on her left lower leg that has not healed for one year despite revascularization (left femoropopliteal bypass and transcutaneous popliteal artery

endarterectomy) and hyperbaric oxygen therapy. She suffers from arterial hypertension, chronic venous insufficiency, smoker, warfarin therapy. The wound is 7x5 cm in size, fibrin on the wound bed, weak leakage, oedema, lipodermatosclerosis and hemosiderosis of the lower leg. Doppler ultrasound finding show refluxing stump of the great saphenous vein (GSV) with the reflux in the remaining GSV to the maleol and close proximity of the GSV with the upper leg bypass that is functional, ankle brachial index 1.31. Three months after conservative treatment, smoking cessation, local therapy with wound dressings and dosed compression therapy with a short stretch bandages system under the knee, a laser ablation of the refluxing GSV stump was performed under local anesthesia and followed by cyanoacrylate glue ablation of the remaining GSV. Glue ablation is performed due to the close position of the GSV and the arterial bypass, and with the aim of preventing possible iatrogenic lesions of the bypass when applying tumescent anesthesia and scarring along the upper leg. Subsequent perulcerous foam sclerotherapy is performed. The wound heals 5 weeks after the endovenous procedure, without recurrence for one year. The patient wears a compression stocking, does not smoke, walks regularly.

Results: In patients, wounds of mixed etiologies healed completely 5 weeks after endovenous procedures and venous reflux correction. There were no side effects of the procedures, anticoagulant therapy was not interrupted, compression therapy was used for a short time and in low doses.

Conclusion: therapy of lower leg wound of mixed etiology requires diagnostic processing of arterial and venous circulation, planning and implementation of procedures aimed at reperfusion and correction of venous hypertension. With local treatment with wound dressings, dosed compression therapy exclusively with short stretch devices and the implementation of general measures, the wound of mixed etiology shows an acceleration of healing after endovenous procedures and heals in 5 weeks.

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10. PRIKAZI SLUČAJA

■ ***Clostridium difficile* infekcija u dementne pacijentice – prikaz slučaja**

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Ključne riječi: *C. difficile* infekcija (CDI), postantimikrobna dijareja, obiteljska medicina, demencija
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Uvod s ciljem: *Clostridium difficile* infekcija (CDI) smatra se najčešćim uzročnikom postantimikrobne dijareje koju može uzrokovati primjena gotovo svih antimikrobnih lijekova. U posljednjim dvama desetljećima incidencija CDI-ja značajno je porasla. CDI se tipično smatra nozokomialnom infekcijom, no prepoznaje se i kao uzročnik dijareje stечene u zajednici. Cilj rada bio je prikazati tijek bolesti i liječenja u uvjetima obiteljske medicine s naglaskom na individualni pristup bolesniku.

Prikaz slučaja: Pacijentica u dobi 83 godine bojuje od demencije, hipotireoze i disfagije. Lijeći se u vlastitom domu, a u njezinu je skrb trajno uključen multidisciplinarni tim. U kolovozu 2021. godine bila je bolnički liječena zbog aspiracijske pneumonije i sepse te se od tada zbog disfagije hrani preko nazogastrične sonde. U studenome 2021. u pacijentice se javljaju znakovi respiratornog infekta, za što je propisan koamoksiklav. Nakon prvotnog poboljšanja po terapiji došlo je do pogoršanja stanja uz ponovne znakove respiratornog infekta. Istodobno je razvila proljev, što se prvotno shvatilo kao nuspojava koamoksiklava. Vitalni parametri bili su uredni, a klinički status u skladu s komorbiditetom. Od odstupanja izdvaja se pogoršanje mentalnog statusa te auskultacijski nad plućima difuzni hropci koji se sele po nakašljavanju. Upalni parametri iznosili su: leukociti $23 \times 10^9 /L$, neutrofil 76 %, limfociti 13 %, CRP 250 mg/L. Obitelji je predloženo bolničko liječenje. Međutim, u skladu s njihovom željom nastavljeno je ambulantno liječenje te je propisan moksifloksacin. Po moksifloksacincu dolazi do poboljšanja uz pad upalnih parametara, ali uz perzistiranje proljevestih stolica. S obzirom na kliničku sliku i prisutnost više rizičnih čimbenika, posumnjalo se na CDI. Analizom stolice dokazana je prisutnost toksikogenog soja *C. difficile*. Propisana je terapija metronidazolom *per os* u ukupnom trajanju od 14 dana. Također je savjetovana upotreba probiotika, adekvatna hidracija i higijenske mjere pri njezi. Iz terapije je isključen inhibitor protonskih pumpa (IPP). Nakon terapije dolazi do poboljšanja općeg stanja i normalizacije stolice.

Rasprava: Rizični čimbenici koji pogoduju razvoju CDI-ja opisani u literaturi, prisutni u opisane pacijentice jesu upotreba antibiotika, starija životna dob, prisutnost komorbiditeta, korištenje IPP-a i nazogastične sonde. Dijagnoza se postavlja na temelju kliničke slike uz nalaz

toksikogenog soja *C. difficile* ili samih toksina u uzorku stolice. Klinička slika CDI-ja varira od asimptomatskog kliconoštva do potencijalno smrtonosnih stanja. U slučaju prikazane pacijentice određivanje stupnja težine bolesti bilo je otežano istodobno prisutnim respiratornim infektom koji je utjecao na laboratorijske nalaze i njezino opće stanje. Poboljšanjem općeg stanja i padom vrijednosti upalnih parametara po moksifloksacincu zaključeno je da se radilo o blažem obliku CDI-ja. U liječenju blažeg oblika prve *C. difficile* infekcije antibiotikom prvog izbora smatra se peroralni vankomicin. Alternativno se može dati metronidazol *per os*. U RH vankomicin je dostupan u bolničkim uvjetima. U dogovoru s obitelji odlučeno je primijeniti metronidazol na koji je došlo do regresije simptoma.

Zaključak: Pravovremeno prepoznavanje i dijagnosticiranje CDI-ja u ordinaciji obiteljske medicine bitno je radi donošenja adekvatne odluke o terapiji i eventualnoj hospitalizaciji. Pri tome je bitan individualni pristup i prepoznavanje rizičnih čimbenika koji mogu predisponirati bolesnike za ovu infekciju. Racionalna primjena antibiotika i higijenske mjere ostaju ključ prevencije CDI-ja.

Clostridium difficile infection in dementia patient - case report

Keywords: C.difficile infection (CDI), post-antibiotic diarrhea, primary health care, dementia

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Introduction. Clostridium difficile infection (CDI) is the most common cause of post-antibiotic diarrhea which can occur after the use of almost every antibiotic. In the last two decades, the incidence of CDI has grown significantly. CDI is typically considered a nosocomial infection, but it has also been recognised as a cause of community-acquired diarrhea. The aim of this paper was to show the course of the disease and its treatment in primary health care settings with emphasis on individual patient approach.

Case report An 83-years old patient suffers from dementia, dysphagia and hypothyroidism. She is treated in her own home, and a multidisciplinary team is permanently involved in her care. In August 2021 she was hospitalized for treatment of aspiration pneumonia and sepsis and has since then been fed through a nasogastric tube due to dysphagia. In November 2021, the patient showed signs of respiratory infection. Therefore, coamoxiclav was prescribed. After the initial improvement, her condition had worsened with recurrent signs of respiratory infection. At the same time she developed diarrhea, which was at first considered a side effect of coamoxiclav. Vital parameters were normal and her clinical condition was consistent with her comorbidity, with deviations in her mental state and auscultatory diffuse crackles disappearing after coughing. Inflammatory parameters were as follows: leukocytes $23 \times 10^9/L$, neutrophils 76%, lymphocytes 13%, CRP 250 mg/L. Hospital treatment was suggested to the family. According to their wishes, outpatient treatment was continued and moxifloxacin was prescribed. After initiating treatment with moxifloxacin, she got better and inflammatory parameters decreased, but diarrhea was still present. Considering her clinical condition and multiple risk factors, CDI was suspected.

Stool analysis proved the presence of a toxicogenic strain of *C.difficile*. Metronidazole per os was prescribed for a total of 14 days. Probiotics, adequate hydration and hygienic measures at her care were also advised. Proton pump inhibitor (PPI) was excluded from her therapy. After the treatment, her general condition improved and stool normalized.

Discussion Risk factors for CDI described in the literature, which were present in our patient, are use of antibiotics, older age, comorbidity, use of PPIs and nasogastric tube. CDI is diagnosed based on the clinical picture and finding of toxicogenic strain of *C.difficile* or toxins alone in the stool sample. Clinical picture of CDI varies from asymptomatic carriage to potentially fatal conditions. In case of this patient, it was difficult to determine the severity of her disease because of the respiratory infection that was present at the same time. With the improvement of her general condition and decreasing inflammatory parameters after initiating the moxifloxacin treatment, we concluded that our patient suffered from a mild form of CDI. The drug of choice for a mild form of *C.difficile* primoinfection is peroral vancomycin. Alternatively peroral metronidazol can be prescribed. In Croatia vancomycin is only available in hospital settings. In agreement with the family, it was decided to use metronidazol after which the symptoms regressed.

Conclusion It is important to recognize CDI in a timely manner in primary care settings in order to treat the infection properly and to consider hospital treatment. It is important to approach each patient individually and to recognize risk factors that may predispose patients to this infection. Antibiotic stewardship and hygienic measures remain the key to CDI prevention.

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■ Psihotični poremećaj – posljedica COVID-19 infekcije

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Ključne riječi: COVID-19, psihoza

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Uvod s ciljem: Pandemija COVID-19 infekcije negativno je utjecala na mentalno zdravlje populacije te se uočava porast anksioznih i depresivnih poremećaja kao i psihotičnih poremećaja povezanih s infekcijom COVID-19. Postoji nekoliko mogućih uzroka nastanka neuropsihijatrijskih posljedica u oboljelih od infekcije COVID-19, a to su teška upalna reakcija, neuroinvazivnost virusa i migracija perifernih imunoloških stanica. Cilj ovog rada bio je prikazati bolesnicu koja je tijekom COVID-19 infekcije razvila simptome psihotičnog poremećaja.

Prikaz slučaja: Bolesnica u dobi 59 godina zaprimljena je zbog febriliteta 39,5 °C i nedostatka zraka. Bolesnici je dva dana prije učinjen bris orofarinkska i nazofarinkska na SARS-CoV-2 te je nalaz pozitivan. Uzima redovitu propisanu terapiju za arterijsku hipertenziju. Pri prijemu bolesnica je pri svijesti, orientirana u sva tri pravca i vidno uzinemirena. Kardijalno je kompenzirana, tahipnoična, disajni šum je uredan bez popratnih zvučnih fenomena. Laboratorijskim nalazima i rendgenom prsnih organa utvrđena je obostrana intersticijska pneumonija. Bolesnica je zaprimljena na COVID odjel gdje je dobivala terapiju kortikosteroidima, oksigenoterapiju, gastroprotekiju i tromboprofilaksu. Desetog dana boravka javljaju se psihotični simptomi te se premješta na odjel za psihijatriju. Pri prijemu bolesnica je uzinemirena, agitirana, sumanuta i pokazuje znakove paranoidnosti. Tijekom boravka na odjelu za psihijatriju lijeći se promazinom, olanzapinom, diazepamom i flurazepamom. Psihičko stanje bolesnice se poboljšavalo te se otpušta kući nakon dvaju tjedana uz nastavak terapije i daljnje kontrole psihijatra.

Rasprava: Rezultati pojedinih istraživanja pokazuju kako su bolesnici oboljeli od COVID-19 infekcije imali veći rizik razvoja psihoze nego zdravi pojedinci iz opće populacije. Prilikom infekcije javljali su se delirij, halucinacije i anksioznost. Međutim, napominje se kako nije isključeno štetno djelovanje kortikosteroidea korištenih za liječenje infekcije koji također mogu uzrokovati razvoj psihijatrijskih poremećaja, najčešće 1–2 tjedna nakon početka terapije. Pokazalo se da trećina bolesnika koji su liječeni u jedinici intenzivnog liječenja razvija depresiju, anksioznost i poremećaje spavanja, što može dovesti do psihotičnih poremećaja.

Zaključak: U bolesnika koji su preboljeли COVID-19 infekciju pri pojavi psihotičnih simptoma bitno je razmišljati o psihotičnom poremećaju kao mogućoj posljedici infekcije. Dosadašnja istraživanja provođena su na ograničenom broju pacijenata te su potrebna daljnja istraživanja za objašnjenje etiologije nastanka psihotičnih simptoma u oboljelih od COVID-19 infekcije.

■ Psychotic disorder - a consequence of COVID-19 infection

Keywords: COVID-19, psychosis

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Introduction and aim: The COVID-19 pandemic negatively affected the mental health of the population and there is an increase in anxiety and depressive disorders [1] and an increase in psychotic disorders associated with COVID-19 infection. There are several possible causes of neuropsychiatric consequences in patients with COVID-19 infection, such as severe inflammatory response, neuroinvasiveness of the virus, and migration of peripheral immune cells [2-3].

Case report: An 59-year-old female patient was referred to the Emergency due to a fever of 39.5 and a lack of air. Two days earlier, a smear of the oropharynx and nasopharynx was performed on SARS-CoV 2 and it was positive. She takes regular prescribed therapy for arterial hypertension. The patient was conscious, oriented in all three directions and visibly upset. Cardially compensated, tachypnoic, respiratory noise was orderly without accompanying sound phenomena. Laboratory findings and chest X-rays revealed bilateral interstitial pneumonia. The patient was admitted to the COVID ward where she received corticosteroid therapy, oxygen therapy, gastroprotection and thromboprophylaxis. On the tenth day of the stay, psychotic symptoms appeared and she was transferred to the psychiatric ward. Upon admission, the patient was anxious, agitated, insane and showed signs of paranoia. During her stay in the psychiatric ward she was treated with promazine, olanzapine, diazepam and flurazepam. The patient's mental condition improved and she was discharged home after two weeks with continued therapy and further psychiatric monitoring.

Discussion: Retrospective cohort studies show that patients with COVID-19 infection had a

higher risk of developing psychosis than healthy individuals from the general population [2]. Delirium, hallucinations and anxiety occurred during the infection. However, it is noted that the harmful effects of corticosteroids used to treat infections that can also cause the development of psychiatric disorders, most often 1-2 after the start of therapy, are not excluded. In addition, one-third of patients treated in the intensive care unit develop depression, anxiety, and sleep disorders, which can lead to mental disorders [1-3].

Conclusion: In patients with COVID-19 infection, it is important to consider the possible consequences of psychotic disorders. Previous research has been conducted on a limited number of patients and further research is needed to explain the etiology of psychotic symptoms in COVID-19 infection [5].

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Duboka venska tromboza nakon COVID-19 infekcije

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Ključne riječi: COVID-19, duboka venska tromboza

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Uvod: Duboka venska tromboza (DVT) karakterizirana je stvaranjem jednog ili više krvnih ugrušaka, najčešće u dubokim venama nogu. Može biti asimptomatska, ali se češće prezentira s bolom, napetošću, oticanjem i promjenom boje zahvaćenog ekstremiteta. Bolest uzrokovana koronavirusom SARS-CoV-2 (COVID-19) povezuje se s koagulacijskim poremećajima, odnosno s porastom prokoagulantnih faktora, uključujući fibrinogen, i D-dimera, što se povezuje s povećanim mortalitetom. Cilj je rada prikazati pacijentu s dubokom venskom trombozom nakon preboljenja bolesti COVID-19, uz poseban osvrт na važnost praćenja bolesnika nakon preboljenja bolesti COVID-19.

Prikaz slučaja: Pacijentica u dobi 76 godina javila se u ordinaciju obiteljske medicine zbog oticanja i bolova u lijevoj potkoljenici koji traju unazad tri dana. Prije 15 dana preboljela je COVID-19, a prethodno nije bila cijepljena. Godine 1976. operirala je dobroćudni tumor na lijevom jajniku. Pacijentica ne uzima nikakvu kroničnu terapiju. Vitalni parametri bili su uredni, a fizikalnim pregledom utvrđen je pozitivan Homanov znak i voluminoznja lijeva potkoljenica. Pacijentica je upućena na daljnju obradu na Objedinjeni hitni bolnički prijem (OHPB). U laboratorijskim nalazima isticale su se povisene vrijednosti D-dimera (33,64 mg/L), CRP (92,1 mg/L) i LDH (304 U/L). EKG nalaz bio je uređan. Color Dopplerom vena potvrđena je parcialna tromboza proksimalnog dijela poplitealne vene te potpuna tromboza distalnog dijela poplitealne vene i proksimalnog dijela dubokih vena potkoljenice. RTG snimka srca i pluća pokazala je obostrana difuzna zasjenjenja plućnog parenhima koja odgovaraju upalnim promjenama. Pacijentica je bila hospitalizirana zbog liječenja duboke venske tromboze lijeve potkoljenice. U terapiju je uveden niskomolekularni heparin i inhibitor protonske pumpe, a drugi dan hospitalizacije u terapiju je uveden novi oralni antikoagulans (NOAK). Pacijentica je otpuštena kući uz preporuku pridržavanja terapije i nošenja elastične čarape te upućena na kontrolni Color Doppler za mjesec dana i zatim na kardiološku kontrolu.

Rasprrava: Pojava duboke venske tromboze češća je u osobama s rizičnim čimbenicima koji uključuju pušenje, pretlost, stariju dob, operacije, traumu, imobilizaciju, maligne bolesti, trudnoću,

koristenje određenih lijekova poput kontracepcijskih pilula, hormonske nadomjesne terapije, selektivnih modulatora estrogenских receptora, nesteroidnih protuupalnih lijekova... Prepostavlja se da povećan upalni odgovor, hipoksija, imobilizacija i diseminirana intravaskularna koagulacija uzrokovan bolesti COVID-19 sudjeluju u razvoju tromboza u ovih pacijenata.

Zaključak: Tromboembolijske manifestacije česte su tijekom bolesti COVID-19 i nakon nje. Stoga je važno na vrijeme posumnjati na duboku vensku trombozu u ovih bolesnika, posebno u onih koji imaju više rizičnih čimbenika za razvoj duboke venske tromboze.

■ Deep vein thrombosis after COVID-19 infection

Keywords: COVID-19, deep vein thrombosis

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Introduction and aim: Deep vein thrombosis (DVT) is characterized by the formation of one or more blood clots, most commonly in the lower limbs' veins. DVT can be asymptomatic, but often present with symptoms like leg pain, tenderness, swelling, or discoloration of the limb. Coronavirus disease 2019 (COVID-19)-associated coagulopathy is characterized by an increase of several procoagulant factor levels, including fibrinogen and D-dimer, that has been associated with higher mortality. In the following text, we will present a patient with deep vein thrombosis after COVID-19 with a highlighted emphasis on the importance of following these patients after COVID-19.

Case report: A 76-year-old female patient reports to the GP due to pain and swelling of the lower left limb in the last 3 days. She had COVID-19 15 days before. She was not vaccinated against COVID-19. In 1976 she had ovarian benign tumor surgery. She does not take therapy for chronic conditions. Vital signs are normal, and physical examination reveals a positive Homan's sign and swollen lower left leg. The patient is reported to Emergency Room. Laboratory findings are within the recommended range except for significantly elevated D-dimer (33.64 mg/L), CRP (92.1 mg/L), and LDH (304 U/L). ECG is normal. Partial DVT is confirmed by color Doppler ultrasound in the proximal popliteal vein and complete DVT in the distal popliteal vein and proximal parts of deep lower leg veins. X-ray of the lungs show bilaterally, diffuse pulmonary infiltrates associated with inflammation. She is hospitalized for further treatment of deep vein thrombosis of the left lower leg. Low-molecular-weight heparin (LMWH) and proton pump inhibitor (PPI) are prescribed. On the second day of her hospitalization, a direct oral anticoagulant (DOAC) is prescribed. The patient is referred with the recommendation of direct oral

anticoagulant, proton pump inhibitor, compression stockings wearing, Color Doppler Ultrasound in one month, and then a cardiology appointment.

Discussion: Deep vein thrombosis is more common in patients with risk factors including smoking, obesity, older age, surgery, trauma, immobilization, malignancy, pregnancy, some drugs use, e.g. oral contraceptives, hormone replacement therapy, *selective estrogen receptor modulators*, non-steroidal anti-inflammatory drugs... Increases in the inflammatory response, hypoxia, immobilization, and disseminated intravascular coagulation (DIC) caused by COVID-19 are suggested mechanisms of thrombus formation in these patients.

Conclusion: Thromboembolic events are common during and after the COVID-19. So, diagnosing DVT requires a high level of clinical suspicion, especially in those patients with more risk factors for the development of deep vein thrombosis.

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Prikaz slučaja pacijenta oboljelog od *Sinus pilonidalis*

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Uvod s ciljem: Pilonidalna bolest (pilonidalni sinus i pilonidalna cista) česta je bolest koja smanjuje radnu produktivnost u mladim zdravim ljudi. Manifestira se kao kronična upala u području sakrokokcigealne regije. Prema literaturi tom je bolesti zahvaćeno 2 % populacije u omjeru 2 : 1 u korist muškaraca. Pojava bolesti opisana je i u rascjepu između prstiju kod frizera i brijača, u pažuhu, oko pupka, intermamilarno, u genitalnom sustavu kod žena i muškaraca, na amputiranom bataljku. Primarni su rizični čimbenici pojačana dlakavost, pojačano znojenje, muški spol i pretlost. Cilj je rada prikazati kompleksnost zbrinjavanja ove bolesti u obiteljskoj medicini.

Prikaz slučaja: Pacijent, 23 godine, radi sjedilački posao. Godine 2021. liječen je zbog pilonidalnog sinusa glutealne regije stadija III s gnojnom bolnom oteklinom desnog gluteusa i otvorom u središnjoj liniji s bočnim proširenjem na jednu stranu. Apsces je spontano perforirao u siječnju 2021. i u terapiju je uveden amoksicilin/klavulan-ska kiselina tijekom sedam dana. Tijekom petodnevne hospitalizacije u ožujku 2021. učinjena je ekskizija sa sekundarnim zatvaranjem uz uredne laboratorijske upalne parametre. Na ranu su aplicirani oblozi – alginati za kavitete i silikonski oblozi, obični i sa srebrom, u trajanju mjesec dana nakon operacije. Recidiv nastaje u razdoblju šest mjeseci sa sukrvicom i sekretom, te je opet kirurški bolnički zbrinut u svibnju 2021. kada je učinjena incizija i drenaža. Godinu dana prisutni su bol i parestezeji u području rane. Pacijentu je zaostao ožiljak koji je osjetljiv i koji je sklon rascjepu, zbog čega je ponovno upućen kirurgu. Pacijent je zabrinut za posao i anksiozan, ima problema sa sjedenjem i s raznim aktivnostima. Privremena radna nesposobnost trajala je tri mjeseca prvi put i dva mjeseca drugi put.

Rasprava: Nakon perforacije apcsesa nastaje kronična manifestacija bolesti s opetovanim gnojenjem i sekrecijom uz pojavu fistuloznih kanala i otvora. Jedina poteškoća u diferencijalnoj dijagnozi bolesti može biti *hidradenitis suppurativa* ili perianalna fistula. Prema istraživanjima pilonidalnu bolest treba stupnjevati i liječiti ovisno o stupnju bolesti. Neki autori smatraju da primjena antibiotika ne utječe na bolje cijeljenje, na komplikacije i učestalost kasnijih pojave recidiva bolesti. U konzervativne metode ubrajamo brijanje i čupanje dlaka u sinusu i okolnoj koži,

sklerozaciju uz pomoć injekcije 80 %-tnog fenola u sinus, lasersku terapiju i fibrinsko ljepilo. Kirurške metode pokazuju dugoročno bolje rezultate od konzervativnih metoda u kroničnoj fazi. Kirurški pristup bolesti dijelimo na otvorene rane, zatvorene rane i ostale metode (laserska i endoskopska kirurgija, koja je budućnost). Sve tehnike imaju relativno visok postotak recidiva. Terapija zlatnog standarda i dalje nije definirana. Komplikacije su postoperativne infekcije rane i serom.

Zaključak: Kako *sinus pilonidalis* obično pogađa radno aktivnu mlađu mušku populaciju i rezultira stvaranjem kronične rane, uloga tima obiteljske medicine jest u edukaciji pacijenata i članova obitelji o što boljem postoperativnom zbrinjavanju bolesnika. Ovakvo iskustvo za paciente može biti neugodno te im je potrebno pružiti psihološku podršku i pomoći. Adekvatna njega rane sprječava postoperativne komplikacije i dovodi do bržeg oporavka i povratka na posao.

■ Case report of a patient with *sinus pilonidalis*

Keywords: Sinus pilonidalis, staging of chronic pilonidal disease, chronic wound treatment

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Introduction and aim: Pilonidal disease (pilonidal sinus and pilonidal cyst) is a frequent disease reducing the working ability of young healthy people. It is a chronic inflammatory process in the sacrococcygeal region. According to literature, 2% of the population is affected, two thirds being male. Occurrence of disease is also found in hairdressers interdigital space, armpits, navels, male and female genital tracts, amputation stumps. Primary risk factors are extreme hairiness, increased sweating, male gender, obesity.

The aim of this paper is to present the complexity of care for this the patient suffering from this disease manifesting as a chronic wound in family practice.

Case report: Male patient with a sedentary job, aged 23. was treated in 2021. for sinus pilonidalis of his right gluteal region stage III with purulent painful swelling, with one hole and spreading to one side. The abscess spontaneously perforated, in January 2021, and Amoxicilin-Klavulanate for 7 days was introduced. A surgical operation during five-day hospitalisation – excision with secondary healing was performed with normal leukocytes and CRP, with no signs of postoperative wound inflammation. Wound dressings colloid and silicone (the regular and the one with silver) were applied on the wound for a month after the first surgery. There was a recidive of disease with blood and purulent secretion after six months, with new hospitalisation and surgical excision in May 2021. Pain and paresthesia persisted for a year. Patient has a sensitive and prone to splitting scar, and was referred to the surgeon again. The young patient is anxious and worried about his job, and has trouble with sitting and different activities. He was on a sick leave for two months first time, and for three months second time.

Discussion: After abscess perforation, disease takes chronic form with repetitive purulent secretion and formation of fistules and holes. The only difficulty in differential diagnosis can be hydradenitis suppurativa or perianal fistula. Also, studies say that pilonidal disease should be staged and treated according to stages. Some authors mention that the use of antibiotics has no effect on better wound healing, perioperative complications, nor on the frequency of recidives. Conservative methods of the treatment are shaving the area, hair extirpation around and in the sinus, sclerosation with 80% fenol injection in the sinus, laser therapy and fibrine glue.

Surgical methods have better long-term results than conservative methods in the chronic phase.

Surgical methods can include open, closed and other wound techniques (laser and endoscopic technique being the techniques of the future). All techniques have a relatively large percentage of recidive. Golden standard therapy has not yet been defined. Postoperative complications are wound infections and seroma.

Conclusion: Since young, working male population is affected with sinus pylonidalis, ending with a chronic wound, the role of the general practitioner is education of patients and members of the family for the treatment of open chronic wounds. Community nurse help is often needed. Of course that can be embarrassing for patients, and psychological support of general practitioner's team is needed. Adequate wound care prevents postoperative complications and leads to faster recovery and return to work.

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■ Febrilitet kao jedini simptom

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Uvod i cilj: Vrućicu i opći algički sindrom ubrajam u opće simptome infektivnih bolesti. U većini tih bolesti javljaju se i specifični simptomi kao znak lokalizacije infekcije u jednom ili više organskih sustava. Cilj rada bio je prikazati tijek bolesti i liječenja pacijentice s vrućicom i općim algičkim sindromom bez prisutnih specifičnih simptoma.

Prikaz slučaja Pedesetogodišnja pacijentica od 2020. godine boluje od dijabetesa tipa 2, u terapiji metformin. Cijepljena dva puta protiv COVID-19 infekcije. U siječnju 2022. pacijentica telefonski javlja kako je unazad dva dana febrilna s maksimumom do 39 °C te ima boleve u cijelom tijelu uz negiranje postojanja drugih simptoma. Pacijentici je savjetovano da napravi brzi antigenski test na COVID-19 (BAT) te je propisan ibuprofen od 600 mg. Pacijentica se ponovno javila peti dan od početka simptoma; BAT ponovno negativan, a temperatura do 40 °C. Upućena je u laboratorij uz dogovoren pregled u ordinaciji. U laboratorijskom nalazu vidljivo je povećanje leukocita $16,3 \times 10^9/L$ uz neutrofiliju i C-reaktivnog proteina 221 mg/L. Prilikom dolaska u ordinaciju pacijentica je dobrog općeg stanja. U učinjenom kompletном kliničkom statusu nije pronađeno patoloških odstupanja uz saturaciju kisika (SaO_2) izmjerenu pulsnim oksimetrom 98 %. S obzirom na kliničku sliku i laboratorijske nalaze propisana je terapija cefuroksimom 500 mg, 2 x 1 tableta tijekom sedam dana. Savjetovan joj je odlazak na hitan prijam u slučaju pogoršanja simptoma. Pacijentica se drugi dan nakon pregleda u ordinaciji javlja na infektološki hitni prijam zbog novonastalog kašla i boli pod desnim rebrinem lukom. Pri prijemu klinički status je i dalje bio bez osobitosti, osim respiratorne frekvencije koja je iznosila 25/min uz SaO_2 89 %. Učinjeni RTG prsnog koša pokazao je obostranu pneumoniju. Pacijentica je bila liječena suplementacijom kisika u niskim postotcima te empirijski ceftriaksonom iv. Po poboljšanju općeg stanja, RTG prikaza i laboratorijskih parametara pacijentica je otpuštena iz bolnice nakon osam dana hospitalizacije.

Rasprava: Dijagnoza pneumonije obično nije teška kada su jasno izraženi karakteristični simptomi i znakovi. Osnovni simptomi su kašalj i vrućica, uz koje se pojavljuju i dispneja/tahipneja, bol u prsištu te patološki auskultacijski nalaz

pluća. Kombinacija simptoma može biti različita, a oni mogu biti različitog intenziteta ili pak posve izostati. Izostanak kašla na početku bolesti najčešće viđamo u atipičnih pneumonija. Vrlo visoka temperatura, leukocitoza s neutrofilijom i CRP iznad 200 mg/L govore u prilog teže bakterijske infekcije što je indikacija za empirijsko uvođenje antibiotika širokog spektra u terapiju.

Zaključak: Teškoće u dijagnostici pneumonije nastaju kada se ona klinički očituje samo općim simptomima, što se nerijetko događa u početku bolesti, te uz izostanak patoloških zvučnih fenomena prilikom auskultacije pluća. Pravovremeno prepoznavanje težih infekcija u uvjetima PZZ-a, čak i kada je primarni izvor infekcije nepoznat, te empirijska primjena antibiotika uz upućivanje na pregled infektologa u slučaju da ne dođe do odgovora na terapiju, ključni su koraci u pristupu pacijentu s nejasnim febrilnim stanjem i povišenim upalnim parametrima.

Fever as the only symptom

Keywords: fever, pneumonia, primary health care (PHC)

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Introduction. Fever and general algic syndrome are considered to be the general symptoms of infectious diseases. In most of these diseases specific symptoms also occur as a sign of the infection localization in one or more organ systems. The aim of this paper was to show the course of the disease and the treatment of a patient with fever and general algic syndrome without the presence of specific symptoms.

Case report A 50-year-old patient has been suffering from type 2 diabetes since 2020 and is on metformin therapy. Vaccinated 2x against COVID-19 infection. In January 2022, the patient reported by phone call that she had been febrile for 2 days with a maximum of 39°C. She also reported generalized myalgia while denying the existence of other symptoms. The patient was advised to perform a rapid antigen test for COVID-19 and was prescribed ibuprofen 600 mg. The patient called again on the fifth day from the onset of symptoms; BAT again negative, and fever up to 40°C. She was sent to the laboratory and told to come in the office afterwards. Laboratory findings revealed an increase in leukocytes of $16.3 \times 10^9/L$ with neutrophilia and C-reactive protein 221 mg/L. Upon arrival at the office, the patient was in good general condition. No pathological deviations, with oxygen saturation (SaO_2) 98% measured by a pulse oximeter, were found in the complete physical exam. Based on the symptoms and laboratory reports, cefuroxime 500 mg 2x1 pill was prescribed for 7 days. She was advised to go to the emergency room in case of symptoms worsening. On the second day after the examination in the office, the patient was admitted at the infectology emergency care due to a new-onset of cough and pain under the right costal arch. At admission, the physical exam was still unremarkable except for her respiratory rate of 25/min with SaO_2 89%. Chest X-ray suggested bilateral pneumonia. The patient was treated with oxygen supplementation at low percentage, and empirically ceftriaxone iv. When the general condition of the patient, chest

X-ray and laboratory parameters were improved, she was released after a total of 8 days of hospitalization.

Discussion The pneumonia diagnosis is usually not challenging, when the leading symptoms and signs are present. Common symptoms are cough and fever, in combination with dyspnea/tachypnea, chest pain, and pathological auscultatory findings of the lungs. The combination of symptoms can be different, and they may differ in the intensity and presence. The absence of cough at the beginning of the disease is most often seen in atypical pneumonias. Very high fever, leukocytosis with neutrophilia and CRP above 200 mg/L speak in favour of more severe bacterial infection, which is an indication for the empirical introduction of broad-spectrum antibiotics in the therapy.

Conclusion Difficulties in the diagnosis of pneumonia occur when it is manifested only by general symptoms, which often occurs at the beginning of the disease, and in the absence of pathological sound phenomena during auscultation of the lungs. Prompt recognition of severe infections in PHC, even when the primary source of infection is unknown, and empirical use of antibiotics with referral to an infectologist in case of non-response to therapy are key steps in approaching a patient with unclear febrile condition and elevated inflammatory parameters.

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■ Zbrinjavanje bolesnika oboljelog od demencije

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Uvod: Demencija predstavlja ozbiljan javnozdravstveni problem koji s globalnim starenjem stanovništva značajno utječe na zdravstvene sustave diljem svijeta, a njezin je najčešći oblik Alzheimerova bolest (do 70%). Užurbani način života dovodi do promjena u funkcioniranju obitelji, kućanstva su sve manja, gubi se međugeneracijska pomoć u svakodnevnom životu što dodatno otežava skrb o starijim i bolesnim članovima obitelji. Cilj ovog rada bio je prikazati kako je moguće osigurati kvalitetnu skrb za osobe oboljele od demencije unutar obitelji i ulogu liječnika obiteljske medicine pri tome.

Prikaz slučaja: Osamdesetrogodišnja pacijentica dolazi u pratnji kćeri koja navodi da se majka povremeno žali na probadanje/žiganje u glavi. Pacijentica samostalno ne verbalizira tegobe već nesuvlivo ponavlja pojedine riječi pri čemu pokazuje na čeoni režanj glave. Heteroanamnestički se od kćeri doznaže da unazad nekoliko mjeseci majka sve manje uspijeva verbalizirati svoje tegobe ili želje, čini joj se da demencija napreduje. Boluje od arterijske hipertenzije, stenoze mitralne valvule i unazad pet godina od demencije. U redovnoj terapiji uzima bisoprolol 2,5 mg, furosemid 40 mg, kalijev klorid 500 mg, atorvastatin 20 mg i acetilsalicilnu kiselinu 100 mg te donepezil 10 mg neredovito s prekidima od nekoliko mjeseci. Laboratorijski nalazi bili su unutar preporučenih vrijednosti. Fizikalnim pregledom nije nađeno patoloških promjena, osim tihog sistoličkog šuma nad prekordijem. Neurološki status bio je granično uredan. Pacijentica je bila samostalno pokretna, nesigurna hoda uz blago zanošenje. Znala je svoje osnovne podatke (ime, prezime i datum rođenja), dezorientirana u vremenu i prostoru, logoreična. Mini mental test (engl. *Mini-mental State Examination*, MMSE) zbog loše suradljivosti nije se mogao učiniti. Umjesto toga napravljen je Mini-cog test s rezultatom 0/5. Kćeri je objašnjeno da rezultat testa upućuje na demenciju teškog stupnja koja zahtijeva konzultaciju neurologa i promjenu terapije uz naglasak na redovito uzimanje propisane terapije. S obzirom na prisutnu COVID-19 pandemiju liječnik obiteljske medicine konzultirao se sa specijalistom neurologom preko A5 uputnice. Kći je naglasila da će se i dalje sa svojom sestrom brinuti za majku kod kuće. U zbrinjavanje je uključena kućna njega, fizikalna terapija u kući, redoviti

mjesečni posjeti patronažne sestre i liječnika obiteljske medicine.

Rasprrava: Demencija je kronični, globalni, obično ireverzibilni gubitak kognicije progresivnog tijeka. Ponajprije zahvaća starije (oko 40 % > 85 godina). Dijagnostika testovima kratkoročnog pamćenja jednostavna je i pristupačna svim liječnicima obiteljske medicine i dovoljna je za postavljanje radne dijagnoze. Kvalitetno liječenje uz farmakoterapiju (inhibitori kolinesteraze, antagonist NDMA-receptora) podrazumijeva mjere sigurnosti bolesnika i prikladnu okolinu koju je potrebno osigurati uz pomoć njegovatelja, a uključujući prilagodbu prostora u kojem pacijent boravi (ukloniti pragove na vratima, isključiti štednjak iz struje/plina, zaključavati ulazna vrata...). Obitelj i bližu okolinu pacijenta potrebno je educirati o načinu komunikacije s pacijentom i o tome kako postupati u određenim situacijama. Potporu pružaju i razne udruge.

Zaključak: Demencija je postala globalni javnozdravstveni problem koji treba rješavati na svim razinama zdravstvene skrbi u cilju što raniјeg prepoznavanja bolesti. Ranom dijagnostikom postižemo bolju kontrolu i sporiji tijek bolesti, a bolesniku osiguravamo dostojanstveniji život.

Care of patients with dementia

Keywords: dementia, family physician, family

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Introduction: Dementia is a serious public health problem affecting health systems around the world as the population ages. The most common form of dementia is Alzheimer's disease (up to 70%). A hectic lifestyle leads to changes in the functioning of the family, households are shrinking, intergenerational assistance is being lost in everyday life, which further complicates the care of elderly and sick family members. The aim of this paper is to show how it is possible to provide quality care for people with dementia within the family and the role of family physicians in this.

Case report: An eighty-year-old patient is accompanied by her daughter who states that her mother occasionally complains of a stabbing/burning sensation in the head. The patient does not verbalize her difficulties on her own, but incoherently repeats some words, pointing to the frontal lobe of her head. Heteroanamnestically, her daughter claims that in the last few months her mother has been less and less successful in verbalizing her ailments or desires, it seems to her that dementia is progressing. She has been suffering from arterial hypertension, mitral valve stenosis and, for the past five years, from dementia. She regularly takes bisoprolol 2.5 mg, furosemide 40 mg SDD, potassium chloride 500 mg SDD, atorvastatin 20 mg, acetylsalicylic acid 100 mg, while she takes donepezil 10 mg irregularly at intervals of several months. Laboratory findings are within the recommended values. Physical examination reveals no pathological changes, except for a quiet systolic murmur over the precordium. The neurological status is normal. The patient is independently mobile, walking unsteadily and slightly swaying. She knows her basic data (name, surname and date of birth), disoriented in time and space, logorrheic. A mini mental test (MMSE) can not be conducted due to poor collaboration. Instead, a mini-cog test is applied with a score of 0/5. The daughter is explained that the test result indicates severe dementia that requires a neurologist's examination and a change in

therapy. She agrees to take her mother to see a neurologist as soon as possible and to give her donepezil 10 mg regularly until then, but she also emphasizes that she and her sister will continue to take care of their mother at home, which includes home care, physical therapy at home, regular monthly visits to the community nurse and family physician.

Discussion: Dementia is a chronic, global, usually irreversible loss of cognition with a progressive course. It primarily affects the elderly (about 40% > 85 years). Diagnostic Short-term memory tests are simple and accessible to all family physicians and sufficient to make a working diagnosis. Quality treatment with pharmacotherapy (cholinesterase inhibitors, NDMA receptor antagonist) includes patient safety measures and a suitable environment that needs to be provided with the help of a caregiver and includes adjustment of the patient's living space (remove door thresholds, plug out the stove, lock the entrance door...). The family and the patient's immediate environment should be educated about how to communicate with the patient and how to act in certain situations. Support is also provided by various associations.

Conclusion: Dementia has become a global public health problem that needs to be addressed at all levels of health care in order to identify the disease as early as possible. Early diagnosis achieves better control and a slower course of the disease, and ensures a more dignified life for the patient.

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Poteškoće u prepoznavanju i praćenju pacijenta s cistama gušterače u ordinaciji obiteljske medicine

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Ključne riječi: ciste gušterače, EUZ, starija dob, komorbiditet

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Uvod s ciljem: Cistične promjene gušterače predstavljaju velik dijagnostički i terapijski izazov jer njihova pojavnost varira od benignoga do malignog oblika, što stvara dodatne poteškoće u praćenju takvih pacijenata. Nastaju kao rezultat kongenitalnih, upalnih, benignih ili malignih tumorskih procesa, a dostupnost i široka primjena dijagnostičkih slikovnih metoda značajno je povećala učestalost detekcije cista gušterače. Oko 10 % starijih od 70 godina ima dijagnosticiranu cističnu leziju gušterače. Kad se takve promjene otkriju, potrebno je redovito praćenje kako bi se pravovremeno spriječila progresija u maligni oblik te umanjila potreba za cjeloživotnim liječenjem. Cilj ovog prikaza slučaja jest uputiti na poteškoće s kojima se liječnik obiteljske medicine nosi u praćenju ovakvih pacijenata, osobito pacijenata starije životne dobi s pridruženim komorbiditetima, kao i na potrebu za multidisciplinarnim pristupom u praćenju i liječenju.

Prikaz slučaja: Muškarac u dobi od 75 godina, umirovljenik, oženjen, živi sa suprugom, ne puši, alkohol uzima prigodno. Boluje od arterijske hipertenzije unazad deset godina, te u kroničnoj terapiji uzima dvojnu antihipertenzivnu terapiju (Perindopril/Indapamid u dozi 8/2,5 mg 1,0,0, Bisoprolol 2,5 mg 1,0,0). Javlja se u ordinaciju obiteljske medicine zbog bola pod desnim rebenim lukom koji traju unazad nekoliko dana. Nakon detaljne anamneze i fizikalnog pregleda učini se ambulantno ultrazvuk (UZV) abdomena kojim se verificira hipoehogena lezija u glavi gušterače veličine oko 11 mm uz preostali uređan nalaz ultrazvuka. Učini se i laboratorijska obrada kojom se verificira patološki lipidogram uz uredne vrijednosti krvne slike i hepatograma. Zbog verificirane hipoehogene lezije pacijent se uputi na daljnju dijagnostičku obradu po gastroenterologu. Dalnjom obradom po gastroenterologu proširi se slikovna dijagnostička obrada na kompjutoriziranu tomografiju (CT) abdomena s naglaskom na gušteraču, te se verificira cistična lezija glave gušterače zbog koje se pacijent uputi na endoskopski ultrazvuk (EUZ) s ciljem daljnje vizualizacije i aspiracije cistične promjene. Učine se i tumorski markeri CEA i CA 19,9, koji su uredni. Citološkom punkcijom ne nađe se

znakova malignosti te se preporuči nastavak praćenja i redovite kontrole gastroenterologa, a EUZ svakih godinu dana.

Rasprrava: S obzirom na to da se ciste gušterače često slučajno otkriju u sklopu obrade različitih bolesti probavnog sustava, njihova pojavnost ne smije se ignorirati. Iako je klinička slika često atipična, jedan od najvećih izazova za liječnike obiteljske medicine predstavlja praćenje takvih pacijenata i rana detekcija simptoma koji bi upućivali na eventualni maligni potencijal. Kako bi se osiguralo najprikladnije liječenje, vrlo je važno na vrijeme ustanoviti postojanje cistične lezije. Također je važno poznavanje rizičnih čimbenika za njezin nastanak te u liječenje uključiti multidisciplinarni tim stručnjaka. Liječnik obiteljske medicine ima važnu ulogu u edukaciji pacijenta o prirodi bolesti te u redovitom praćenju i prijavljanju kojeg od simptoma pogoršanja osnovne bolesti (progresivni gubitak na težini, bolovi u kostima, kronični umor).

Zaključak: Unatoč dostupnosti brojnih slikovnih metoda najosjetljivija dijagnostička metoda i zlatni standard u postavljanju dijagnoze malignih i benignih lezija gušterače jest EUZ. Iako se malo govori o cistama gušterače, liječnici obiteljske medicine mogu si značajno pomoći u ambulantnom radu korištenjem transabdominalnog UZV-a radi praćenja pacijenta uz dotadašnje laboratorijske pretrage. Svakako treba istaknuti važnu ulogu gastroenterologa koji procjenjuje dodatnu obradu ako se primijete simptomi pogoršanja.

Difficulties in identifying and monitoring a patient with pancreatic cysts in a family medicine practice

Keywords: Pancreatic cysts, EUS, Elderly, Comorbidity

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Background and Aim: Cystic changes of the pancreas present a great diagnostic and therapeutic challenge because their incidence varies from benign to malignant, which creates additional difficulties in monitoring such patients. They occur as a result of congenital, inflammatory, benign or malignant tumor processes, and the availability and wide application of diagnostic imaging methods have significantly increased the frequency of detection of pancreatic cysts. About 10% of those over 70 have been diagnosed with a cystic pancreatic lesion. Once detected, regular monitoring is required to prevent timely progression to malignancy and reduce the need for lifelong treatment. The aim of this case report is to point out the difficulties faced by the family physician in monitoring such patients, especially elderly patients with associated comorbidities, as well as the need for a multidisciplinary approach in monitoring and treatment.

Case presentation: A 75-year-old man, retired, married, lives with his wife, non smoker, takes alcohol drinks on occasion. He has been treated for arterial hypertension for ten years, and is regularly using double antihypertensive therapy (Perindopril / Indapamide in a dose of 8/2.5 mg 1.0.0, Bisoprolol 2.5 mg 1.0.0). After a detailed history and physical examination, an outpatient ultrasound of the abdomen is performed to verify a hypoechoic lesion in the head of the pancreas of about 11 mm with the remaining normal ultrasound findings, pathological lipidogram with normal values of the blood count and hepatogram. Due to the verified hypoechogenic lesion, the patient is referred for further diagnostic processing by a gastroenterologist. Further processing by the gastroenterologist expands the imaging diagnostic processing of a CT of the abdomen with emphasis on the pancreas, and verifies cystic lesion of the head. The patient is referred to the

EUS with the aim of further visualization and aspiration of the cystic change. Tumor markers CEA and CA 19.9 are neat. Cytological puncture does not show signs of malignancy and it is recommended to continue monitoring as well as to regular check-ups by the gastroenterologists and EUS every year.

Discussion: Since pancreatic cysts are often accidentally discovered as part of the treatment of various diseases of the digestive system, their occurrence should not be ignored. Although the clinical picture is often atypical, one of the biggest challenges for family physicians is to monitor such patients as well as to early detect symptoms that would indicate possible malignant potential. In order to ensure the most appropriate treatment, it is very important to identify a cystic lesion on time, as well as to know the risk factors for its occurrence and to involve a multidisciplinary team of experts in the treatment. The family physician has an important role in educating the patient about the nature of the disease and regularly monitoring and reporting any of the symptoms of worsening underlying disease (progressive weight loss, bone pain, chronic fatigue).

Conclusion: Despite the availability of numerous imaging methods, the most sensitive diagnostic method and gold standard in diagnosing malignant and benign pancreatic lesions is endoscopic ultrasound (EUS). Although there is little talk about pancreatic cysts, family physicians can significantly help themselves in outpatient work by using transabdominal ultrasound to monitor the patient with previously conducted laboratory tests. The important role of the gastroenterologist, who evaluates additional treatment if symptoms of deterioration are observed, should certainly be emphasized.

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Prikaz slučaja bolesnice liječene PCSK9 inhibitorom

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Ključne riječi: hiperkolesterolemija, moždani udar, PCSK9 inhibitori

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Uvod s ciljem: U bolesnika s akutnim koronarnim sindromom postoji veći rizik od nastanka ishemiskog moždanog udara koji se može smanjiti snižavanjem vrijednosti aterogenih lipoproteina. Proprotein konvertaza subtilizin/keksin tipa 9 (PCSK9) enzim je koji se predominantno stvara u jetri te, vežući se za receptore lipoproteina niske gustoće (LDLR), dovodi do njihova uvlačenja u hepatocite i povećanja koncentracije LDL-a u plazmi. PCSK9 inhibitori (evolokumab, alirokumab) jesu humana monoklonalska protutijela na PCSK9 enzim koja pospješuju uklanjanje cirkulirajućeg LDL-kolesterolja. Cilj je rada upozoriti na važnost postizanja preporučenih ciljnih vrijednosti lipidnog statusa u bolesnika s vrlo visokim kardiovaskularnim rizikom.

Prikaz slučaja: Bolesnica rođena 1948. godine, nepušač, normalne tjelesne mase, dolazi u ambulantu zbog praćenja rizičnih čimbenika radi tercijarne prevencije kardiovaskularnih događaja. U anamnezi 2012. godine imala vrtoglavicu, a u desetogodišnjem razdoblju čak je tri puta opservirana zbog tranzitorne ishemische atake da bi 2018. preboljela infarkt miokarda bez ST-elevacije (NSTEMI). Prati se zbog dislipidemije od 2000., šećerne bolesti od 2011., obostrane stenoze unutarnje karotidne arterije (lijevo 60 – 70 %, desno 30 – 40 %), totalnog AV bloka (2020. ugrađen elektrostimulator) te stanja nakon ugradnje totalne endoproteze desnog kuka. Do 2018. (NSTEMI) bolesnica je imala vrlo nepovoljan lipidni profil (ukupni kolesterol 7,5 mmol/L, LDL 5,6 mmol/L, HDL 0,8 mmol/L, trigliceridi 3,4 mmol/L) koji je nakon uvođenja atorvastatina od 80 mg i ezetimiba od 10 mg ostao previšok za bolesnika s vrlo visokim kardiovaskularnim rizikom (LDL-kolesterol 3,6 mmol/L). Od ostale kronične terapije uzima pantoprazol 40 mg ujutro, furosemid 40 mg ujutro, kalij jednu tabletu dnevno, moksonidin 0,4 mg navečer, kombinaciju amlodipina, valsartana i hidroklorotiazida 10/160/12,5 mg ujutro, acetilsalicilnu kiselinu 100 mg u podne, inzuline prema shemi te urapidil 30 mg ujutro i navečer.

Nadalje, 2021. učinjena je kontrolna koronarografija koja pokazuje rubne kalcifikate u glavnoj silaznoj koronarnoj arteriji (LAD) te punktiformne kalcificirane plakove u ostalim

koronarnim arterijama bez značajnijih stenoza. Ekokardiografski je verificirana teška aortna stenoza uz blagu aortalnu regurgitaciju. Ejekcijska frakcija nešto niža (50 %), a veličine srčanih komora bile su uredne. Elektrokardiogram bez patologije. Pogoršanje stenoze karotidnih arterija (desne 50 %, lijeve 75 – 80 %). Po uvođenju alirokumaba u dozi 75 mg dva puta mjesečno od kardiologa, LDL-kolesterol pada na 0,6 mmol/L (pad od 82,6 % od početne vrijednosti).

Rasprava: Smjernice Evropskoga kardiološkog društva (ESC) iz 2019. godine preporučuju smanjenje LDL-kolesterolja za više od 50 % od početnih vrijednosti u svih bolesnika, a u onih s vrlo visokim kardiovaskularnim rizikom LDL-kolesterol manji od 1,4 mmol/L. Ako ove vrijednosti nisu postignute maksimalnom podnošljivom dozom statina, preporučena je kombinacija s ezetimibom. Ako niti nakon četiri tjedana od uvođenja terapije ove vrijednosti nisu postignute, treba razmotriti uvođenje PCSK9 inhibitora. Očekivano sniženje LDL-kolesterolja uz najvišu podnošljivu dozu statina, ezetimiba i PCSK9 inhibitora iznosi oko 85 % početne vrijednosti. Terapija PCSK9 inhibitorom primjenjuje se svaka dva tjedna suputano.

Zaključak: U svih bolesnika s visokim i vrlo visokim kardiovaskularnim rizikom koji ne postižu ciljne vrijednosti LDL-kolesterolja s maksimalnom dozom statina i ezetimiba treba razmotriti uvođenje PCSK9 inhibitora koji značajno smanjuju rizik od ishemiskog moždanog udara neovisno o početnoj vrijednosti LDL-kolesterolja.

■ Case report on treatment with a PCSK9 inhibitor

Keywords: hypercholesterolemia, stroke, PCSK9 inhibitors

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Introduction: In patients with acute coronary syndrome there is a greater risk of ischemic stroke that can be lowered by lowering the levels of atherogenic lipids. Proprotein convertase subtilisin/kexin type 9 (PCSK9) is an enzyme that is predominantly formed in the liver and by binding to low-density lipoproteins receptors (LDLR) it causes their internalization into the liver and the rise of LDL plasma levels. PCSK9 inhibitors (evolocumab, alirocumab) are human monoclonal antibodies that neutralize the PCSK9 enzyme and enhance the removal of circulating LDL cholesterol. The aim of this case report is to emphasize the importance of rigorous regulation of the lipid profile in patients with very high cardiovascular risk.

Case report: A female patient born in 1984 non-smoker, normal body weight, comes into the clinic for risk factor monitoring with the purpose of tertiary prevention of cardiovascular incidents. Her medical history includes: dizziness in 2012 being observed three times for transitory ischemic attacks in a ten-year period and suffering from a Non-ST-Elevation Myocardial Infarction (NSTEMI) in 2018. She has been monitored because of dyslipidemia since 2000 diabetes since 2011 bilateral internal carotid artery stenosis (left 60-70%, right 30-40%), total AV block (2020) an electrostimulation device was implanted) and post total right hip endoprosthesis replacement status. Up until 2018 (NSTEMI) she had a very unfavorable lipid profile (total cholesterol 7.5mmol/L, LDL 5.6mmol/L, HDL 0.8mmol/L, triglycerides 3.4mmol/L) that even after introducing 80mg of atorvastatin and 10mg of ezetimibe remained too high for a patient with a very high cardiovascular risk (LDL cholesterol 3.6mmol/L). She also takes pantoprazole 40mg in the morning, furosemide 40mg in the morning, one pill of potassium daily, moxonidine 0.4mg in the evening, a combination of amlodipine, valsartan and hydrochlorothiazide 10/160/12.5mg in the morning, acetylsalicylic acid

100mg at noon, insulins according to scheme and urapidil 30mg in the morning and evening.

Furthermore, in 2021, a control coronarography was done that showed marginal calcifications in the main descending coronary artery (LAD) and punctiform calcified plaques in the rest of coronary arteries without significant stenoses. A severe aortic stenosis with mild regurgitation was verified with an echocardiogram. The ejection fraction was lower (50%), but the heart chambers were normal. The electrocardiogram was without pathology. The carotid arteries stenoses worsened (right 50%, left 75-80%). With the introduction of 75mg of alirocumab two times a month by a cardiologists, LDL cholesterol decreased to 0.6mmol/L (fall of 82.6% of the initial value).

Discussion: The European Society of Cardiology (ESC) guidelines from 2019. recommend a decrease in LDL cholesterol of more than 50% of the initial value in all patients and levels of LDL cholesterol lower than 1.4mmol/L in patients with very high cardiovascular risk. If these values are not reached with the maximum tolerable dose of statins, introducing ezetimibe is recommended. If even after 4 weeks of ezetimibe use, the target values are not reached, introducing a PCSK9 inhibitor should be considered. The expected LDL cholesterol decrease with using a maximum tolerable dose of statins, ezetimibe and PCSK9 inhibitor is 85% of the initial value. PCSK9 inhibitoris are given every two weeks subcutaneously.

Conclusion: In all patients with a high and a very high cardiovascular risk who do not reach the target values of LDL cholesterol with a maximum tolerable dose of statins and ezetimibe, introducing a PCSK9 inhibitor, that significantly lowers the risk of ischemic stroke regardless of the starting value of LDL cholesterol, should be considered.

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■ Konična urtikarija kao pokazatelj kolangiomu – prikaz slučaja iz ordinacije obiteljske medicine

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Ključne riječi: konična urtikarija, kolangiomu, komorbiditet, smjernice

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Uvod s ciljem: Konična urtikarija predstavlja velik izazov u liječenju u ordinacijama obiteljske medicine s obzirom na to da se u 75 % slučajeva uglavnom radi o idiopatskim urtikarijama. Preostali dio odnosi se na alergijske i infektivne uzročnike, endokrinopatije, autoimune bolesti, ali rijetko i na maligne bolesti. Karakterizira ju osip u obliku eritematoznih plakova praćen svrbežom koji traje u razdoblju od šest tjedana i više. Prema smjernicama Europskog društva za alergologiju i kliničku imunologiju i srodnih društava iz područja alergologije (EAACI/GA2LEN/EDF/WAO), u svakog pacijenta s koničnom urtikrijom potrebno je isključiti diferencijalne dijagnoze, procijeniti aktivnost bolesti te identificirati temeljne uzroke. Kolangiokarcinom je rijedak maligni tumor s incidencijom od samo 2 %. Cilj ovog prikaza slučaja jest upozoriti na kompleksno razmišljanje o koničnoj urtikariji, koja u podlozi može imati ozbiljnu i tešku malignu bolest, osobito u pacijenata s pridruženim komorbiditetima, što dodatno otežava pristup u ranoj detekciji i racionalnom odlučivanju.

Prikaz slučaja: Žena u dobi od 72 godine, umirovljenica, udana, živi sa suprugom i dva sina, ne puši, ne konzumira alkohol. Unazad deset godina dijabetičar i hipertoničar, a unazad sedam godina lijeći se zbog osteoartritisa šaka. U koničnoj terapiji uzima kombinaciju perindopril/amlodipin 5/5 mg, metformin 1000 mg 1,0,1 i naprosen-natrij 550 mg 1,0,1. Adipozne grade (indeks tjelesne mase 31 kg/m²). Javlja se u ambulantu obiteljske medicine zbog osipa po tipu urtikarije, zbog čega je nakon detaljno uzete anamneze i fizikalnog pregleda zbrinuta ambulantno parenteralno kortikosteroidom i antihistaminikom uz nastavak terapije antihistaminikom u kućnim uvjetima te kontrolni pregled nakon tri do pet dana. S obzirom na minimalnu regresiju kožnih promjena na sljedećim kontrolama (7. i 14. dana) upućena je dermatologu koji tegobe shvati kao scabies te ordinira terapiju. S obzirom na to da su tegobe i dalje trajale uz intenzivan svrbež i nakon četiri tjedana, ordinira se prošireni laboratorijski postav i postavlja sumnja na paraneoplastički sindrom. Po dospjeli nalaza, mirnih upalnih parametara, patološkog hepatograma, neregulirane glikemije, uz porast tumorskih markera (CEA 980,4 µg/L, Ca-19,9

550 kIU/L, LDH 450 U/L). Pacijentica se uputi na proširenu dijagnostičku obradu, prezentira gastroenterologu i onkologu, koji preporuče transabdominalni ultrazvuk abdomena, potom magnetsku rezonanciju jetre, te se postavi dijagnoza kolangiokarcinoma. Pacijentica se dalje uputi na multidisciplinarni tim i liječenje uz podršku obiteljskog liječnika.

Rasprrava: Konična urtikarija velik je izazov obiteljskom liječniku u ambulantnom radu jer zahtjeva kompleksno razmišljanje, osobito u slučaju pacijenata starije dobi s pridruženim komorbiditetima. Liječnik obiteljske medicine ima važnu ulogu u racionalnom odlučivanju i pravilnom usmjeravanju na dodatne specijalističke pregledne s ciljem konačne potvrde bolesti, osobito u slučaju sumnje na malignu bolest. Uza sve to, educira pacijente o nastavku života s malignom bolesti, o potrebi onkološkog liječenja i prijavi pokazatelja pogoršanja bolesti te pruža psihološku podršku cijelo vrijeme.

Zaključak: Utvrđivanje uzroka konične urtikarije teško je i ponekad gotovo nemoguće. To otežava specifično liječenje i stvara frustracije kod pacijenta i liječnika. Svaka nespecifična i dugotrajna urtikarija zahtjeva detaljniju obradu. Iako se kolangiokarcinom može prezentirati nespecifičnom kliničkom slikom, i konična urtikarija može biti znak prve manifestacije bolesti. Potrebno je više provoditi edukacije o rijetkim malignim bolestima jer one zahtijevaju multidisciplinarni pristup. Pacijenti s većim brojem komorbiditeta predstavljaju poteškoće u ranom prepoznavanju zbog preklapanja kliničke slike.

■ Chronic urticaria as a presenting sign of cholangiocarcinoma-case report from family medicine practice

Keywords: Chronic urticaria, Cholangiocarcinoma, Comorbidity, Guidelines

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Background and Aim: Chronic urticaria presents a challenge in family medicine practice, because it is a common clinical disorder that is idiopathic in over 75% of cases. Less commonly, urticaria may be the presenting manifestation of an allergic or infectious disease, endocrinopathy, autoimmune disorder or, rarely, malignant diseases. It is characterized by a rash in the form of erythematous plaques followed by itching within a period of six weeks or longer. According to EAACI/GA²LEN/EDF/WAO guidelines, it is important to exclude differential diagnoses, to assess disease activity and to identify underlying causes. Cholangiocarcinoma is a rare malignancy and accounts for 2% of all malignancies. The aim of this case presentation is to pay attention and think about the causes of chronic urticaria, especially in patients with associated comorbidities, which further complicates early detection and rational decision making.

Case presentation: A 72-year-old woman, retired, married, lives with her husband and two sons, does not smoke, does not consume alcohol. For the past 10 years she has been diabetic and hypertensive, for the past 7 years she has been treated for osteoarthritis of the hands. In chronic therapy she takes the combination of Perindopril / Amlodipine 5/5 mg 1,0,0; Metformin 1000 mg 1.0.1; Naproxen sodium 550 mg 1,0,1. Adipose material (BMI 31). She went to the family medicine clinic for urticaria-type rash and was treated with parenteral corticosteroids and antihistamines after a detailed history and physical examination and with continued antihistamine therapy at home and a follow-up examination after 3-5 days. Given the minimal regression of skin changes at the next controls (7 and 14 days), she was referred to a dermatologist, who understands the problems as scabies and prescribes therapy. As the discomfort persists with intense itching even after four weeks, an extended laboratory is prescribed, and

paraneoplastic syndrome is suspected. Findings show low level inflammatory parameters, pathological hepatogram, unregulated glycemia, and an increase in tumor markers (CEA 980.4 µg / L, Ca 19.9 550 kIU / L, LDH 450 U / L). The patient is referred for extended diagnostic processing by a gastroenterologist and oncologist, who recommend an ultrasound of the abdomen, then an MRI of the liver, and a diagnosis of cholangiocarcinoma is made. The patient is further referred to the multidisciplinary team and treatment.

Discussion: Chronic urticaria is a major challenge for the family physician in outpatient work because it requires complex thinking, especially in the case of elderly patients with associated comorbidities. The family doctor has an important role in rational decision-making and proper focus on additional specialist examinations with the aim of final confirmation of the disease, especially in the case of suspected malignant disease. In addition, it educates patients about the continuation of life with malignant diseases, the need for oncological treatment as well as the reporting of indicators of disease exacerbation, and provides psychological support throughout.

Conclusion: Establishing the cause of CU is difficult and at times almost impossible. This renders cause specific management difficult and frustration on the part of the patient and the treating physician. Nonspecific and long-lasting urticaria requires detailed treatment. Although cholangiocarcinoma may present with a nonspecific clinical picture, chronic urticaria may also be a sign of the first manifestation of the disease. More education is needed on rare malignancies, as they require a multidisciplinary approach. Patients with a higher number of comorbidities present difficulties in early recognition due to an overlapping clinical picture.

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Melanom ploče nokta

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Ključne riječi: melanom, ploča nokta, multidisciplinarni tim, ABCDE klasifikacija, CUBED klasifikacija
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Uvod s ciljem: Melanom je zločudni tumor kože koji nastaje iz melanocita – specijaliziranih stanica koje proizvode melanin. Brojni su čimbenici koji pridonose nastanku melanoma, kao što su pretjerana izloženost ultraljubičastom (UV) zračenju, svjetla put, pozitivna obiteljska anamneza, prisutnost većeg broja madeža na koži i imunokompromitiranost. Iako se najčešće javlja na mjestima koja su izložena djelovanju Sunčevih zraka, u 2 – 3 % slučajeva može se javiti i u području ploče nokta. Do sada nije u potpunosti dokazan jasan etiološki čimbenik koji dovodi do nastanka ove vrste melanoma, no pretpostavlja se da je trauma okidač za nastanak uz druge predisponirajuće čimbenike. Cilj ovog prikaza slučaja jest svratiti pozornost na promjene na ploči nokta koje se mogu prezentirati atipičnom kliničkom slikom i maskirati pravu dijagnozu, a u podlozi imati ozbiljnu i tešku malignu bolest.

Prikaz slučaja: Muškarac u dobi od 52 godine, hrvatski ratni vojni invalid (HRVI), oženjen, živi sa suprugom i dva sina, pušač, konzumira alkoholna pića. Unazad 15 godina liječi se zbog posttraumatskog stresnog poremećaja (PTSP), u terapiji uzima sertralin 50 mg, zolpidem 10 mg, diazepam 10 mg 1,1,1. Zbog prekomjerne konzumacije alkohola u nekoliko navrata liječen po psihijatru, a bio je uključen i u program Kluba liječenih alkoholičara. Ne dolazi često u ordinaciju obiteljske medicine, no redovito se javlja nakon pregleda psihijatra, te uredno naručuje kroničnu terapiju. Javlja se u ordinaciju obiteljske medicine zbog bolova u području palca desnog stopala, koji traju unazad mjesec dana. Anamnestički navodi da je u nekoliko navrata zadobio udarac u isti palac, ali da nije primjećivao veće tegobe. Sada dolazi jer je primijetio diskoloraciju i ablaciјu ploče nokta uz rubno crvenilo. Prilikom pregleda, nakon detaljno uzete anamneze i obavljenog fizikalnog pregleda, prvotno se postavi radna dijagnoza traumatske ozljede ploče nokta te se pacijenta uputi na pregled kirurga radi eventualne ekscizije. Pacijent se u nekoliko navrata obradio po kirurgu, te se nakon ekscizije ploče nokta razvio ulkus u području ležišta nokta nakon četiriju tjedana zbog čega se učini biopsija kojom se dokaže melanom. Pacijent se javlja s nalazom biopsije nakon čega se upućuje u KBC

Sestre milosrdnice, Referentni centar za melanome, gdje se prezentira na multidisciplinarni tim, uz nastavak daljnog liječenja prema uputi dermatologa, kirurga i onkologa.

Rasprrava: Rana detekcija melanoma od ključnog je značaja za odabir modaliteta liječenja i bolju prognozu preživljjenja. Pri sumnji na kožni melanom od velike je pomoći ABCDE klasifikacija, no u slučaju promjena na noktima primjena je te klasifikacije nešto teža, te nam u tim situacijama puno više služi CUBED klasifikacija ili ABCDEF klasifikacija. S obzirom na njihovu rijetku pojavnost uglavnom se dijagnosticiraju u uznapredovaloj fazi zbog čega je i stopa preživljjenja značajno lošija. Liječnik obiteljske medicine u slučaju abnormalnosti u području ploče nokta diferencijalno-dijagnostički ne smije zanemariti i melanom, kada isključi sve uzročnike patološkog stanja.

Zaključak: Utvrđivanje uzroka abnormalnosti u području ploče nokta ponekad je teško te zahtijeva multidisciplinarni pristup u liječenju. Svaka atipična klinička prezentacija, uz anamnestički podatak o traumi i pozitivnu obiteljsku anamnesu, zahtijeva žurno liječenje.

Melanoma of nail unit

Keywords: Melanoma, Nail unit, Multidisciplinary approach, ABCDE classification, CUBED classification

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Background and Aim: Melanoma is a malignant tumor of the skin that results from melanocytes - specialized cells that produce melanin. There are numerous factors that contribute to the development of melanoma, such as an excessive exposure to ultraviolet (UV) radiation, positive family history, the presence of multiple moles on the skin and immunodeficiency disorders. Although it most often occurs in places exposed to the sun's rays, in 2-3% of cases it can also occur in the area of the nail plate. To date, a clear etiological factor leading to the development of this type of melanoma has not been fully proven, but trauma is thought to be the trigger for the development along with other predisposing factors. The aim of this case report is to pay attention to the changes on the nail plate, which can present with an atypical clinical picture masking the true diagnosis, and have a serious and severe malignant disease in the background.

Case presentation: A 52-year-old man, Croatian war invalid (HRVI), married, lives with his wife and two sons, a smoker, consumes alcoholic drinks. For the past 15 years he has been treated for post-traumatic stress disorder (PTSD), with chronic therapy of Sertaline 50 mg 1.0.0; Zolpidem 10 mg 0.0.1; Diazepam 10 mg 1,1,1. Due to excessive alcohol consumption, he was treated by a psychiatrist on several occasions, and he was also included in the program of the Club of Treated Alcoholics. He does not often come to the family medicine office, but he regularly appears after a psychiatrist's examination, and regularly orders chronic therapy. He reported to the family medicine office due to pain in the area of the big toe of his right foot, which lasted for a month before his arrival. Now he is coming because he noticed discoloration and ablation of the nail plate along the edge redness. During the

examination, after a detailed history and physical examination, a working diagnosis of traumatic nail plate injury is initially made, and the patient is referred to a surgeon for possible excision. The patient is treated by a surgeon several times, and after excision of the nail plate, an ulcer developed in the area of the nail bed after 4 weeks, which led to a biopsy to prove melanoma. The patient presents with a biopsy finding after which he is referred to the Sestre milosrdnice Clinical Hospital, Melanoma Reference Center, where he is presented to a multidisciplinary team, with continued treatment as directed by dermatologists, surgeons and oncologists.

Discussion: Early detection of melanoma is crucial for the choice of treatment modalities and a better prognosis of survival. In case of a suspicion of cutaneous melanoma, the ABCDE classification is very useful, but it is difficult to apply in the case of changes in the nail units, and in these situations the CUBED classification or ABCDEF classification is much more useful. Due to their rare occurrence, they are mostly diagnosed at an advanced stage, which is why the survival rate is significantly lower. In case of abnormalities in the area of the nail plate, the family doctor must not neglect melanoma in the differential diagnosis, when they exclude all the causes of the pathological condition.

Conclusion: Determining the cause of abnormalities in the nail plate area is difficult, and requires a multidisciplinary approach in treatment. Atypical clinical presentation, with anamnestic data on trauma and a positive family history, require urgent treatment

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11. SLOBODNE TEME

■ Uloga liječnika obiteljske medicine u praćenju kardiotoksičnosti uzrokovane liječenjem karcinoma dojke

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Uvod: Karcinom dojke najčešći je karcinom u žena, a njegovo suvremeno liječenje može rezultirati kardiotoksičnim posljedicama stavljući time kardiovaskularne bolesti (KVB) na drugo mjesto učestalosti smrti i pobola tih bolesnika. Cilj je rada podsjetiti na najnovije spoznaje o kardiološkim nuspojavama lijekova koji se primjenjuju u liječenju karcinoma dojke i na ulogu liječnika obiteljske medicine.

Rasprava: Kao posljedica kemoterapije mogu se razviti reverzibilni, akutno ugrožavajući oblici kardiotoksičnosti, tipa hipertenzivne reakcije, vazospastične i/ili trombotske ishemije miokarda, poremećaja ritma te razni tromboembolijski incidenti, ali i irreverzibilni oblici poput disfunkcije lijeve klijetke i zatajenja srca. Postoje dva patofiziološka tipa nastanka kardiotoksičnosti i posljedično zatajenja srca: tip I (irreverzibilni), koji je kod liječenja tumora dojke najčešće uzrokovani antraciklinima (npr. doksorubicin, epirubicin), i tip II (reverzibilni) ili ošamućenost (engl. *stunning*) srca, najčešće uzrokovani monoklonalskim protutijelima usmjerenima na receptore humanova epidermalnog faktora rasta 2 (HER-2, npr. trastuzumab, pertuzumab). Kardiotoksični učinak protutijela usmjerenih na vaskularni endoteljni faktor rasta (VEGF) i VEGF receptor (npr. bevacizumab, sunitinib, sorafenib) najčešće se očituje kao neregulirana arterijska hipertenzija ili kao tromboembolijski incident. Predispozicija za razvoj kardiotoksičnosti jest multifaktorska, a može se javiti tijekom, neposredno nakon, ali i nekoliko godina nakon završetka kemoterapije. Svim je bolesnicama prije početka kardiotoksične kemoterapije potrebno učiniti klinički pregled s detaljnom procjenom kardiovaskularnog rizika, elektrokardiografiju i ehokardiografiju te srčane biokemijske biljege. Bolesnice sa srednjim i visokim rizikom preporuka je identificirati korištenjem upitnika Asocijacije za zatajenje srca Međunarodnoga kardiološko-onkološkog društva (engl. *Heart Failure Association – International Cardio-Oncology Society*, HFA ICOS) koji kombinira sociodemografske podatke, podatke o kardiovaskularnim rizičnim čimbenicima, prethodnim KV bolestima te srčanim biokemijskim biljezima s podatcima o trenutačnom i prethodnim liječenjima karcinoma. Otkrivanje abnormalnosti u EKG zapisu, poput tahikardije u mirovanju, promjene ST-T segmenta, produženje QT intervala ili aritmija, mogu upozoriti

na mogućnost kardiotoksičnosti. Kemoterapiju treba obustaviti ako se ejekcijska frakcija lijevog ventrikula (EFLV) smanji za 15 – 16 % od početne ili za 10 – 15 % od normale. Praćenje srčanih biokemijskih biljega troponina i natriuretskog peptida korisno je u otkrivanju ranog oštećenja miokarda, no ne zna se kod kojeg je patološkog nalaza potrebno obustaviti terapiju. U slučaju kardiotoksičnosti obustavlja se primjena lijeka, a liječenje se ne razlikuje od liječenja uzrokovanih drugim uzrocima. Kod zatajenja srca preferira se propisivanje karvedilola kao beta-blokatora. Uz poznavanje i prepoznavanje kardiotoksičnosti lijekova koji se primjenjuju u liječenju karcinoma dojke uloga liječnika obiteljske medicine posebno je važna u koordiniranju skrbi, pomoći bolesnicama da redovito slijede upute onkološkog tima te u edukaciji o znacima i simptomima za koje je važno da ih same bolesnice pravovremeno prepoznaaju.

Zaključak: Iako je u praćenju i liječenju kardiotoksičnosti ključna uloga onkologa i kardiologa, liječnik obiteljske medicine može poboljšati skrb prevencijom KVB-a, ranim prepoznavanjem kardiotoksičnosti i pružanjem psihološke potpore ovim bolesnicima.

■ Role of family physicians in the monitoring of cardiotoxicity caused by breast cancer treatment

Keywords: cardiotoxicity, breast cancer, family medicine

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Introduction: Breast cancer is the most common cancer in women and its modern therapy can lead to cardiotoxicity, making cardiovascular diseases (CVD) the second most frequent cause of mortality and morbidity in these patients. The aim of this paper is to recall recent findings on the cardiac side effects of drugs used in the treatment of breast cancer and the role of family physicians.

Discussion: Chemotherapy can cause reversible, but emergent cardiotoxicity such as hypertensive reactions, vasospastic and/or thrombotic myocardial infarctions, arrhythmias, and various thromboembolic incidents, as well as have irreversible effects such as causing a left ventricular dysfunction and heart failure. There are two pathophysiological types of cardiotoxicity and a consequent heart failure: type I (irreversible), which is most commonly caused by anthracyclines (e.g. doxorubicin, epirubicin), and type II (reversible), or the stunning of the heart, most commonly caused by monoclonal antibodies targeting human epidermal growth factor 2 receptors (HER2 e.g. trastuzumab, pertuzumab). The cardiotoxic effect of antibodies targeting vascular endothelial growth factor (VEGF) and the VEGF receptor (e.g. bevacizumab, sunitinib, sorafenib) is most commonly manifested as unregulated arterial hypertension or as a thromboembolic incident. The predisposition for the development of cardiotoxicity is multifactorial, and can occur during, immediately after, and also a few years after the end of the treatment with chemotherapy. All patients should undergo a clinical examination with a detailed cardiovascular risk assessment, electrocardiography, echocardiography, and cardiac biochemical markers before initiating cardiotoxic chemotherapy. It is recommended to

identify patients with medium and high risk using the tool of the Heart Failure Association of the International Cardio-Oncology Society (HFA ICOS), which combines sociodemographic data, data on cardiovascular risk factors and previous CVD, cardiac biochemical markers with data on current and previous cancer treatments. The detection of abnormalities in the ECG record, such as resting tachycardia, ST-T segment changes, QT prolongation, or arrhythmias, may alert to the possibility of cardiotoxicity. Chemotherapy should be discontinued if the left ventricular ejection fraction (EFLV) is reduced by 15–16% from the baseline or 10–15% from normal. The monitoring of cardiac biochemical markers such as troponin and natriuretic peptide is useful in the early detection of myocardial damage, but it is unknown which pathological finding is necessary to discontinue therapy. In the case of confirmed cardiotoxicity, it is necessary to discontinue the drug, and the treatment is no different from the treatment of heart failure resulting from other causes. In heart failure, prescribing carvedilol as a beta-blocker is preferred. In addition to knowing and recognizing the cardiotoxicity of drugs used in the treatment of breast cancer, the role of family physicians is particularly important in coordinating care, helping patients regularly follow the instructions of the oncology team and educating about signs and symptoms that are important to recognize.

Conclusion: Although a key role in the monitoring and treatment of cardiotoxicity is played by oncologists and cardiologists, family physicians can improve care by preventing CVD, early recognition of cardiotoxicity, and providing psychological support to these patients.

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■ Prisilna hospitalizacija psihički dekompenziranog pacijenta

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Ključne riječi: liječnik obiteljske medicine, psihički dekompenzirani pacijent, prisilna hospitalizacija
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Uvod: Psihotični pacijenti posebno su zahtjevna skupina. Liječnik obiteljske medicine (LOM), kao liječnik prvog kontakta, mora znati prepoznati psihički dekompenziranog pacijenta i ozbiljnost situacije te procijeniti ugrožava li takav pacijent vlastiti život ili život druge osobe. U tom slučaju na LOM-u je velika profesionalna odgovornost brzog donošenja odluke o potrebi prisilne hospitalizacije. Takva situacija posebno je neugodna za liječnika, za pacijenta i cijelu njegovu obitelj.

Cilj: Podsetiti na indikacije za prisilnu hospitalizaciju psihotičnog bolesnika te na važnost poznavanja postupka i zakonskih okvira za njezino provođenje.

Rasprava: Pacijenti sa psihozom vrlo su zahtjevna skupina pacijenata za komunikaciju i skrb. Temelj uspješne motivacije pacijenta za liječenje jest kontinuirana skrb i dobar odnos s pacijentom zasnovan na povjerenju. LOM na osnovi profesionalne komunikacije i kontinuirana praćenja kod pacijenta najbolje prepoznaže znakove dekompenzacije bolesti. Povjerenje u LOM-a i njegova maksimalna dostupnost omogućuju pacijentima sa shizofrenijom da upravo kod LOM-a potraže pomoć. Dekompenzirani psihotični pacijent gubi sposobnost donošenja medicinskih odluka, razumijevanja situacije, uvažavanja posljedica svoje odluke, gubi sposobnost rasuđivanja i izricanja svojih želja. LOM je tada izložen agresivnim, verbalnim i fizičkim napadima pacijenta. U takvim iznimnim situacijama svakom pacijentu treba pristupiti individualno, detektirajući unutar često nepovezanih priča i najsitnije detalje. Na temelju svojeg znanja i iskustva LOM treba uvidjeti postoji li opasnost za okolinu i za samu osobu, je li ta opasnost aktualna i visokog intenziteta, te postoji li potreba za prisilnom hospitalizacijom pacijenta. Ako postoji, vrlo je važno dobro poznavati postupak i zakonske okvire kod kojih se primjenjuje prisilna hospitalizacija te biti svjestan odgovornosti onih koji ju pokreću i donose odluke o njezinoj primjeni. Radi isključivanja mogućnosti zloupotrebe, primjenjena prisilna hospitalizacija mora biti dobro obrazložena, evidentirana i skladu s najvišim dostignutim profesionalnim standardima zdravstvene skrbi o osobama s duševnim smetnjama.

Zaključak: LOM kontinuirano skrbi za psihotičnog pacijenta, na temelju svojeg znanja i iskustva mora prepoznati kad pacijent izgubi sposobnost donošenja medicinskih odluka i razumijevanja situacije te postoji li potreba prisilne hospitalizacije psihički dekompenziranog pacijenta jer ozbiljno i izravno ugrožava vlastiti život ili život druge osobe.

Involuntary hospitalization of a mentally decompensated patient

Keywords: family physician, mentally decompensated patient, involuntary hospitalization

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Introduction: Psychotic patients are a particularly demanding group. A family physician (FP), as a first contact physician, must be able to identify a mentally decompensated patient, the severity of the situation, and whether he is endangering his own or another's life. In this case, the FP has a great professional responsibility to make a quick decision on the need for involuntary hospitalization. Such a situation is especially disturbing for the physician, for the patient and his whole family. Aim of this paper is to recall the indications for involuntary hospitalization of a psychotic patient, and the importance of knowing the procedure and legal framework for its implementation.

Discussion: Patients with psychosis are a very demanding group of patients for communication and care. The basis of successful patient motivation for treatment is continuous care and a good relationship with the patient based on trust. FP, through professional communication and continuous monitoring of the patient, best recognizes the signs of decompensation of the disease. Confidence in FP and maximum availability allow patients with schizophrenia to seek help at FP. A decompensated psychotic patient loses the ability to make medical decisions, understand the situation, respect the consequences of his decision, loses the ability to reason and express his wishes. FP is then exposed to aggressive, verbal and physical attacks by the patient. In such special situations, each patient should be approached individually, detecting within often unrelated stories, even the smallest details. Based on its knowledge and experience, LOM should determine whether there is a danger to the environment and to the patient himself, whether this danger is current and of high intensity, and whether there is a need for involuntary hospitalization of the patient. If there is, it is very important to be familiar with

the procedure, the legal framework in which involuntary hospitalization is applied, as well as with the responsibility of those who initiate it and make decisions about its application. In order to exclude the possibility of abuse, the applied involuntary hospitalization must be reasoned and recorded in details, and in accordance with the highest achieved professional standards of health care for persons with mental disorders.

Conclusion: FP continuously cares for a psychotic patient, based on his knowledge and experience must recognize when the patient loses the ability to make medical decisions and understand the situation, and whether there is a need for involuntary hospitalization of a mentally decompensated patient because it seriously and directly threatens his own or another's life.

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■ Akutna ishemija ekstremiteta kod asimptomatske periferne arterijske bolesti

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Uvod s ciljem: Akutna ishemija ekstremiteta (AIE) hitno je stanje nastalo naglim smanjenjem perfuzije i posljedičnim odumiranjem tkiva zahvaćenog ekstremiteta. Glavni uzroci ishemije su tromboza, embolija, trauma i iyatrogena ozljeda. Tromboza uzrokuje 60 % netraumatskih AIE-ja. Periferna arterijska bolest (PAB) glavna je kronična podležeća bolest u pacijenata s arterijskom trombozom. Kod bolesnika s PAB-om incidencija AIE-ja značajno raste u odnosu na opću populaciju. U ovome se radu upućuje na važnost brze i točne dijagnoze akutne ishemije ekstremiteta na temelju kliničke slike te na identifikaciju i adekvatno lijeчењe PAB-a.

Rasprava: Akutna ishemija ekstremiteta pojavljuje se u jedan do dva slučaja na 10 000 stanovnika godišnje. Unatoč hitnoj revaskularizaciji trombolitičkim agensima ili operacijom amputacija je potrebna u 10 do 15 % bolesnika tijekom hospitalizacije. Petnaestodnevni mortalitet iznosi više od 25 %. Oko 15 do 20 % bolesnika umire u prvoj godini. U bolesnika s AIE-jem brzo prepoznavanje i lijeчењe ključni su u spašavanju ekstremiteta, umanjuje se vjerojatnost amputacije i smanjuje mortalitet. Odgađanje definitivnog zahvata rezultira većim rizikom od gubitka ekstremiteta. Simptomi AIE-ja nastaju naglo. Šest je glavnih znakova akutne ishemije, a to su bljedoća kože, odsutnost pulsa, bolnost, pareza, parestezije i hladnoća. Postoji i sedmi simptom, marmorizacija, koji se povezuje s prisutnošću periferne arterijske bolesti i razvijenim kolateralnim krvotokom. Godišnja incidencija AIE-ja tek je 0,00015 %, ali kod oboljelih od PAB-a penje se na značajnih 1,7 %. PAB možemo podijeliti na četiri stadija, prvi je asimptomatski, u drugom se pojavljuju intermitentne kaudikacije, u trećem bolovi u mirovanju, a u četvrtom stadiju, kritičnoj ishemiji, gangrena i ulceracije. Prevalencija PAB-a ovisna je o dobi, a njezina incidencija penje se na više od 10 % kod pacijenata u sedmom i osmom desetljeću života i nešto je veća kod muškaraca. Čimbenici rizika slični su kao i kod kardiovaskularnih bolesti, a među njima vodeći su pušenje i šećerna bolest. Ključni alat u postavljanju dijagnoze, koji se može pronaći i u ordinaciji obiteljske medicine, jest tlakomjer za mjerjenje indeksa razlike arterijskih tlakova gležnja i nadlaktice.

Zaključak: AIE je rijetka emergencija koja zahtijeva brzu i točnu dijagnozu na temelju kliničkog pregleda i adekvatno hitno kirurško lijeчењe. PAB je kronična bolest s dobro rastućom prevalencijom koja se može prepoznati prilikom uzimanja anamneze, a zatim i dijagnosticirati određivanjem indeksa razlike arterijskih tlakova gležnja i nadlaktice. Regulacija rizičnih čimbenika i tjelesna aktivnost ključne su metode u sprječavanju progresije bolesti i umanjuju vjerojatnost nastanka AIE-ja.

■ Acute limb ischemia in asymptomatic peripheral arterial disease

Keywords: Acute limb ischemia, peripheral arterial disease

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Introduction: Acute limb ischemia (ALI) is an emergency caused by a sudden decrease in perfusion and consequent death of the affected limb tissue. The main causes of ischemia are thrombosis, embolism, trauma and iatrogenic injury. Thrombosis causes 60% of non-traumatic ALI. Peripheral arterial disease (PAD) is a major chronic underlying disease in patients with arterial thrombosis. In patients with PAD, the incidence of ALI increases significantly relative to the general population. This case report was intended to highlight the importance of rapid and accurate diagnosis of ALI based on the clinical presentation and the identification and adequate treatment of PAD.

Discussion: ALI occurs in 1 to 2 cases per 10,000 persons per year. Despite urgent revascularization with thrombolytic agents or surgery, amputation is required in 10 to 15% of patients during hospitalization. 15-day mortality is more than 25%. About 15 to 20% of patients die in the first year. In patients with ALI, rapid identification and treatment are crucial to save limb, reducing the chance of amputation, and reducing mortality. Delaying a definitive procedure results in a higher risk of limb loss. Symptoms of ALI occur suddenly. There are six main signs of acute ischemia, which are pale skin, absence of pulse, pain, paresis, paresthesia and cold. There is also a seventh symptom, deep duskiness, which is associated with the presence of peripheral arterial disease and developed collateral blood flow. The annual incidence of ALI is only 0.00015%, but in patients with PAD it rises to a significant 1.7%. PAD can be divided into four stages, the first is asymptomatic, in the second there are intermittent claudication, in the third there is pain at rest and in the fourth stage, critical ischemia, gangrene and ulceration. The prevalence of PAD is age-dependent and its incidence rises above 10% in patients in the 7th and 8th decades and is slightly higher in men. Risk factors are similar to those for coronary and cerebrovascular diseases,

particularly smoking and diabetes mellitus. A key tool in diagnosis, which can also be found in the family physician practice, is the pressure gauge for measuring the ankle-brachial pressure index (ABPI).

Conclusion: ALI is a rare emergency that requires rapid and accurate diagnosis based on clinical examination and adequate emergent surgical intervention. PAD is a chronic disease with an age-increasing prevalence that can be recognized when a medical history is taken and then diagnosed using ABPI. Regulation of risk factors and physical activity are key methods in preventing disease progression and reducing the chance of ALI.

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■ Kriptorhizam – uloga liječnika obiteljske medicine

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Ključne riječi: kriptorhizam, liječnik obiteljske medicine

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Uvod: Kriptorhizam je jedna od najčešćih kongenitalnih anomalija koja zahvaća do 4 % terminske muške novorođenčadi, dok incidencija znatno raste kod prematurusa i iznosi do 45 %. Kod manjeg broja dječaka testisi se mogu spontano spustiti tijekom prvih šest mjeseci života, a spontano spuštanje nakon toga vrlo je rijetko. Dijagnoza se postavlja na temelju kliničke slike kada se vidi prazan skrotum ili hemiskrotum, a može se prezentirati i s ingvinalnom hernijom te kao torzija testisa (sa slikom akutnog abdomena). Muškarci koji su u djetinjstvu imali nespušteni testisi imaju povećan rizik za razvoj tumora testisa, kao i veću incidenciju neplodnosti. Kako bi se na vrijeme spriječile teške posljedice, najnovije smjernice preporučuju kirurško liječenje do navršenih 18 mjeseci života, što se ne slijedi uvijek. Cilj je rada podsjetiti na važne odrednice kriptorhizma i na ulogu liječnika obiteljske medicine (LOM).

Rasprava: Iako je ovo stanje ponajprije u domeni primarnog pedijatra (PP), poznavanje kriptorhizma neobično je važno i za LOM-a. Zbog brojnih razloga (nedostatak PP-a, prevelik broj djece po jednom liječniku, retraktilni testisi...) dijete s kriptorhizmom može promaknuti pedijatru i nakon navršene sedme godine života, ali i ranije, doći u skrb LOM-a. U Hrvatskoj je 2019. godine u primarnoj zdravstvenoj zaštiti utvrđen 1341 slučaj kriptorhizma, od čega je u ordinacijama LOM-a utvrđeno njih 449 (345 kod djece u dobi sedam ili više godina). Brojne studije iz različitih država upućuju na manjkavo znanje i slabu osviještenost o kriptorhizmu te, posljedično, njegovo kasno prepoznavanje i liječenje. Broj djece operirane nakon sedme godine života kreće se između 20 i 30 %, a takav broj očekuje se i u Hrvatskoj. LOM ima važnu ulogu i u dugoročnom praćenju ove djece, kasnije adolescenata i odraslih muškaraca, koji su pod rizikom za razvoj kasnih posljedica kriptorhizma. Rizik za razvoj tumora testisa višestruko je povećan u ovih pacijenata. Iako se on ne može u potpunosti ukloniti, pravovremenim liječenjem može se smanjiti. Što se praćenja tiče, pacijentima treba savjetovati samopalpaciju jednom mjesečno nakon puberteta kako bi se na vrijeme otkrile eventualne maligne promjene. Neplodnost zahvaća do 10 % muškaraca s jednostrano nespuštenim testisima, a raste kod obostrano nespuštenih testisa te odgođenog liječenja, što dodatno naglašava važnost ranog prepoznavanja i liječenja ovog stanja.

Zaključak: Kriptorhizam predstavlja velik problem o kojem treba razgovarati ne samo na razini primarne zaštite predškolske djece nego i u obiteljskoj medicini. Od velikog značaja može biti i edukacija roditelja te opće populacije.

Cryptorchidism – the role of a family physician

Keywords: cryptorchidism, family physician

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Introduction. Cryptorchidism is one of the most common congenital anomalies affecting up to 4% term male newborns, while the incidence increases significantly in prematurity and is up to 45%. In a smaller number of boys, the testicles may descend spontaneously in the first six months of life, and spontaneous descent after that is very rare. The diagnosis is made on the basis of the clinical picture when an empty scrotum or hemiscrotum is seen, and it can also be presented with an inguinal hernia or as a testicular torsion (with a presentation of acute abdomen). Men who had undescended testicles in the childhood have an increased risk of developing testicular tumors, as well as increased incidence of infertility. In order to prevent severe consequences in time, the latest guidelines recommend surgical treatment up to 18 months of age, which is not always followed. The aim of this paper is to recall important determinants of cryptorchidism and the role of family physicians (FP).

Disscusion. Although this condition is primarily in the domain of the primary pediatrician (PP), knowledge of cryptorchidism is also extremely important for a FP. Due to numerous reasons (lack of PP, too many children per doctor, retractable testicles, ...) a child with cryptorchidism can go unnoticed by a pediatrician and after the age of seven, but also earlier, come to the care of a FP. In 2019, 1341 cases of cryptorchidism were identified in primary health care in Croatia, of which 449 were identified in FP offices (345 in children aged seven or more). Numerous studies from different countries indicate a lack of

knowledge and low awareness of cryptorchidism, and, consequently, its late recognition and treatment. The number of children operated after the age of seven is between 20% and 30%, and such a number is also expected in Croatia. A FP also has an important role in long-term follow-up of these children, later adolescents and adult men, who are at the risk for developing the late consequences of cryptorchidism. The risk of developing testicular tumors is multiplied in these patients. Although it cannot be completely removed, it can be reduced with timely treatment. As far as follow-up is concerned, patients should be advised to self-palpate once a month after puberty in order to detect possible malignant changes in time. Infertility affects up to 10% of men with unilaterally undescended testicles, and increases in bilaterally undescended testicles and delayed treatment, which further emphasizes the importance of early recognition and treatment of this condition.

Conclusion. Cryptorchidism is a major issue that needs to be discussed not only at the level of primary care for preschool children, but also in family medicine. The education of parents and the general population can also be of great importance.

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■ Postavljanje dijagnoze celijakije u odrasloj i pedijatrijskoj populaciji

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Ključne riječi: celijakija, dijagnostika, gluten

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Uvod: Prevalencija celijakije u svijetu značajno je porasla u posljednjih 50 godina, a trenutочно u razvijenim zapadnim zemljama iznosi između 0,6 % i 1 %. Unatoč tomu smatra se da je velik dio oboljelih u svijetu i dalje neprepoznat.

Rasprava: S obzirom na to da se većina pacijenata najprije javlja svojem izabranom liječniku obiteljske medicine, oni imaju jednu od ključnih uloga u otkrivanju celijakije i stoga je izrazito važno da su upoznati sa simptomima i dijagnostičkim pretragama potrebnim za postavljanje te dijagnoze. Na celijaku je potrebno posumnjati kod pacijenata sa simptomima malapsorpcije poput kronične dijareje, stetaoreje i gubitka tjelesne težine te, kod djece, zastoja u razvoju. Česti su simptomi i bolovi u trbuhi, nadutost, anemija zbog manjka željeza, osteoporiza/osteopenija. Kako bi serološki testovi i histopatološki nalaz bili valjani, tijekom procesa dijagnosticiranja celijakije nužno je da se pacijenti pridržavaju dijetete koja sadržava gluten. Kod odraslih prvi je korak mjerjenje titra IgA antitijela na tkivnu transglutaminazu (anti-tTG IgA) te titra ukupnog IgA. U slučaju povišene vrijednosti anti-tTG IgA za potvrdu dijagnoze nužan je endoskopski pregled uz najmanje četiri biopsije distalnog duodenuma i dvije biopsije bulbusa duodenuma. Ako na biopsiji nema karakterističnih promjena za celijakiju, a anti-tTG IgA je povišen i pacijent je na dijeti koja sadržava gluten, preporučuje se reevaluacija nalaza biopsije, HLA-DQ2/8 tipizacija te izrada titra IgA antitijela na endomizij (EMA IgA) i/ili IgA antitijela na deaminirane glijadinske peptide (anti-DGP IgA). Kod pacijenata s izoliranom IgA deficijencijom potrebno je izmjeriti anti-tTG IgG i anti-DGP IgG. Prema revidiranim smjernicama Europskoga društva za pedijatrijsku gastroenterologiju, hepatologiju i prehranu (*European Society for Paediatric Gastroenterology, Hepatology and Nutrition – ESPGHAN*) iz 2020., prilikom sumnje na celijakiju kod djece također se preporučuje prvo izmjeriti ukupni IgA te anti-tTG IgA. Ako je izmjerena vrijednost anti-tTG IgA deset i više puta veća od gornje granice normale, preporučuje se mjerjenje EMA IgA u novom uzorku krvi te je u slučaju pozitivnog nalaza moguće postavljanje dijagnoze celijakije. Ako je vrijednost manja od deseterstrukog povećanja anti-tTG IgA i ako je EMA IgA negativan, za postavljanje dijagnoze celijakije potrebna je biopsija duodenuma. Biopsija duodenuma također je potrebna kod

djece kojoj je ustanovljena IgA deficijencija uz prethodno mjerjenje anti-tTG IgG, EMA IgG ili anti-DGP IgG.

Zaključak: Za razliku od odraslih, kod kojih je nužna potvrda dijagnoze celijakije biopsijom duodenuma, u dječjoj populaciji u određenim slučajevima moguće je postavljanje dijagnoze isključivo na temelju rezultata serologije.

■ Establishing the diagnosis of celiac disease in the adult and pediatric population

Keywords: celiac disease, diagnosis, gluten

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Introduction: The worldwide prevalence of the celiac disease has significantly increased over the last 50 years and currently in the developed western countries it is between 0.6% and 1%. However, it is believed that many cases are still undiagnosed.

Discussion: Since most patients first report to their family physician, they have one of the key roles in detecting celiac disease, and therefore it is essential that family physicians are familiar with symptoms and diagnostic algorithms for celiac disease. Celiac disease usually presents with signs of malabsorption such as chronic diarrhea, steatorrhea, weight loss, and in children with a failure to thrive. Other common symptoms are abdominal pain, bloating, iron deficiency anemia, osteoporosis/osteopenia. In order for serological tests and histopathological findings to be valid, it is necessary that patients are on a gluten-containing diet during the process of diagnosing celiac disease. In adults, the first-line tests are assay for IgA antibodies against tissue transglutaminase (anti-tTG IgA) and measurement of the total IgA levels. In case of elevated anti-tTG IgA levels, endoscopy with at least 4 biopsy specimens of distal duodenum and at least 2 from the duodenal bulb are needed to confirm the diagnosis of celiac disease. If the histopathological findings are normal and the anti-tTG IgA levels are elevated while the patient has been on a diet containing gluten, then the biopsy specimen should be re-evaluated. In addition, HLA-DQ2/8 typing and assays for IgA antibodies against endomysium

(EMA IgA) and/or IgA antibodies against deamidated gliadin peptides (ant-DGP IgA) should be performed. In patients with selective IgA deficiency, the recommended tests are anti-tTG IgG and anti-DGP IgG. According to the new 2020 guidelines of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN), when celiac disease is suspected in children, the first line tests are total IgA levels and anti-tTG IgA assay. A no-biopsy approach for diagnosing celiac disease in children is appropriate only if the value of anti-tTG IgA is 10 or more times the upper limit of normal and if the EMA IgA antibodies are positive in the second blood sample. If the value of anti-tTG IgA is lower than 10 times the upper limit of normal or if the EMA IgA is negative, then the biopsy is needed in order to confirm the diagnosis of celiac disease. Biopsy specimens are also required in children diagnosed with selective IgA deficiency with a prior measurement of anti-tTG IgG, EMA IgG, or anti-DGP IgG.

Conclusion: Unlike the adults, for whom the biopsy of the duodenum is necessary in order to establish the diagnosis of celiac disease, in the pediatric population a no-biopsy approach is possible under the strict criteria.

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█ Procjena rizika nastajanja kardiovaskularnih događaja u oboljelih od šećerne bolesti

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Ključne riječi: diabetes mellitus, kardiovaskularne bolesti, kardiovaskularni rizik, procjena rizika
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Uvod: Cirkulacijske bolesti vodeći su uzrok smrти u 2020. godini, a čine 40 % ukupnog mortaliteta Republike Hrvatske. Među cirkulacijskim bolestima šećerna je bolest treći uzrok smrti. Iako se bilježi pad smrtnosti od kardiovaskularnih bolesti (KVB) od 10 % u posljednjem desetljeću, riječ je o i dalje značajnom uzroku mortaliteta i (multi)morbidity, ponajprije zbog povećanja rizika aterosklerotske kardiovaskularne bolesti. Cilj je rada prikazati alate za procjenu kardiovaskularnog rizika (KVR) kod visoko rizične populacije oboljelih od šećerne bolesti kao i njihovu varijabilnost.

Rasprrava: Kardiovaskularne bolesti obilježene su mogućnošću otklanjanja i/ili kontrole ciljanim terapijskim planom, ali i klinički asimptomatskim tijekom do trenutka (ne)fatalnog kardiovaskularnog (KV) događaja zbog čega su probir i pravovremena intervencija osnova uspješnog liječenja, no i izvor nedoumica. Nove smjernice Europskoga kardiološkog društva (engl. *European Society of Cardiology Guidelines*) preporučuju različite alate za procjenu KVR-a zdravih osoba i osoba s opterećujućom KV anamnezom. Unatoč tomu, procjena KVR-a u osoba s prethodno utemeljenim komorbiditetima i dalje ne pruža dovoljno informacija. Osobe sa šećernom bolesti pripadaju kategoriji visokog ili vrlo visokog KV rizika. S obzirom na progresivni tijek šećerne bolesti, čak i u slučajevima zadovoljavajuće glikemijske kontrole, potrebno je temeljito određivanje ukupnog i rezidualnog KVR-a. ADVANCED ili DIAL sustavi procjene rizika osnovni su alati predviđanja (ne)fatalnog KV događaja, ali postoje i drugi bodovni sustavi (Q-RISK, ACC/AHA). Procjena KVR-a spomenutim ljestvicama velike je varijabilnosti, ne daje jednoznačne rezultate te može dovesti do podcjenjivanja rizika i neadekvatnog liječenja, ali i precenjivanja rizika i polimedikacije, ponajviše statinima. Osim procjene rizika nastanka neželjenog događaja, važna je i procjena učinka određenih postupaka (lijekova i promjene životnih navika) što nudi *U-prevent* sustav. Procjena KV rizika trebala bi činiti okvir, ali ne i temelj individualiziranog liječenja i nadzora.

Zaključak: Nedovoljna educiranost o alatima procjene subpopulacijskog KV rizika uz pretjerano zanemarivanje individualnog kliničkog konteksta jedni su od uzroka lošijeg nadzora spomenute subpopulacije bolesnika.

■ Estimation of risk for cardiovascular events in people with diabetes mellitus

Keywords: diabetes mellitus, cardiovascular disease, risk assessment

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Introduction: Circulation diseases were the leading cause of death in 2020, and they comprised 40.00% of mortality in Croatia. Among circulatory diseases, diabetes mellitus is the third cause of death. Although, in the last decade, there has been a 10% drop in cardiovascular mortality (CVD), it is still a significant cause of mortality and (multi) morbidity, primarily due to an increased risk of atherosclerotic cardiovascular disease. The aim of this paper is to present tools for assessment of cardiovascular risk (CVR) in high-risk populations of diabetics as well as the variability of these tools.

Discussion: CVDs are characterized by the possibility of elimination and/or control by a targeted treatment plan, but also clinically asymptomatic course of the disease until the moment of (non) fatal cardiovascular (CV) event. This is why screening and timely intervention are the basis of successful treatment, also being a source of doubt. New guidelines of the European Society of Cardiology recommend various tools for assessment of the CVR of healthy individuals and individuals with a burdensome CV history. Nevertheless, the assessment of CVR in persons with previously established comorbidities still does not provide sufficient information. People with diabetes mellitus belong to the category of high and very high CV risk. Considering the progressive course of diabetes, even in cases with a satisfactory glycemic control, a thorough determination of total and residual CVR is necessary. ADVANCED or DIAL risk assessment systems are the basic tools for predicting (non) fatal CV events, but there are other scoring systems (Q-RISK, ACC/AHA). The assessment of CVR on these scales is highly variable, does not give

unambiguous results and can lead to underestimation of the risk and inadequate treatment, but also an overestimation of risk and polymedication, mostly by statins. In addition to assessing the risk of adverse events, it is also important to assess the effect of certain procedures (medications and lifestyle changes), offered by the U-prevent system. CV risk assessment should form the framework, but not the basis of individualized treatment and supervision.

Conclusion: Insufficient education on tools for assessing subpopulation CV risk combined with an excessive neglect of the individual clinical context are one of the causes of poorer supervision of the mentioned subpopulation of patients.

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■ Informacijska i komunikacijska tehnologija u komunikaciji liječnik-pacijent

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Ključne riječi: informacijska i komunikacijska tehnologija, komunikacija, liječnik-pacijent, kvaliteta, zadovoljstvo

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Uvod: Promjene koje donosi digitalna revolucija vidljive su i u zdravstvenom okruženju od svih dionika zdravstvenog procesa (pružatelji zdravstvenih usluga, bolnice, administracije, pacijenta, donositelja odluka i državnih tijela) te na različitim razinama: administracije, procesa i komunikacije. Komunikacija liječnik-pacijent, koja se sve više odvija u digitalnom obliku, uvjetovana je razvojem tehnologije, porastom broja pametnih uređaja, pandemijskom situacijom i porastom interesa za primjenom tehnologije. Cilj istraživanja bio je analizirati postojeću primjenu informacijske i komunikacijske tehnologije (IKT) u komunikaciji liječnik-pacijent.

Rasprava: Značajan je porast istraživačkog interesa za primjenom IKT-a u zdravstvu, u bazi Web of Science, od 2000. godine do danas. Analiza primjene različitih tehnologija (platforma, aplikacija i servisa) u komunikaciji liječnik-pacijent: zdravstvenih portala, e-komunikacijskih usluga, virtualnih platforma, telemedicinskih usluga za ljudsku interakciju – osobito putem videozapisa, mobilnih aplikacija (mHealth) i društvenih mreža, pokazuje da se one sve više koriste za interakciju između korisnika zdravstvene zaštite i pružatelja usluga. nude se rješenja temeljena na umjetnoj inteligenciji, kao što su analiza velikih količina podataka (engl. *Big Data*), agenti za razgovor (engl. *chatbot*), prediktivna analitika, primjena jezičnih tehnologija, senzora i interneta stvari (engl. *Internet of Things*). Analiza postojećih tehnologija i njihova uporaba otkriva velik spektar različitih tehnologija koje se primjenjuju za specifične situacije, fragmentirano i za specifične jezike. Nedostaju sveobuhvatnije analize prednosti i nedostatka postojeće primjene, kao i analiza uvjeta za integraciju tehnologija u postojeće stanje.

Zaključak: Primjena prikazanih tehnologija zahtijeva sinergijski pristup svih dionika procesa, uključujući detaljnu analizu prednosti i nedostatka, edukaciju o primjeni tehnologije i zdravstvenoj pismenosti. Prikazane tehnologije osobito su analizirane sa stajališta primjene liječnika opće prakse u svakodnevnoj komunikaciji s pacijentima.

■ Information and Communication Technology in Doctor-Patient Communication

Keywords: information and communication technology, communication, doctor-patient, quality, satisfaction

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Introduction: Changes made by the digital revolution are visible in the health environment of all healthcare stakeholders (providers of health services, hospitals, administration, patients, decision-makers and state bodies) and at different levels: administration, processeses and communication. The physician-patient communication, which is increasingly taking place in digital form, is conditioned by the development of technology, increasing number of smart devices, pandemic situation and augmented interest in technology. The aim of the research is to analyze the existing use of information and communication technology (ICT) in the physician-patient communication.

Discussion: There is a growing research interest for applying ICT in healthcare, based on the Web of Science, from 2000 to today. The usage analysis of different technologies (platforms, applications and services) conducted in physician-patient communication, such as health portals, email communication services, virtual platforms, telemedicine services for human interaction - especially via videos, mobile applications (MHealth) and social networks are increasingly used to interact between health care users and service providers. Artificial intelligence (AI) solutions, such as Big Data analysis, chatbot agents, predictive analytics, language technology applications, sensors and Internet of Things (IoT) are offered. The usage analysis of existing technologies reveals a large spectrum of different technologies applicable to specific situations, fragmented and created for specific languages. There are missing comprehensive analysis of the advantages and deficiencies and missing analysis

of conditions for technology integration in the current situation.

Conclusion: The application of technologies requires a synergistic approach of all stakeholders, including a detailed analysis of advantages and deficiencies, education on technology use and health literacy. The presented technologies are particularly analyzed from the point of view of general practitioners in daily communication with patients.

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■ Rijetke prezentacije bolesti COVID-19 iz prakse liječnika obiteljske medicine

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Ključne riječi: COVID-19, rijetki simptomi, obiteljska medicina

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Cilj: Cilj je rada prikazati rijetke simptome bolesti COVID-19 iz prakse liječnika obiteljske medicine (LOM).

Metode: Prikaz pet slučajeva iz prakse LOM-a s rijetkim početnim simptomima.

Rezultati: Prvi slučaj: muškarac, 55 godina, s dobro reguliranim šećernom bolesti tipa 2 (DMT2), prvi simptom bio je iznenadna i neobjasnjava hiperglikemija (GUP 16 – 20 mmol/L) dva dana prije nastanka klasičnih simptoma bolesti COVID-19. Drugi slučaj: žena, 93 godine, od ranije s perifernom arterijskom bolesti (PAB) i DMT2 dobiva otok i crvenilo lijevog stopala i potkoljenice. Dijagnosticira se akutno pogorsanje PAB-a, pacijentica se upućuje u bolnicu. Prilikom prijema PCR je bio pozitivan, a u daljem tijeku dobiva klasične simptome bolesti COVID-19. Odbija operativni zahvat i biva otpuštena iz bolnice kao neizlijecena. Treći slučaj: žena, 85 godina, s prethodnim DMT2, dislipidemijom, aterosklerotskim srcem i stanjem nakon totalne endoproteze (TEP) lijevog kuka dobiva ponavljajuće hipoglikemije (3,1 – 3,7 mmol/l). Tijekom jednog napadaja hipoglikemije pacijentica pada i dislocira TEP lijevog kuka. Jedanaestog dana razvijaju se klasični simptomi bolesti COVID-19, upala pluća i akutni respiratorni distres sindrom. Pacijentica završava fatalno u bolnici nakon sedam dana. Četvrti slučaj: žena, 35 godina, inače zdrava, dobiva iznenada urtikariju bez vidljivog povoda. Nakon četiri dana ambulantnog liječenja urtikarije izbijaju klasični simptomi bolesti COVID-19. Peti slučaj: žena, 45 godina, koja inače ima migrenu, dobiva neuobičajeno jak migrenozni napadaj, potom nakon dva dana klasične simptome bolesti COVID-19.

Rasprava: Brojna su istraživanja pokazala da COVID-19 može u početku ili tijekom infekcije imati i rijetke simptome koji se mogu svrstati u kardiovaskularne, neurološke, kožne, gastroenterološke, urološke, nefrološke i mentalne.

Zaključak: Rijetki simptomi bolesti COVID-19 mogu usmjeriti pažnju LOM-a u pogrešnom smjeru.

■ Rare presentations of COVID-19 in the practice of family physicians

Keywords: Covid-19, rare symptoms, family medicine

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Objective: To show the rare symptoms of Covid-19 in the practice of family physicians (FP).

Method: Presentation of five cases with rare initial symptoms in the practice of FP.

Results: Case 1: A 55-year-old man with well-regulated type 2 diabetes mellitus (DMT2) had his first symptom of sudden and unexplained hyperglycemia (FPG 16–20 mmol/L) two days before the onset of classic Covid-19 symptoms. Case 2: A 93-year-old woman with peripheral arterial disease (PAD) and DMT2 developed swelling and redness of the left foot and lower leg. Acute exacerbation of PAD was diagnosed, and the patient was referred to hospital. On admission, PCR was positive and later the patient got classic symptoms of Covid-19. She refused operative treatment and was discharged from the hospital. Case 3: A 85-year-old woman with previous DMT2, dyslipidemia, atherosclerotic heart, and left hip TEP developed recurrent hypoglycemia (3.1–3.7 mmol/L). During one attack of hypoglycemia, the patient fell and dislocated the TEP of the left hip. On the eleventh day, she got the classic symptoms of Covid-19, pneumonia, and acute respiratory distress syndrome. The patient died while in hospital after seven days. Case 4: A 35-year-old woman, otherwise healthy, suddenly got urticaria for no apparent reason. After four days of outpatient treatment of urticaria, the classic symptoms of Covid-19 developed. Case 5: A 45-year-old woman who normally has migraine got an unusually severe migraine attack and two days later the classic symptoms of Covid-19 developed.

Discussion: Numerous studies have shown that Covid-19 may have rare symptoms at the beginning or during infection that can be grouped into cardiovascular, neurological, cutaneous, gastroenterological, urological, nephrological, and mental conditions.

Conclusion: Rare symptoms of Covid-19 can divert FP's attention in the wrong direction.

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12. POSTERI

■ Poznavanje alata za procjenu kardiovaskularnog rizika u pacijenata sa šećernom bolesti tipa 2 (DM2) među studentima medicine

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Ključne riječi: diabetes mellitus, kardiovaskularne bolesti, procjena rizika

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Uvod: Šećerna bolest dostiže pandemijske razmjere. U svijetu je trenutačno oko 463 milijuna osoba oboljelih od te bolesti. U Hrvatskoj je 2020., prema CroDiab registru, bilo 310 tisuća i 212 oboljelih, a procjenjuje se da je ta brojka i viša. Procjena stupnja educiranosti o kardiovaskularnom (KV) riziku među studentima od velike je važnosti jer je primjereno stupanj educiranosti preduvjet dobrog medicinskog nadzora, ishoda liječenja i smanjenja polifarmacije tijekom kontinuirane skrbi o pacijentima s bolesti DM2.

Materijali i metode: Izrađena je anketa u Google Forms aplikaciji, koju su ispunjavali studenti 6. godine. Prikupljeno je 88 odgovora preko kojih je analizirana razina znanja o alatima za procjenu KV rizika. Studenti su podijeljeni u dvije skupine: prema tome jesu li odslušali kolegij Obiteljska medicina i prema osobnom dojmu razine znanja o procjeni KV rizika.

Rezultati: Kolegij Obiteljska medicina odslušalo je 53 ispitanika (60,2 %), a njih 38 (43,7 %) smatra da ima dovoljno znanja o procjeni KV rizika. Iako je sa SCORE2 kalkulatorom upoznato 97,4 % studenata, samo bi ih 48,9 % računalo KV rizik u naizgled zdravih. Za procjenu KV rizika u osoba s DM-om tipa 2 studenti bi, njih 41,6 % upotrijebili ADVANCE, 26,0 % DIAL, a QRISK samo 9,1 % studenata. Hrvatsku je u zemlju visokog KV rizika kategoriziralo 71,3 % studenata. Njih 77,4 % misli da je nužno održavati vrijednost LDL-kolesterola ispod 1,8 mmol/L te razinu HbA1c ispod 7,0 %. Više od trećine (35,3 %) studenata smatra da su statini nužan dio dijabetičke terapije.

Rasprrava: Nije zabilježena statistički značajna razlika u pitanju ciljane vrijednosti LDL-kolesterola ($p = 0,153$), HbA1c ($p = 0,104$) i nužnosti primjene statina ($p = 0,765$) s obzirom na odslušanost kolegija, a ni s obzirom na osobnu procjenu razine znanja ($p = 0,899$, $p = 0,376$, $p = 0,201$). Postoji razlika u poznavanju pojma rezidualnog kardiovaskularnog rizika ($p = 0,022$, $p = 0,275$).

Zaključak: Rezultati upućuju na potrebu podizanja svijesti o važnosti primjene smjernica i kritičkog pristupa pri njihovoj evaluaciji te na potrebu primjene teorijskog znanja na slučajevima prisutnima u svakodnevnom kliničkom radu tijekom obrazovanja budućih lječnika.

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■ Medical students' awareness of tools for assessing cardiovascular risk in patients with type 2 diabetes

Keywords: diabetes mellitus, cardiovascular disease, risk assessment

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Introduction: Diabetes is reaching pandemic proportions. There are currently about 463 million people in the world suffering from this disease. In Croatia in 2020, according to the CroDiab register, there were 310,212 patients, and it is estimated that this number is even higher. Assessing the level of education on cardiovascular (CV) risk among students is of great importance because an appropriate level of education is a prerequisite for good medical supervision, treatment outcomes and reduction of polypharmacy during continuous care of patients with DM2.

Materials and methods: A survey was created via the Google Forms application, which was filled out by 6th year students. Eighty-eight answers were collected, through which the level of knowledge about tools for CV risk assessment was analyzed. Students were divided into two groups: whether they had attended the Family Medicine course and according to personal impression of their level of knowledge about CV risk assessment.

Results: 53 respondents (60.2%) attended the course, and 38 (43.7%) believe that they have sufficient knowledge of CV risk assessment. Although 97.4% of students are familiar with the SCORE2 calculator, only 48.9% would calculate CV risk in the seemingly healthy. To assess CV risk in people with type 2 DM, 41.6% of students would use ADVANCE, 26.0% DIAL, and only 9.1% of students would use QRISK. Croatia was categorized as country of high CV risk by 71.3% of students, while 77.4% of students think that it is necessary to keep the LDL-cholesterol level below 1.8 mmol/L and the HbA1c level below 7.0%. More than a third of them (35.3%) believe that statins are a necessary part of diabetic therapy.

Discussion: There was statistically no significant difference in the target value of LDL-cholesterol ($p = 0.153$), HbA1c ($p = 0.104$) and the necessity of statin use ($p = 0.765$) with regard to course attendance, nor with regard to personal assessment of the level of knowledge ($p = 0.899$, $p = 0.376$, $p = 0.201$). There is a difference in knowledge of the concept of residual cardiovascular risk ($p = 0.022$, $p = 0.275$).

Conclusion: The results indicate that, during the education of future physicians, there is a need to raise awareness of the importance of applying the guidelines, to develop a critical approach in their evaluation and to apply theoretical knowledge in treating patients who present in everyday clinical work.

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COVID-somnia – nova dijagnoza

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Ključne riječi: COVID-19 infekcija, nesanica, COVID-somnia

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Uvod s ciljem: COVID-19 je respiratorna bolest koja se pojavila u prosincu 2019. te uzrokovala globalnu pandemiju. Osim tipičnih simptoma, uočena je prisutnost nesanice i lošije kvalitete spavanja u pacijenata koji boluju ili se oporavljaju od COVID-19 bolesti, a uzrok se može pripisati tjelesnim simptomima, primjenjenim lijekovima, posttraumatskom stresnom poremećaju, depresiji i anksioznosti.

Cilj je ovoga rada prikazati slučaj pacijentice kod koje je COVID-19 infekcija dovela do nesanice.

Prikaz slučaja: Šezdesetogodišnja pacijentica javlja se zbog subfebrilnosti, suhog kašla i mišaljije u trajanju od dva dana. Upućena je na PCR testiranje na SARS-CoV-2 te nalaz pristiže pozitivan. Pacijentica inače ne uzima nikakvu kromičnu terapiju. Svakodnevno je telefonski kontaktirana, a zbog pogoršanja devetog dana bolesti pregledana je u kući uz zaštitnu opremu. Doima se prestrašena i dispnoična, a u fizikalnom nalažu febrilna 38,6 °C, RR 90/60 mmHg, puls 88/min, saO2 93 %, te se upućuje u bolnicu. Tijekom osam dana hospitalizacije liječena je kortikosteroidnom terapijom, niskomolekularnim heparinom i oksigenoterapijom. Pri otpustu preporuka je uzimanje metilprednizolona uz gastroprotek ciju sljedećih devet dana, acetilsalicilne kiseline mjesec dana te vitamina D. Budući da je pacijentica ostala na dužem bolovanju, redovito je dolazila na kontrole te se u više navrata žalila na nesanicu, osjećaj lupanja srca i slabost u nogama. Upućena je na obradu u post-COVID neurološku ambulantu te joj je savjetovano vođenje dnevnika spavanja, educirana je o higijeni spavanja i pružena joj je psihološka podrška zbog straha od dugotrajnih posljedica bolesti i usamljenosti. Pacijentica nije bila sklona farmakološkom liječenju, ali je radi pružanja podrške i bolje adherencije u higijeni spavanja naručivana na redovite kontrolne preglede.

Zaključak: COVID-19 infekcija utječe i na živčani sustav, uzrokujući neurološke simptome već od ranih stadija bolesti, a najčešći su poremećaji spavanja. Kako bi se izbjegle dugoročne posljedice i očuvala kvaliteta života pacijenta, važno je na vrijeme prepoznati i liječiti

problem, a najučinkovitijim se pokazuje personalizirani pristup pacijentu.

■ COVID-somnia - new diagnosis

Keywords: COVID-19 infection, insomnia, COVID-somnia

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Introduction and aim. COVID-19 is a respiratory disease that emerged in December 2019 and caused a global pandemic. In addition to typical symptoms, insomnia and poor sleep quality have been observed in patients suffering from or recovering from COVID-19, and the cause can be attributed to physical symptoms, medications, post-traumatic stress disorder, depression and anxiety.

The aim of this paper is to present the case of a patient in whom COVID-19 infection has led to insomnia.

Case report. A 60-year-old patient presents with subfebrile, dry cough, and myalgia for two days. She is referred for PCR testing for SARS-CoV2 and the result is positive. The patient does not take any chronic therapy. She is contacted by phone every day, and due to the worsening on the ninth day of her illness, she is examined at home with protective equipment. She appears frightened and dyspnoeic, and in the physical finding she is febrile 38.6°C, RR 90/60 mmHg, pulse 88/min, saO₂ 93% and is sent to hospital. During the eight days of hospitalization, she is treated with corticosteroid therapy, low-molecular-weight heparin and oxygen therapy. She repeatedly complains of insomnia, a feeling of palpitations, and weakness in her legs. She is referred to a post-COVID neurology clinic for treatment and is advised to keep a sleep diary. She is also educated about sleep hygiene and provided psychological support for fear of the long-term consequences of illness and loneliness. The patient is not inclined to pharmacological treatment, but in order to provide support and better adherence to sleep hygiene, she is ordered to have regular check-ups.

Conclusion. COVID-19 infection also affects the nervous system, causing neurological symptoms from the early stages of the disease, and sleep disorders are the most common. In order to avoid long-term consequences and preserve the quality of life of the patient, it is important to identify and treat the problem in time, and a personalized approach to the patient is the most effective of all.

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■ Problem kontinuiteta skrbi za oboljele od šećerne bolesti tipa 2 u obiteljskoj medicini – rezultati pilot-audit studije

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Ključne riječi: kontinuirana skrb, šećerna bolest tipa 2, telefonski poziv

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Uvod s ciljem: Dosadašnjim istraživanjima utvrđeno je da 47 – 80 % oboljelih od šećerne bolesti ima barem jednu izmjerenu vrijednost HbA1c godišnje. Cilj je utvrditi je li šećerna bolest tipa 2 (ŠB) lošije regulirana u oboljelih bez adekvatnog kontinuiteta skrbi u odnosu na bolesnike s dobrim kontinuitetom skrbi koju pruža liječnik obiteljske medicine.

Ispitanici i metode: Presječno istraživanje provedeno je tijekom studenoga i prosinca 2021. u ordinaciji obiteljske medicine Doma zdravlja Zagreb – Zapad na 1712 osoba u skrbi i 120 otkrivenih dijabetičara (7,01 %, 75 muškaraca i 45 žena) bez stalnog liječnika. Prvu skupinu čine bolesnici s određenim HbA1c u 2020. i 2021. godini, a drugu skupinu dijabetičari koji nisu zadovoljili navedeni uvjet te su telefonski pozvani i upućeni na laboratorijsko određivanje HbA1c, LDL-kolesterola, triglicerida i kreatinina (vrijednost glomerularne filtracije [eGFR]). Svim ispitanicima određen je kardiovaskularni (KV) rizik SCORE tablicama. Statistička značajnost za kontinuirane varijable utvrđena je pomoću Mann-Whitneyeva U-testa, a za kategoričke pomoću χ^2 testa u programu Statistica v.10.0.

Rezultati: Ukupno 48 oboljelih pozvano je telefonski (40,00 %, 32 muškarca i 18 žena) od kojih 9 oboljelih (18,75 %, 6 muškaraca i 3 žene) do isteka važenja uputnice nije učinilo laboratorijsko vađenje krvi iako su pristali na sudjelovanje u istraživanju. U 64,58 % pozvanih bolesnika HbA1c posljednji je put određen 2018. ili ranije. Nije bilo razlika između spolova, niti u broju korištenih oralnih antihiperglikemika između ispitanih skupina. U pozvanih osoba ŠB je statistički duže trajao nego u prvoj skupini (medijan 9,5 vs. 8 godina; P = 0,034), KV rizik bio je značajno viši (medijan 11 vs. 9; P = 0,004), a dob ispitanika nije se pokazala statistički značajna (medijan 68,5 vs. 70 godina; P = 0,821). Pozvani pacijenti imali su značajnije lošiju regulaciju ŠB-a od prve skupine (HbA1c medijan 6,7 [6,1 – 7,6 %] vs. 7,3 % [6,7 – 8,3 %]; P = 0,003). HbA1c > 7 % imalo je 61,54 % pozvanih ispitanika, dok je ta vrijednost u prvoj skupini značajno manja, 34,72 % (χ^2 = 6,33; P = 0,012). Iako su pozvani ispitanici imali više vrijednosti LDL-kolesterola,

triglicerida i eGFR-a u odnosu na prvu skupinu, razlike nisu bile statistički značajne.

Zaključak: Oboljeli od ŠB-a s neadekvatnim kontinuitetom skrbi imali su duže trajanje bolesti, viši KV rizik te znatno lošiju regulaciju bolesti uz isti broj antihiperglikemika od bolesnika u kojih je skrb bila provedena prema smjernicama u posljednje dvije godine.

■ Continuity of care for diabetic patients in family medicine – pilot-audit study results

Keywords: continuity of care, diabetes mellitus type 2, phone call

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Introduction: Studies show that 47-80% of all diabetic patients have at least one measured HbA1c value per year. The aim of this study was to determine whether type 2 diabetes mellitus in patients without adequate continuity of care was poorer controlled than in patients with good continuity of care in family medicine.

Subject and methods: Cross-sectional research was conducted during November and December 2021 in one family medicine practice in Health center Zagreb – West without a permanent family physician with 1712 patients in care and 120 diabetic patients with diagnosis (7.01%, 75 males, 45 females). The first group consisted of diabetic patients with determined HbA1c values in 2020 and 2021. On the other hand, the second group contained diabetic patients who did not meet the conditions for the first group and was called and referred to the lab to determine HbA1c, LDL cholesterol, triglycerides, and creatinine (with glomerular filtration rate [eGFR]) afterward. Cardiovascular risk was determined in all patients with SCORE risk charts. Statistical significance was determined by the Mann-Whitney U test and χ^2 test in Statistica v.10.0.

Results: Total of 48 diabetic patients were called (40.00%, 32 males, 18 females) of which 9 (18.75%, 6 males, 3 females) did not go to the lab until the referral paper expiry date, even though they agreed to do it. In 64.58% of the called patients, HbA1c was last determined in 2018 or earlier. There were no differences between genders, nor in the number of used antihyperglycemic medications between the examined groups. In the called patients, diabetes lasted longer than in the first group (median 9.5 vs. 8 years; $P=0.034$), CV risk was significantly higher (median 11 vs. 9; $P=0.004$), but patients' age did not show any

significance (median 68.5 vs. 70 years of age; $P=0.821$). Called patients had significantly poorer control of the disease compared to the first group (HbA1c median 6.7 [6.1-7.6%] vs. 7.3% [6.7 – 8.3%]; $P=0.003$). Among the called patients, 61.54% had HbA1c > 7%, while it was significantly lower in the first group, 34.72% ($\chi^2=6.33$; $P=0.012$). Although the called patients had higher values of LDL cholesterol, triglycerides, and eGFR compared to the first group, these differences were not statistically significant.

Conclusion: Diabetic patients with inadequate continuity of care had a longer duration of the disease, higher CV risk, and significantly poorer diabetes regulation with the same number of antihyperglycemic medications compared to the patients with good continuity of care in the past two years.

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■ Važnost nutritivne potpore u onkoloških bolesnika

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Ključne riječi: nutritivna potpora, enteralna prehrana, onkologija

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Uvod s ciljem: Nutritivna deficijencija javlja se u 15 – 40 % onkoloških pacijenata, a može nastati zbog samog karcinoma ili neizravno metaboličkim promjenama uzrokovanim karcinomom, te dovodi do kaheksije. U vrijeme postavljanja dijagnoze i tijekom liječenja nutritivna je procjena nužna jer je pothranjenost vrlo bitan čimbenik u procesu liječenja i kvaliteti života bolesnika. Cilj je rada prikazati važnost enteralne prehrane kod onkoloških bolesnika.

Rasprava: Tumorska kaheksija definirana je sljedećim kriterijima: pacijent je nenamjerno izgubio na tjelesnoj težini više od 5 % u tri do šest mjeseci, unos manje od 1500 kcal/dan i vrijednosti C-reaktivnog proteina 10 i više. Postoji više metoda probira za ocjenu nutritivnog statusa; NRS-2002 (engl. *Nutrition Risk Screening-2002*), MUST (engl. *Malnutrition Universal Screening Tool*), SARC-F (engl. *Strength, assistance with walking, rising from a chair, climbing stairs, and falls questionnaire*) ili detaljne metode pregledom antropometrijskih mjerena ili mjerena sastava tijela. Pravovremenom procjenom nutritivnog statusa djeluje se na očuvanje mišićne snage i smanjenje gubitka tjelesne mase, onemogućavanje nastanka komplikacija bolesti, očuvanje kvalitete života te smanjenje rizika od smrtnosti. Nutritivna prehrana onkoloških bolesnika vrlo je složena i u donošenju odluka moraju sudjelovati obiteljski liječnici, nutricionisti, kirurzi, farmakolozi i psiholozi. Kemoterapija može uzrokovati nuspojave što utječe na smanjenje apetita i posljedično tome na manji unos hrane. Neke nuspojave mogu potrajati dugo nakon prestanka liječenja, a u nekim slučajevima pacijenti se nikada ne oporavljaju. Povećan unos kalorija nije dovoljan za liječenje tumorske kaheksije. Parenteralna prehrana uzrokuje razvoj komplikacija i vrlo je skupa, a postotak morbiditeta pri primjeni parenteralne prehrane iznosi oko 15 %. Razlozi za primjenu enteralne prehrane jesu tumorska kaheksija uz nenamjerni gubitak tjelesne težine veći od 5 % u mjesec dana, nenamjerni gubitak tjelesne težine veći od 10 % u tri mjeseca, NSR 2002 ≥ 3, BMI < 20,5 te ako se zbog bolesti ne mogu normalnim putem zadovoljiti energetske i nutritivne potrebe. Kontraindicirana je kod izraženog povraćanja, jakih bolova u trbuhi,

profuznih proljeva, mehaničke opstrukcije te drugih poremećaja crijeva. Posebnu pažnju zauzima eikosapentenočna kiselina (EPA), koja pripada ω-3 masnim kiselinama, a smanjuje proizvodnju prouplnih citokina te inhibira učinke čimbenika indukcije proteolize. Preporuku za primjenu pripravaka koji sadrže EPA-u daje bolnički specijalist koji sudjeluje u onkološkom liječenju. U nalazu je obvezno navesti status, tjelesnu težinu bolesnika i medicinske razloge zbog kojih postoji potreba za tom vrstom enteralne prehrane. Nastavak primjene procjenjuje bolnički specijalist svakih šest mjeseci tijekom redovite kontrole, što je nedostatak upotrebe enteralne prehrane u svakodnevnoj praksi, jer upravo obiteljski liječnici najbolje poznaju svojeg pacijenta i kontinuirano ga prate. Obiteljski liječnici sami ne mogu propisati enteralne pripravke, no mogu bolničkim specijalistima poslati upit za preporuku A5 uputnicom uz detaljnu anamnezu i fizikalni status pacijenta, relevantne nalaze i nutritivne probire.

Zaključak: Procjena nutritivnog statusa vrlo je važan segment onkološkog liječenja, a adekvatan odabir nutritivne potpore osigurava bolju kvalitetu života i poboljšava nastavak liječenja onkoloških pacijenata. Pandemija COVID-19 svakako je još više potaknula upotrebu elektroničke konzultacije.

The importance of nutritional support in cancer patients

Keywords: nutrition support, enteral nutrition, oncology

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Introduction and aim: Nutritional deficiency occurs in 15–40% of cancer patients and can occur due to the cancer itself or indirectly to metabolic changes caused by cancer. It leads to cachexia. At the time of diagnosis and during treatment, nutritional assessment is necessary since malnutrition is a very important factor in the treatment process and the quality of life of the patient. The aim of this paper is to show the importance of enteral nutrition in cancer patients.

Discussion: Tumor cachexia is defined by the following criteria: the patient has inadvertently lost more than 5% of body weight in three to six months, their intake is below 1500 kcal/day, and C-reactive protein values are 10 and more. There are several screening methods for assessing the nutritional status; NRS-2002 (Nutrition Risk Screening-2002) MUST (Malnutrition Universal Screening Tool), SARC-F (Strength, assistance with walking, rising from a chair, climbing stairs, and falls questionnaire) or detailed review of anthropometric measurements or measurements of body composition. Timely assessment of nutritional status works to preserve muscle strength and reduce weight loss, prevent complications of the disease, preserve quality of life and reduce the risk of mortality. The nutritional diet of cancer patients is very complex and family physicians, nutritionists, surgeons, pharmacologists and psychologists must be involved in decision-making. Chemotherapy can cause side effects that reduce appetite and consequently reduce food intake. Some side effects may last long after the treatment is completed, and in some cases, patients never recover. Increased calorie intake is not enough to treat tumor cachexia. Parenteral nutrition causes the development of complications and is very expensive, and the percentage of morbidity

when using parenteral nutrition is about 15%. Reasons for enteral nutrition are tumor cachexia with unintentional weight loss of more than 5% in one month, unintentional weight loss of more than 10% in three months, NSR 2002 ≥ 3 , BMI <20.5 and if the patient's energy and nutritional needs can not be met by normal food intake. It is contraindicated in severe vomiting, severe abdominal pain, profuse diarrhea, mechanical obstruction and other intestinal disorders. Special attention is paid to eicosapentaenoic acid (EPA), which belongs to ω -3 fatty acids, reduces the production of proinflammatory cytokines and inhibits the effects of proteolysis-inducing factors. The recommendation for the use of preparations containing EPA is given by a hospital specialist involved in oncological treatment. The report must state the status, body weight of the patient and the medical reasons why there is a need for this type of enteral nutrition. Continued use is assessed by a hospital specialist every six months during regular check-ups, the factors being insufficient daily enteral nutrition, as it is family doctors who know their patient best and monitor them continuously. Family physicians cannot prescribe enteral preparations on their own, but they can send a request for recommendation to hospital specialists via A5 referrals with a detailed history and physical status of the patient, relevant findings and nutritional screenings.

Conclusion: Assessment of nutritional status is a very important segment of oncology treatment. Adequate selection of nutritional support ensures a better quality of life and improves the continuation of treatment of oncology patients. The COVID-19 pandemic has certainly further encouraged the use of electronic consultation.

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■ Primjer malog kirurškog zahvata u obiteljskoj medicini – ekstrakcija lipoma

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Ključne riječi: mali kirurški zahvati, obiteljska medicina

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Uvod s ciljem: Mali kirurški zahvat (MKZ) jest postupak koji liječnici obiteljske medicine (LOM) sve češće rade u uobičajenoj praksi. Takvi su zahvati karakterizirani kratkim vremenom izvođenja te se u pravilu izvode na površinskim strukturama u lokalnoj anesteziji. Korektno izvedeni, nose nizak rizik za razvoj komplikacija.

Cilj je rada na primjeru pokazati uspješno izveden postupak maloga kirurškog zahvata u ambulantni obiteljske medicine (OM).

Rasprava: Pacijent, 49 godina, hipertoničar koji redovito uzima terapiju, javlja se u ambulantu OM-a s lipomatoznom tvorbom, veličine 5 x 5 cm, na dorzalnom dijelu vrata. Palpira se sadržaj koji je pomican, srednje tvrd. Ne uočavaju se elementi upale. Pacijent navodi da mu lipom veličinom smeta pri odijevanju te je suglasan da se ambulantno kirurški odstrani. Za obavljanje MKZ-a osigurana je zasebna radna prostorija. Pripremi se radno područje sa sterilnim instrumentima, anestetikom i potrošnim materijalom. Medicinska sestra sterilno pripremi područje zahvata. LOM učini MKZ tako da upotrijebi lokalnu anesteziju, učini mali rez skalpelom, veličine 5 – 6 mm. Zatim instrumentom, peanom, uđe u područje lipoma i pažljivo ekstrahira kompletну kapsulu lipoma sa sadržajem. Provjeri se ima li zaostalih segmenata. Zbog malog kirurškog reza ne stavi se šav, već se uvede dren koji će osigurati drenažu sadržaja do kontrole. Na operativno područje stavi se gaza s povidon-jodom te se previje sterilnom gazom. Pacijent se naruči na kontrolno previjanje sljedeći dan. Nakon nekoliko dana, uz redoviti prijevoj, rana uredno cijeli.

Zaključak: Češće izvođenje zahvata male kirurgije u ambulantni OM-a može bitno unaprijediti stručnu razinu i skrb o pacijentima, te se predlaže što češća primjena. Uvođenje MKZ-a prihvatljivo je za pacijente i za liječnika obiteljske medicine, a istovremeno se kao ishod postiže bolja skrb o pacijentima. Preduvjet za izvođenje MKZ-a jest dostatna edukacija i dostatna materijalna opremljenost.

■ An example of a small surgical procedure in family medicine - lipoma extraction

Keywords: minor surgical procedures, family medicine

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Introduction and aim of: Minor surgery (MS) is a procedure that family physicians (FPs) are increasingly doing in their practice. These procedures of short duration are usually performed on superficial structures under local anesthesia. Thus, they carry a low risk of complications.

The aim of this paper is to show the process of a performed small surgical procedure in a family medicine clinic (FM).

Discussion: The patient, 49 years old, with regulated hypertension, occurs in the FM clinic with a lipomatous formation, size 5 x 5 cm, on the dorsal part of the neck. The palpated medium-hard content is moving. No elements of inflammation are observed. The patient states that the size of the lipomatous formation bothers him when he is getting dressed and that he agrees to have it surgically removed. A separate working room is provided to perform the MS. The work area is prepared with sterile instruments, anesthetics, and consumables. The nurse prepares the sterile area for the procedure. FP performs the MS by using local anesthesia, making a small incision with a scalpel, 5 - 6 mm in size. Then, with an instrument, a pean enters the area of the lipoma and carefully extracts the complete lipoma capsule with its contents. The surgical would is checked for remaining segments. Due to the small surgical incision, no suture is placed, but a drain is introduced which will ensure drainage of the contents until the control. Sterile gauze with povidone-iodine is put on the operative area and sterile closed. The patient is ordered for a control dressing the following day. After a few days, with a regular bandage, the wound is healing properly.

Conclusion: More frequent small surgeries in the FM outpatient clinic can significantly improve

the professional level and care of patients, and it is suggested that they be used as often as possible. The introduction of MS is acceptable for patients and family physicians, the outcome being a better patient care. A prerequisite for performing the MS is sufficient education and material equipment.

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Prikaz slučaja: Pacijent s akutnom encefalopatijom u području hipokampalnih regija obostrano uslijed intoksikacije tetrahidrokanabinolom

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Ključne riječi: kanabinoidi, hipokampus, limbički encefalitis

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Uvod s ciljem: Cilj prikaza slučaja bio je upozoriti na štetnost dugotrajnog korištenja kanabisa s posebnim osvrtom na učinak delta-9-tetrahidrokanabinola na neurološki sustav, obzirom su ove tvari sve češće zastupljene i često korištene u mlađih osoba. Akutna encefalopatija u području limbičkog sustava zabilježena je u svijetu u nekoliko desetaka slučajeva pacijenata koji su koristili tetrahidrokanabinole, a najčešće zahvaćena područja bila su insula i hipokampus^{1,2}.

Prikaz slučaja: Pacijent u dobi od 30 godina zaprimljen je na OHBP nakon pronađaska u svom stanu. Pronađen je smeten, teškog disanja i pomokren. Iz osobne anamneze saznaće se kako unazad 15-ak godina uzima različite psihotropne tvari. Tijekom 2018. godine u 2 navrata je pregledan ambulantno zbog konvulzivne cerebralne atake, a uvedenu terapiju nije uzimao. Postavljena je sumnja na intoksikaciju tetrahidrokanabinolom uz moguć epileptički napad. Pri prijemu pacijent je bio pri svijesti, tremorozan, dezorientiran, urednog grubog neurološkog statusa, afebrilan, urednog arterijskog tlaka, izrazite leukocitoze ($43,5 \times 10^9/L$) uz povišene vrijednosti mišićnih enzima i bubrežnih parametara te blago povišen CRP. U toksikološkom nalazu bili su pozitivni kanabinoidi uz niske koncentracije alkohola u serumu. Sljedeći dan u laboratorijskim se nalazima pratio porast CK-a, CK-MB-a i CRP-a. Učinjen je hitni MSCT glave te je zamjećena desno frontobazalno zona malacije s rubnim defektom krova desne orbite (upalna kolekcija dimenzija 18×7 mm). Hitni UZV abdomena te RTG srca i pluća bili su uredni. Obzirom na povišene upalne parametre, poremećeno stanje svijesti i neuroradiološki nalaz postavljen je sumnja na encefalitis. U nalazima likvora detektiran je blaže povišeni broj leukocita, neutrofila uz povišene proteine, glukozu i laktate te smanjen broj limfocita. Ex iuvantibus je uključena intravenska terapija meropenemom, vankomicinom i azitromicinom, a ordinirana je i psihijatrijska terapija i terapija antiepilepticima. MR mozga prikazao je hiperintenzitet hipokampalnih regija obostrano, izraženije s desne strane što je ukazivalo na limbički encefalitis. Serološki profil ukazivao je na prokuženost sa HSV-1, CMV i EBV-om dok je serološki profil za hepatitis B virus odgovarao statusu poslije cijepljenja.

Urinokultura i hemokultura bile su sterilne, panel na meningitise i encefalitise u likvoru negativan kao i serologija na B.burgdorferi. U likvoru nisu nađene maligne stanice. Nalaz elektroencefalografije bio je difuzno dizritmički promijenjen. Serum, urin i likvor naknadno su poslati na analizu na krpeljni meningoencefalitis i Virus Zapadnog Nila, a nalazi su pristigli uredni.

Rasprava: Obzirom je pacijent imao znakove rabdomiolize, akutne tubularne nekroze i povišene upalne parametre, a detaljnou obradom isključeni su autoimuni i infektivni uzroci akutne encefalopatije u području hipokampalnih regija obostrano te elektroencefalografijom nije nađeno epileptičke aktivnosti zaključeno je kako je aktualno stanje posljedica encefalopatije posljedično dugotrajnoj konzumaciji psihoaktivnih tvari dok je inicijalni epileptički napad nastao vjerojatno posljedično hipoglikemiji ili djelovanju delta-9-tetrahidrokanabinola. Pacijentu je savjetovana stroga apstinencija od svih psihoaktivnih tvari, a kontrolni MR mozga nakon tri mjeseca pokazao je smanjenje promjena u području hipokampalnih regija.

Zaključak: Primjena kanabinoida ima učinak na procese pamćenja djelovanjem na kolinergični limbički sustav, a intoksikacija kanabinoidima može dovesti do pojave encefalitisa. Pri postavljanju dijagnoze važno je isključiti drugu moguću etiologiju poput infekcije, autoimunih bolesti i paraneoplastičnog sindroma, a važnu ulogu u prepoznavanju, ali i prevenciji nastanka navedenih komplikacija imaju liječnici obiteljske medicine koji su najčešće prvi upoznati sa navikama pacijenata te s njima imaju kontinuiran kontakt.

Case report: Patient with acute hippocampal encephalitis caused by tetrahydrocannabinol intoxication

Key words: Cannabinoids, Hippocampus, Limbic Encephalitis

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Introduction: The aim of this case report was to demonstrate the harmful effects of long-term cannabis use with special reference of the effect of delta-9-tetrahydrocannabinol on the neurological system, as these substances are increasingly commonly used and especially by younger people. Acute limbic encephalopathy has been reported worldwide in dozens of cases of patients using tetrahydrocannabinol, and the most commonly affected areas were the insula and hippocampus^{1,2}.

Case report: A 30-year-old patient was admitted to ER after being found in his apartment. He was found confused, breathing hard and had wet himself. From his personal anamnesis, it is known that he has been taking various psychoactive substances for the past 15 years. In year 2018, he was examined twice through the neurological clinic, due to a convulsive cerebral attack, and he did not take the introduced therapy. Tetrahydrocannabinol intoxication with a possible epileptic seizure has been suspected. On admission, the patient was conscious, tremorous, disoriented, of normal gross neurological status, afebrile, of normal arterial pressure. He had severe leukocytosis (43.5 x 10⁹ / L) with elevated muscle enzymes and renal parameters with slightly elevated CRP. In the toxicological finding, there were positive cannabinoids with low serum alcohol values. The next day, the increase in CK, CK-MB, and CRP was monitored in laboratory findings. An emergency MSCT of the head was performed and a right front basal deficit zone with a marginal roof defect of the right orbit (inflammatory collection measuring 18x7 mm) was observed. Emergency abdominal ultrasound and heart and lung X-rays were normal. Encephalitis has been suspected due to elevated inflammatory parameters, impaired state of consciousness and neuroradiological findings. In the findings of cerebrospinal fluid, a slightly increased number of leukocytes, neutrophils were detected, along with increased proteins, glucose and lactates, and a reduced number of lymphocytes. Intravenous therapy (meropenem, vancomycin and azithromycin) was introduced ex iuvantibus. Psychiatric

and antiepileptic therapy was also prescribed. MRI of the brain showed hyperintensity of the hippocampal regions bilaterally, more pronounced on the right side indicating limbic encephalitis. Urine culture and blood culture were sterile; the panel on meningitis and encephalitis in cerebrospinal fluid was negative as was the serology on B. burgdorferi. No malignant cells were found in the cerebrospinal fluid. The electroencephalography finding was diffusely dysrhythmically altered. Serum, urine and cerebrospinal fluid were subsequently sent for analysis for tick-borne meningoencephalitis and West Nile Virus, and the readings were good.

Discussion: Considering the patient had signs of rhabdomyolysis, acute tubular necrosis and elevated inflammatory parameters, autoimmune and infectious causes of acute encephalopathy in the hippocampal region on both sides were excluded by detailed investigation. The electroencephalography finding showed no signs of epilepsy and the conclusion was that long-term consumption of psychoactive substances caused encephalopathy while the initial epileptic seizure occurred probably due to hypoglycemia or the direct action of delta-9-tetrahydrocannabinol. The patient was advised to abstain strictly from all psychoactive substances, and a control MRI of the brain after three months showed a reduction in changes in the area of the hippocampal regions.

Conclusion: The use of cannabinoids has an effect on memory processes by acting on the cholinergic limbic system and cannabinoid intoxication can lead to the appearance of encephalitis. When making a diagnosis, it is important to exclude other possible etiologies such as infection, autoimmune diseases and paraneoplastic syndrome, and an important role in recognizing, but also preventing the occurrence of these complications have family physicians who are usually the first to get acquainted with the habits of patients.

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■ Učinkovitost povratne informacije u komunikaciji

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Ključne riječi: komunikacija, povratna informacija, medicina, fizioterapija, klinička praksa



SažetakUvod: Učinkovita komunikacija u kliničkoj praksi u zajedničkom je interesu zdravstvenog djelatnika kao provoditelja medicinskih postupaka i pacijenata kao korisnika zdravstvenih usluga. Povratna informacija čini temelj komunikacijskog procesa u kliničkoj praksi, a sastoji se od informacije koju primatelj poruke vraća pošiljatelju. Povratna informacija omogućuje prepoznavanje točnosti i razumljivosti primljene informacije. Kada se komunikacijski *feedback* ne dogodi, proces komunikacije naziva se jednosmjernom komunikacijom. Dvosmjerna komunikacija, koja je uvijek poželjna, dogada se kada postoji povratna informacija koja može biti izravno usmena izjava ili pak neverbalna poruka ostvarena kao izraz lica, pogled, gesta ili promjena u držanju tijela.

Cilj: Cilj istraživanja bio je procijeniti učinkovitost povratne informacije u komunikaciji fizioterapeuta u njihovoј kliničkoj praksi bilo da se radi o komunikaciji s pacijentima ili o komunikaciji s drugim članovima zdravstvenog tima. Hipoteza istraživanja H1: U procjeni komunikacijskog *feedbacka* postoje razlike među fizioterapeutima s obzirom na godine radnog staža.

Metodologija istraživanja: Kako bi se analizirao komunikacijski *feedback* kod fizioterapeuta, provedeno je anketno istraživanje „Procjena komunikacije fizioterapeuta s korisnicima fizioterapije i u zdravstvenom timu“ u razdoblju od 1. svibnja do 31. prosinca 2018. godine. Istraživanje je provedeno na području cijele Republike Hrvatske u zdravstvenim ustanovama gdje se obavlja djelatnost fizičke terapije. Testni skup u istraživanju čini 471 fizioterapeut.

Rezultati: Rezultati provedene jednosmjerne analize varijance upućuju na statistički značajne razlike ($p < .01$) u prosječnom rezultatu s obzirom na radni staž fizioterapeuta. *Post-hoc* testom (Scheffe) utvrđeno je da skupina fizioterapeuta s više od 30 godina radnog staža ima značajno viši prosječan rezultat od skupine s 15 – 29 godina radnog staža. Rezultati najmlađe skupine (do 15 godina radnog staža) ne razlikuju se od ostalih skupina. Nije dobivena statistički značajna razlika u rezultatima ankete s obzirom na rod ispitnika i različite oblike fizioterapeutske prakse (javne institucije i privatna praksa).

Zaključak: Povratne informacije u kliničkoj komunikaciji dragocjene su kod pružanja medicinskih informacija korisnicima zdravstvenih usluga

i u komunikaciji s drugim zdravstvenim djelatnicima unutar zdravstvenog tima, gdje se daju ili traže povratne informacije vezano za klinički rad i određena stručna pitanja. Prema dobivenim rezultatima istraživanja potvrđena je postavljena hipoteza da u procjeni komunikacijskog *feedbacka* postoje razlike među fizioterapeutima s obzirom na godine radnog staža.

■ Efficiency of feedback in communication

Keywords: Communication, Feedback, Medicine, Physiotherapy, Clinical Practice



Introduction: Effective communication in a clinical practice is in the common interest of a health worker as a medical agent and patients as a health care user. Feedback makes the foundation of the communication process in a clinical practice, consisting of information that the recipient of the message returns to the sender. The feedback allows to recognize the accuracy and the understandability of the information. When the communication feedback does not happen, the communication process is called one-way communication. The two-way communication, which is always desirable, happens when there is feedback that can be realized as direct oral statement or as non-verbal message through facial expression, view, gesture or change in the body posture.

Aim: The aim of the research is to assess the effectiveness of feedback in the communication of physiotherapists in their clinical practice, whether it is communication with patients or communication with other members of the health team. Hypothesis H1: In the assessment of communication feedback there are differences between physiotherapists with regard to the years of work experience.

Research methodology: In order to analyze the communication feedback of the physiotherapist, a survey was conducted "Assessment of physiotherapist communication with physiotherapy users and in the healthcare team", in the period from 1 May to 31 December 2018. The survey was conducted in the whole of the Republic of Croatia, in health institutions where physical therapy is performed. The test set of the study makes 471 physiotherapists.

Results: Results conducted by one-way variance analysis indicate statistically significant differences ($p < .01$) in an average result with respect to the years of the work experience of physiotherapists. The post-hoc test (Scheffe) shows that a group of physiotherapists with the highest work experience (30 years) has a significantly higher average score from the group with 15-29 years of work experience. The results of the youngest group (up to 15 years of experience) do not differ from other groups. No statistically significant difference was obtained in the results of the survey with regard to the gender of subjects and forms of physiotherapeutic practice (public institutions and private practice).

Conclusion: Feedback in clinical communication is precious in the provision of medical information to users of health services and in communication with other healthcare professionals within the health team, when giving or asking for feedback information on clinical work and specific expert questions. Results of the research confirm the hypothesis saying that there are differences between physiotherapists in the assessment of the communication feedback with regard to the years of the work experience.

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13. GOSTI PREDAVAČI

■ Skrb za osobe starije dobi u pandemiji COVID-19

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Ključne riječi: osobe starije životne dobi, COVID-19, Hrvatska, dugotrajna skrb

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Uvod s ciljem: Kronološka dob najznačajniji je prediktor lošeg ishoda bolesti COVID-19. Osobe starije dobi koje žive u institucijama u višem su riziku od osoba iste dobi i komorbiditeta izvan institucija. Svjetska zdravstvena organizacija i Europski centar za sprječavanje i kontrolu bolesti izdali su zasebne preporuke za prevenciju i suzbijanje epidemije u ustanovama za dugotrajanu skrb. Cilj je rada prikazati aktivnosti provedene u suzbijanju epidemije COVID-19 u institucijskoj skrbi za starije osobe i rezultate provedenih aktivnosti.

Rasprava: Hrvatsko stanovništvo demografski gledano vrlo je staro te je zaštita osobe starije dobi jedan od prioriteta u suzbijanju epidemije i provedbi cijepljenja. U veljači 2020. godine, prije prvog slučaja bolesti COVID-19 u RH, u Gradu Zagrebu napravljene su pripreme za suzbijanje epidemije te su ravnatelji ustanova dobili jasne preporuke za postupanje pri pojavi zaraze u institucijama. U kolovozu 2020. Ministarstvo rada, mirovinskoga sustava, obitelji i socijalne politike osnovalo je Povjerenstvo za sprječavanje i suzbijanje epidemije COVID-19 nad starijim osobama i osobama iz drugih ranjivih skupina. Povjerenstvo je zaduženo za izradivanje i ažuriranje nacionalnih „Uputa za sprječavanje i suzbijanje epidemije COVID-19 za pružatelje socijalnih usluga u sustavu socijalne skrbi“, izradu materijala i provođenje kampanje za zaštitu zdravlja starijih osoba. U izlaganju će biti predstavljeni materijali koje je izradilo Povjerenstvo te ishodi pet valova epidemije. U Hrvatskoj su prije cijepljenja u domovima za starije bile na snazi restriktivne mjere (zabrana posjeta, zabrana izlaska korisnika) koje su sigurno imale posljedice na kvalitetu života, no udio umrlih iz institucija u ukupnom broju umrlih od bolesti COVID-19 nikad nije prešao 14 %, dok su mnoge bogatije europske države u nekim trenutcima imale i do 50 % od svih umrlih korisnika institucija. U institucijama je odaziv na cijepljenje bio visok (80 %) te je broj umrlih u trećem valu, uz dopuštene posjete i izlaske korisnika, bio 20 puta manji nego u drugom valu. U izlaganju će biti predstavljeni i rezultati serološkog istraživanja provedeni u jednom domu za starije šest mjeseci nakon druge doze cijepiva. U istraživanju je sudjelovalo

118 ispitanika koji su cijepljeni dvjema dozama BioNTech/Pfizer cijepiva te nisu imali registrirano preboljenje infekcije COVID-19. Tek nešto više od polovice (54 %) ispitanika imalo je pozitivna neutralizirajuća protutijela, njih 23 % imalo je nisko pozitivan titar, dok 23 % nije imalo detektabilan titar. Temeljem rezultata istraživanja u Hrvatskoj je uvedeno docjepljivanje i prije registracije cijepiva za treću dozu Europske agencije za lijekove i medicinske proizvode (engl. *off-label use*).

Zaključak: Republika Hrvatska u ovoj je pandemiji dobro zaštitila osobe starije dobi u institucijama, dok je izvan institucija rezultat u skladu s općom epidemiološkom slikom prema kojoj smo četvrti po redu u EU po broju umrlih na milijun stanovnika te treći po najmanjoj cijepljenosti. Cijepljenje se pokazalo kao izuzetno učinkovita mjeru u suzbijanju epidemije u institucijama.

Care for the elderly in the COVID-19 pandemic

Keywords: Aged, COVID-19, Croatia, long-term care

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Introduction and aim: Chronological age is the most significant predictor of poor COVID-19 disease outcome. Elderly people living in institutions are at higher risk than people of the same age and comorbidities outside institutions. The World Health Organization and the European Center for Disease Prevention and Control have issued special recommendations for prevention and control of the epidemic in long-term care facilities. The aim of this paper is to present the activities carried out in the fight against the COVID-19 epidemic in institutional care for the elderly and the results of the activities carried out.

Discussion: Demographically, the population of Croatia is very old, and the protection of the elderly has been one of the priorities in combating the epidemic and implementing vaccination. In February 2020, before the first case of COVID-19 in the Republic of Croatia, the City of Zagreb prepared to combat the epidemic and the directors of institutions received clear recommendations for dealing with the infection in institutions. In August 2020. The Ministry of Labor, Pension System, Family and Social Policy has established the “Commission for the Prevention and Suppression of the COVID-19 Epidemic among the Elderly and Persons from Other Vulnerable Groups”. The Commission oversees drafting and updating the national “Guidelines for the Prevention and Suppression of the COVID-19 Epidemic for Social Service Providers in the Social Welfare System”, drafts materials and conducts a campaign to protect the health of the elderly. The materials prepared by the Commission and the outcomes of the five waves of the epidemic will be presented. In Croatia,

before vaccination in nursing homes, restrictive measures were in place (ban on visits, ban on clients to leave institution), which certainly had consequences for the quality of residents’ life. However, the share of deaths from institutions in total deaths due to COVID-19 never exceeded 14% while many European states at some point had up to 50% of all deceased clients from institutions. In the institutions, the response to vaccination was rather high (80%) and the number of deaths in the third wave, with the allowed visits and departures of users, was 20 times lower than during the second wave. The results of serological research conducted in one home for the elderly six months after the second dose of the vaccine will also be presented. The study involved 118 subjects who were vaccinated with two doses of BioNTech/Pfizer vaccine and did not have a registered history of COVID-19 infection. Just over half (54%) had positive neutralizing antibodies, 23% had a low positive titer while 23% had no detectable titer. Based on the results of research in Croatia, re-vaccination was introduced even before the registration of the vaccine for the third dose by the European Agency for Medicinal Products and Medical Production (off-label use).

Conclusion: In this pandemic, the Republic of Croatia has well protected elderly people in institutions, while outside the institutions the result is in line with the general epidemiological situation according to which we are the fourth in the EU in terms of deaths per million inhabitants and the third in low vaccination coverage. Vaccination has proven to be an extremely effective measure in combating the epidemic in institutions.

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■ Vodstvo u obiteljskoj medicini

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Uvod: Nerijetko su obiteljski liječnici iz različitih razloga stavljeni na vodeće mjesto u svojoj struci. Cilj je rada dati neke općenite savjete o tome izazovu.

Opći zahtjevi: Da biste bili uspješan vođa, potrebna je vizija. Bez nje čovjek može funkcirati samo kao menadžer. Vizija bi trebala biti razumljiva. Treba je podijeliti s timom koji bi trebao razumjeti njezinu važnost. Također bi trebala biti ambiciozna i ostvariva. Kao vođa, morate vjerovati u viziju i pokazati svoje uvjerenje da je ona ostvariva.

Uspjeh se može postići samo uz podršku motiviranog tima. Pravi vođa poznaje tim i iskorištava kvalitete njegovih članova. Bitno je da se vođa prihvati kao član tima, a ne da se percipira kao autsajder. Vođa se ne smije ponašati kao da je na bilo koji način bolji od ljudi koje vodi. Treba izbjegavati posebne tretmane ili privilegije zbog položaja vođe.

Komunikacija s članovima tima je neophodna. Vođa mora odvojiti vrijeme za slušanje i priznati kada griješi. Važno je odati priznanje ljudima kada su nešto dobro napravili i poslušati savjete. Kritičari su važniji od ljudi koji vam laskaju. Komunikacija bi trebala biti mirna: nikada ne mojte gubiti živce ili pokazati koliko ste nervozni.

Uzbuđenje stvaranja nečeg novog dolazi s te-retom puno neočekivanog posla, koji se često ne nadoknađuje odmah. To se može prevladati motivacijom, ali ne treba zanemariti finansijske aspekte. Vođa mora biti primjer marljiva rada. Ali ako previše radite, nećete moći uraditi svoj posao kako treba. Zbog toga voditelj mora čuvati slobodno vrijeme i poštivati slobodno vrijeme suradnika. I na kraju: vođa treba rano razmišljati o naslijednicima i na vrijeme ih pripremiti za preuzimanje dužnosti.

Zaključak: Obiteljski liječnici često su prikladniji da budu lideri u medicini od drugih struka. Znamo kako komunicirati, kako slušati, kako biti empatični i tolerantni. Znamo voditi tim u praksi i znamo kako funkcionira zdravstveni sustav. Sve nas to stavlja u povoljan položaj u vodstvu u medicini. No, istina je i da je većina obiteljskih liječnika najsretnija kada se brinu o pacijentima. To im je draže od nepoštenja i papirologije koja dolazi s izazovom vodstva.

■ Leadership in family medicine

Keywords: family medicine, leadership, vision, team work

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Introduction Family physicians are quite often put in a leading position in their profession due to different reasons. This presentation aims to give some general advice about this challenge.

General requirements In order to be a successful leader, a vision is required. Without it, one can only function as a manager. The vision should be understandable. It should be shared with the team which should understand its importance. It should also be ambitious and achievable. As a leader one has to believe in the vision and show belief that it is achievable.

Success can be achieved only with the support of a motivated team. A true leader knows the team and uses qualities of its members. It is essential that the leader is accepted as a team member and not perceived as an outsider. One should not pretend to be in any way better than the people one leads. Special treatments or privileges because of the position of a leader should be avoided.

Communication with team members is essential. One has to take time to listen and to admit when they are wrong. It is important to give credit to people when they have done something well and to listen to advice. Critics are more important than the people who flatter you. Communication should be calm: never lose temper or show how nervous you are.

The excitement of creating something new comes with a burden of a lot of unexpected work, which is often not immediately remunerated. This can be overcome by motivation, but financial aspects should not be ignored. As a leader, one has to be an example of hard work. However, if you work too hard, you will not be able to do your job properly. Because of that, the leader must protect free time and respect the free time of co-workers. And, finally: a leader should think about successors early and prepare them to take over in time.

Conclusion. Family physicians are often better suited to be leaders in medicine than other medical professionals. We know how to communicate, how to listen, how to be empathic and tolerant. We know how to lead a team in practice and how healthcare system functions. All this puts us in a favourable position in leadership in medicine. But it is also true that most family physicians are happiest when they take care of patients. They

prefer that to the dishonesty and paperwork which comes with the challenge of leadership.

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■ COVID-19 pandemija i obiteljska medicina u BiH

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Ključne riječi: obiteljska medicina, COVID-19 pandemija, organizacija zdravstvenog sustava

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Komplicirani zdravstveni sustav u Bosni i Hercegovini dočekao je pandemiju bolesti COVID-19 nepripremljen i bez strateškog plana za odgovor na pandemiju. Dva glavna zdravstvena sustava i trinaest podsustava imali su jedno zajedničko u odlukama brojnih kriznih stožera: postavljanje obiteljske medicine u središte upravljanja zdravstvenom skrbi oboljelih od bolesti COVID-19.

Udruga liječnika obiteljske medicine na više je načina upozoravala nadležne na ozbiljne kadrovske i organizacijske nedostatke i na nedostatnu opremljenost te pružala konkretne prijedloge za poboljšanje sustava. Nekoliko istraživanja tijekom pandemije ispitivalo je stanje u obiteljskoj medicini. Ta su istraživanja pokazala da je zdravstveni sustav dočekao pandemiju nespreman, s nedostatkom zdravstvenih djelatnika u obiteljskoj medicini [(-20 %) – (-25 %)], nedostatkom zaštitne opreme, bez operativnih planova na lokalnoj razini i definiranih kliničkih puteva za pacijente u pandemiji.

Uz redoviti rad s pacijentima, liječnici obiteljske medicine dobili su niz novih uloga i zadataka: inicijalnu epidemiološku procjenu, upućivanje na testiranje i testiranje (PCR, Ag-RTD), svakodnevno telefonsko praćenje bolesnika oboljelih od bolesti COVID-19, ispunjavanje obrazaca za izolaciju i obrazaca za otpust iz izolacije, prijavu zaraznih bolesti, rad u COVID klinikama, kontrolu nakon izolacije, kućne posjete za bolesnike oboljeli od bolesti COVID-19, rad u izolatorima i transport pacijenata u bolnice.

Nametanje novih obveza nije bilo popraćeno odgovarajućim finansijskim poticajima, zapošljavanjem novih zdravstvenih radnika ni poboljšanjem uvjeta rada. Konačno, velik broj liječnika i medicinskih sestara razvio je COVID-19 (80 %), s visokim postotkom različitih razina sindroma izgaranja (81 %) i povećanim brojem bolovanja. Proces edukacije obiteljskih liječnika (specijalizacija i KME) značajno je poremećen.

Tijekom pandemije obiteljski liječnici pokazali su visoku razinu požrtvovnosti, solidarnosti, otpornosti, prilagodljivosti s krajnjom strasti da pomognu bolesnima i ugroženima.

Covid-19 pandemic and family medicine in BiH

Keywords: Family Medicine, Covid-19 pandemic, Health Care System Organization

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The complicated health system in Bosnia and Herzegovina faced the Covid-19 pandemic unprepared and without a strategic plan to respond to the pandemic. The two main health systems and thirteen subsystems had one thing in common in the decisions of numerous crisis headquarters: placing family medicine at the centre of Covid-19 health care management.

The Association of Family Physicians warned the authorities in several ways about serious deficiencies in human resources, equipment, and organization with concrete proposals for improving the system. Several surveys during the pandemic examined the situation in family medicine.

These surveys proved that the health system faced the pandemic unprepared, with a shortage of health workers in family practice [(-20%) - (-25%)], a lack of protective equipment, no operational plans at the local level, and no defined clinical pathways for patients in a pandemic.

In addition to regular work with patients, family physicians have been given numerous new roles: initial epidemiological assessments, referrals for testing and testing (PCR, Ag-RTD), daily telephone monitoring of Covid-19 patients, filling out isolation forms and discharge from isolation forms, reporting of infectious diseases, work in covid clinics, post-isolation controls, home visits for patients with Covid-19, work in isolation wards and transportation of patients to hospitals.

The imposition of new obligations was not accompanied by adequate financial incentives, employment of new health workers, and improvement of working conditions. Eventually, a significant number of physicians and nurses developed Covid-19 (80%), with a high percentage of different levels of burnout syndrome (81%) and an increased number of sick leaves. The process of family physicians' education (specialization and CME) has been significantly disrupted.

During the pandemic, family physicians showed a high level of sacrifice, solidarity, resilience and adaptability with an ultimate passion for helping the sick and vulnerable.

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■ Challenges and achievements of family medicine as specialty in Ukraine



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General Practice - Family medicine (GP/FM) as specialty has been existing for 35 years in Ukraine (since 1987). The education of family physicians has consisted of two stages since 1992: undergraduate and postgraduate training.

The undergraduate medical education is provided by eighteen state medical universities and few medical faculties of other universities. It usually lasts for six years and provides the courses of general practice/family medicine as a part of the course of outpatient care over a few weeks during the last year of the undergraduate curriculum.

Postgraduate specialist (vocational) training of family physicians in Ukraine is provided by the postgraduate educational departments of GP/FM and carried out in two ways. The first way is internship (residency) in family medicine. It was conducted in 1996-2021 in a two-year curriculum approved by the Ministry of Health (MOH) of Ukraine, which included 1 year of full-time study (50% of teaching hours) at departments and clinics of medical universities and 1 year of studying at the workplace (50% of study hours), while the first internship curriculum in family medicine in 1995 took 3 years. Right now the MOH, following international recommendations, has approved the 3-year-curriculum of internship (residency) in GP/FM, but the part of full-time education is reduced to 6 months (15%) and redirected to mentors at the workplace rather than university departments and clinics, so it may become an entirely vocational training at workplace. The second way of specialist (vocational) training is retraining (re-specialization) in a 6-month course for doctors of other specialties in postgraduate educational departments of GP/FM, the necessity of it caused by a period of healthcare reformation and a lack of primary care staff.

The new system of continuous medical education has been implemented since 2021.

Scientific specialty GP/FM has started its development since the department of GP/FM started their research work in primary care. The first professional scientific journal "Family Medicine" was created in Ukraine in 1999 for the scientific publications of researches in primary care. Officially, the academic and scientific specialty "GP/FM" was approved by the Ministry of Education and Science in 2010, and the first specialized academic council for scientific theses

defense and PhD dissertations in the field of GP/FM was created. There were defended about 3 theses of postdoctoral research and about 40 PhD theses in scientific councils from 2010 till 2021. However, the Ministry of Education and Science decided to delete "GP/FM" from the list of scientific specialties in 2021. Consequently, family doctors cannot defend their theses in the field of general practice – family medicine.

In the past 5 years, many changes have been implemented in the practice of family physicians: primary health care centers have become non-commercial communal autonomous establishments, the National Health Service of Ukraine has been established as a new central executive body and single national purchaser of healthcare services, the principle of "money follows the patient" has been implemented with payments on the principles of capitation fee, the government-guaranteed package of health care services and the "Affordable Medicines" program have been implemented and the e-Health system and electronic medical records have become widely used.

Thus, Ukraine has many achievements in the development of family medicine, as well as coping with the challenges imposed by the reform of healthcare and educational systems.

■ Reorganizacija Doma zdravlja Podgorica u cilju efikasnijeg zbrinjavanja pacijenata s bolesti COVID-19

Ključne riječi: primarna zdravstvena zaštita, reorganizacija, pandemija, dispečerski centar
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Pojava prvih dvaju slučajeva s dokazanom SARS-CoV-2 infekcijom 17. 3. 2020. godine označila je početak pandemije u Crnoj Gori.

U Domu zdravlja Podgorica, kao najvećoj ustanovi na primarnoj razini zdravstvene zaštite u Crnoj Gori, formirani su timovi za zbrinjavanje pacijenata oboljelih od bolesti COVID-19 u ambulantnim uvjetima i na terenu, koje su činili liječnici opće i obiteljske medicine.

Tijek pandemije, a posebno pikovi, od kojih su najveći bili u studenome 2020. te u veljači i ožujku 2021. godine, stavili su našu ustanovu kao i čitav zdravstveni sustav Crne Gore pred brojne izazove. Način na koji je zdravstvena zaštita pacijenata oboljelih od bolesti COVID-19 bila do tada organizirana, postao je neodrživ i neracionalan te se pojavila potreba za reorganizacijom.

Reorganizacija je podrazumijevala da se rad organizira u skladu s nacionalnim smjernicama, epidemiološkom situacijom i raspoloživim kadrom.

Iz nacionalnih smjernica za zbrinjavanje pacijenata oboljelih od bolesti COVID-19 proizašao je algoritam zbrinjavanja, u čijem se središtu nalazi dispečerski centar. Uloga dispečerskog centra i medicinskog osoblja koje je angažirano u njemu omogućila je da se mnogi pacijenti (oko 40 % njih), nakon inicijalnog probira (obavljenog telefonski) i testiranja, mogu liječiti u kućnim uvjetima, bez potrebe za kliničkim pregledom.

Uspostavljanje i praćenje performansa dispečerskog centra, u suradnji s operaterom mobilne telefonije, pomoglo nam je da racionalnije iskoristimo ljudske resurse, antibiotsku terapiju i dijagnostičke procedure, da poboljšamo kontrolu širenja infekcije smanjenjem gužvi i nepotrebnih dolazaka, izvršimo bolju integraciju servisa i poboljšamo pružanje esencijanih usluga u ne-COVID dijelu Doma zdravlja.

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