Internacionalni medicinski časopis iz oblasti biomedicinskih nauka International medical journal in the field of biomedical sciences
Medicinska reč **Medical Word**

APSTRAKT 1S 2021; 2(1): 1–1 ABSTRACT 1E

Oralno zdravlje stanovništva u Srbiji
Oral health in the Serbian population

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Apstrakt

Ubrzani tempo života, manjak vremena za osnovne životne potrebe, odnosno nedovoljno posvećivanje pažnje sopstvenom zdravlju, itekako ostavljaju traga na opšte zdravstveno stanje stanovništva, pa tako i na zdravlje usta i zuba. Čista usta i lep osmeh predstavljaju osnovni preduslov za uspešan poslovni i društveni ambijent pojedinca. Zdrav osmeh je danas postao prva stepenica na profesionalnom putu, jer se sve više, s razlogom, poistovećuje sa dobrim opštim stanjem organizma.

Bolesti usta i zuba su najčešća nezarazna oboljenja koja se mogu javiti tokom života i koja uzrokuju bol, nelagodnost, ali mogu dovesti do ozbiljnih posledica po opšte zdravlje. Karijes, parodontopatija, traume zuba spadaju u najčešća oralna oboljenja i stanja. Adekvatna prevencija i lečenje u ranoj fazi uveliko utiču na sprečavanje nastanka ovih oboljenja ili dobrog ishoda lečenja, ukoliko se počne u ranoj fazi. Prema procenama (*The Global Burden of Disease Study*) iz 2016. godine, skoro polovina svetske populacije (3,58 milijardi ljudi) ima neko oralno oboljenje. Karijes stalnih zuba u svetu ima 2,4 milijarde ljudi, a 486 miliona dece ima karijes mlečnih zuba. Prema rezultatima istraživanja koje je 2013. godine sprovedeno u Srbiji samo 8,3% stanovnika starijih od 25 godina ima sve svoje zube. Podaci iz izveštaja o unapređenju kvaliteta rada zdravstvenih ustanova Republike Srbije u 2017. godini pokazuju da je u Srbiji u 2017. godini samo 36,6% dece u sedmoj godini života imalo sve svoje zdrave zube, a da se procenat smanjuje i u dvanaestoj godini iznosi 35,5%.

Neadekvatna oralna higijena kao i neredovna kontrola stomatologa, imaju značajan uticaj na oralno zdravlje. Opšte preporuke za očuvanje oralnog zdravlja su održavanje adekvatne higijene, smanjenje unosa šećera i izbalansirana ishrana, redovne posete stomatologu, fluorizacija različitim preparatima fluora.

Najčešći razlog neodlaska stomatologu kod 70% stanovništva je strah od stomatologa, na koji utiče strah iz najranijeg detinjstva, mirisi ordinacije, zvuk stomatoloških instrumenata, ubod injekcije, sramota zbog lošeg stanja u ustima, strah od gubitka kontrole nad situacijom.

Sve ovo se može otkloniti izborom svog stomatologa od poverenja i njegovim strpljivim radom sa pacijentom uz primenu najsavremenijih dostignuća savremene stomatologije. Te doktrine savremene stomatologije podrazumevaju navikavanje dece od najranijeg uzrasta na obavezu odlaska kod stomatologa, a stomatologu da od ranog uzrasta, uz strpljivi odnos i primenu bezbolnog rada u stomotologiji, omogući posetu ordinaciji bez stresa.

Principi savremene stomatologije u različitom životnom dobu imaju za cilj da pacijentima omoguće rešavanje svih patoloških stanja, omogućavajući im, sa aspekta stanja zdravlja usta i zuba, normalan život.

Abstract

The fast pace of life, lack of time for basic living needs, and insufficient dedication to one's own health affect the general health condition of the population, and thus on the health of the mouth and teeth. A clean mouth and a beautiful smile are the basic preconditions for a successful business and social environment of an individual. Today, a healthy smile has become the first step on the professional path, because it is increasingly, for a reason, identified with the good general condition of the organism.

Diseases of the mouth and teeth are the most common noncommunicable diseases that can occur during life and that cause pain, discomfort, but can lead to serious consequences for general health. Caries, periodontitis, and dental trauma are among the most common oral diseases and conditions. Adequate prevention and treatment at an early stage greatly affect the prevention of these diseases or a good treatment outcome if started at an early stage. According to estimates from The Global Burden of Disease Study in 2016, almost half of the world's population (3.58 billion people) has some kind of oral disease.

There are 2.4 billion people with permanent tooth decay in the world, and 486 million children have dental caries (tooth decay). According to the results of a survey conducted in Serbia in 2013, only 8.3% of the population over the age of 25 have all their teeth. Data from the report on improving the quality of work of health care institutions in the Republic of Serbia in 2017 show that in Serbia in 2017 only 36.6% of children at the age of seven had all their healthy teeth and that the percentage decreases, and in the twelfth year is 35, 5%.

Inadequate oral hygiene, as well as irregular dental check-ups, have a significant impact on oral health. General recommendations for maintaining oral health are maintaining adequate hygiene, reducing sugar intake and a balanced diet, regular visits to the dentist, fluoridation with various fluoride agents.

The most common reason for not going to the dentist in 70% of the population is the fear of the dentist, which is influenced by fear from the earliest childhood, smells of the office, the sound of dental instruments, injection stings, shame due to bad mouth, fear of losing control of the situation.

All this can be removed by choosing the dentist you can trust. It is expected from them to work patiently and use the application of the most modern achievements of modern dentistry. These doctrines of modern dentistry imply the accustoming of children from the earliest age to the obligation to go to the dentist, and the dentist to enable a visit to the office without stress from an early age with a patient attitude and change of painless work in dentistry.

The principles of modern dentistry at different ages are aimed at enabling patients to resolve all pathological conditions, enabling them, from the aspect of oral and dental health, to live a normal life.

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APSTRAKT 2S 2021; 2(1): 2–2 ABSTRACT 2E

Senilna degeneracija makule
Senile macular degeneration

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Apstrakt

Senilna degeneracija makule, bolest makularnog područja, najčešće je uočljiva posle 50. godine života. Predstavlja čest uzrok ireverzibilnog gubitka vida u zapadnom svetu posle 50. godine života. Može se javiti u dva oblika:
1. atrofična
2. eksudativna.

Atrofična ili geografska atrofija makule je sporo progresivna i karakteriše se horioretinalnom neovaskularizacijom i subretinalnim oživljavanjem. Faktori rizika za njen nastanak su genetika, godine života, pušenje, BMI. Histopatološki prisutno je deponovanje patološkog materijala na Bruhovoj membrani tj. druza, koje se, pored fragmenata ovog materijala, sastoje i od lipidne komponente. Druze su smeštene ispod RPE, mogu da variraju u obliku i veličini, retko su klinički vidljive pre 45. godine života. Razlikujemo tvrde i meke druze. Tvrde druze klinički izgledaju kao male okrugle žute tačke. Meke su veće i nejasnih granica. Mogu da se uvećavaju i spajaju. Na FA mogu da budu hiperfluorescentne i one su hidrofilne, imaju nizak sadržaj lipida i predisponiraju nastanak CNV. Hipofluorescentne su hidrofilne, imaju visok sadržaj lipida i predisponiraju nastanak ablacije RPE.

AMD je sporo progresivna bolest, javlja se na oba oka, a može i asimetrično. Prisutna je fokalna hiperpigmentacija, oštro ograničena područja atrofije RPE, uvećavanje artofičnih površina gde mogu postati vidljive ka horiokapilarisu, na FA uočljiva je hiperfluorescencija. Eksudativna forma senilne degeneracije je razorna forma i karakteriše se CNV koja potiče iz horikapilarisa i urasta u defekte u Bruhovoj membrani. Klinički se ispoljava zamućenjem centralnog vida, metamofopsijom, usled isticanja tečnosti iz novoformiranih hiporioretinalnih krvnih sudova.

CNV klinički može da bude otkrivena kao sivozelena ili ružičasto žuta uzdignuta lezija koja se detektuje oftalmoskopom. Senilnu degeneraciju makule otkrivamo najčešće oftalmoskopom, pored toga radimo fluorescentsku angiografiju, indocianin grin angiografiju, optičku koherentnu tomografiju.

Prema vodiču Evropskog udruženja retinologa, danas se za lečenje subfoenalnih CNV koriste isključivo i samo anti-VEGF lekovi koji su prošli ispitivanja, kao što su: avastin, ranibizumab, pegaptanib, direktno u staklasto telo obolelog oka.

Abstract

Senile macular degeneration, a disease of the macular area, is most often seen after the age of 50. It is a common cause of irreversible vision loss in the Western world after the age of 50. It may occur in two forms:
1. Atrophic
2. Exudative.

Atrophic or geographical macular atrophy is slowly progressive and is characterized by chorioretinal neovascularization and subretinal resuscitation. Risk factors for its occurrence are genetics, age, smoking, BMI. Histopathologically, the deposition of pathological material on the Bruch's membrane is present, i.e.- drusen which, in addition to fragments of this material, also consist of a lipid component. Druzen are located below the RPE, can vary in shape and size, are rarely clinically visible before the age of 45. There are hard and soft drusen. Hard drusen clinically look like small round yellow dots. The soft ones are larger and have blurred borders. They can be enlarged and merged. They can be hyperfluorescent on FA and they are hydrophilic, have a low lipid content, and predispose to CNV formation. Hypofluorescent is hydrophilic, has a high lipid content, and predispose to RPE ablation.

AMD is a slowly progressive disease, it occurs in both eyes, and it can also be asymmetric. There is focal hyperpigmentation, sharply limited areas of RPE atrophy, enlargement of arthritic surfaces where they can become visible towards the choriocapillaris, hyperfluorescence noticeable on FA. The exudative form of senile degeneration is a destructive form and is characterized by CNV that originates from the choriocapillaris and grows into defects in the abdominal membrane. It is clinically manifested by the blurring of the central vision, metamorphosis, due to the leakage of fluid from the newly formed blood vessels.

CNV can be clinically detected as a gray-green or pinkish-yellow raised lesion that is detected by an ophthalmoscope. Senile macular degeneration is most often detected with an ophthalmoscope, in addition, we perform fluorescein angiography, indocyanine green angiography, and optical coherence tomography. According to the guide of the European Association of Retina Specialists, today only anti-VEGF drugs that have passed the tests, such as Avastin, ranibizumab, pegaptanib, directly into the vitreous of the diseased eye, are used for the treatment of subfoveal CNV.

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APSTRAKT 3S 2021; 2(1): 3–3 ABSTRACT 3E

Иновативни подходи за превенция на индикаторни инфекции – приложение на пакетни мерки (*bundles*)

Innovative approaches in the prevention of infection indicators - application of bundles

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Апстракт

Един от най-сериозните проблеми на съвременната медицина е превенцията и терапията на нозокомиалните инфекции. Причините за това са свързани с многоаспектиния характер на тази патология и множеството медицински интервенции в болничната помощ. Тези инфекции засягат близо 4,1 млн. пациента в ЕС годишно и причиняват значително нарастване на заболеваемостта, смъртността и медицинските разходи за лечение. В практиката на съвременните структури за интензивно лечение се извеждат и прилагат пакетни мерки/ бъндели за превенция на инфекциите. В контекста на медицинската изследователска дейност, въвеждането им цели да свърже постиженията на фундаменталната наука в практика, която да осигури добри лечебни резултати. Това са добре познати научно доказани правила и стандарти за работа с приоритетно значение за осигуряване превенция на инфекциите. Пакетните мерки представляват група интервенции, които приложени заедно като комплекс водят до подобър изход в сравнение с извършване на отделни процедури. Елементите обикновено са до 6 на брой и представляват кратки и ясни указания, които трябва да бъдат спазвани от всички оказващи здравни грижи. Представят се модели на бъндели при използване на инвазивни устройства, свързани с изкуствена белодробна вентилация (ИБВ), поддържане на съдова линия и уретрална катетеризация в примерни варианти. В редица публикации на корективи от САЩ и Европа се съобщава за установен при проучвания значителен ефект в резултат от внедряването им. Съвременните усилия на здравеопазването са насочени към ограничаване и елиминиране на нозокомиалните инфекции, създавайки безопасна болнична среда - липса на ненужна или вероятна вреда за пациента, свързана с медицинското обслужване.

Abstract

One of the most serious problems of modern medicine is the prevention and treatment of healthcare-associated infections. The reasons for that are related to the multiple nature of this pathology and numerous medical interventions in-hospital care. These infections affect almost 4.1 million patients in the EU each year and cause a significant increase in morbidity, mortality, and treatment costs. In the practice of modern intensive care institutions, packages of measures for infection prevention are presented and applied. In the context of medical research, their introduction aims to link the achievements of basic science with practice in order to ensure good treatment results. These are well-known scientifically proven rules and standards for priority work to ensure infection prevention.

Package measures are a group of interventions that, applied together as a complex, lead to a better outcome than performing individual procedures. There are usually up to 6 of them and there are short and clear instructions that must be followed by all health professionals. Bundle models were presented using invasive devices associated with artificial lung ventilation (IBV), vascular line maintenance, and catheter placement. Numerous publications from the United States and Europe show a significant impact of the study on the results of their application. Modern health efforts are aimed at limiting and eliminating nosocomial infections, also creating a safe hospital environment - without unnecessary or probable harm to the patient.

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APSTRAKT 4S 2021; 2(1): 4–4 ABSTRACT 4E

Multimodalna analgezija kao prevencija ranog postoperativnog bola

Multimodal analgesia as a prevention of early postoperative pain

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Apstrakt

Akutni postoperativni bol se javlja kod svih pacijenata neposredno posle hirurške intervencije. Svaki peti pacijent nakon velikih hiruških intervencija oseća neki intenzitet bola od jakog do neizdržívog ili nedovoljno olakšanje nakon primenjene analgetske terapije. Sa fiziološke starane, bol je normalan biološki odgovor i predstavlja znak da je anatomski, telesni i funkcionalni integritet narušen. Analgezija predstavlja postizanje neosetljivosti na bol. Veština lečenja bola podrazumeva izbor jednog ili više lekova ili nefarmakoloških sredstava koja će obezbediti maksimalnu efikasnost uz minimalne neželjene efekte za svakog pacijenta posebno. Među pacijentima postoji razlika u percepciji bola, kao i u odgovoru na terapiju. Pri izboru analgetika potrebno je dati najbezbedniji efikasan lek u najmanjoj dozi koja će dati zadovoljavajući efekat i pritom izbegavati klinički značajne interakcije sa drugim lekovima.

Multimodalna analgezija deluje na sve aspekte bolne osovine, uključujući stimulaciju, modulaciju, inflamaciju i psihološku komponentu i ima za cilj (kombinacije lekova i terapijskih postupaka) da stvori režim sinergističke kontrole bola, što kao krajni cilj ima za efekat brži i bezbedniji oporavak pacijenata i uspeh u ishodu lečenja.

Dobra procena bola omogućava adekvatan izbor analgetske metode, kao i procenu njene uspešnosti. Za procenu bola uglavnom se koriste: vizuelno analogna skala (VAS), govorna skala, numerička skala, skala za procenu bola sa licima. Terapijski cilj na VAS je od 0 do 4.

Lečenje postoperativnog bola započinje još prilikom anestezi-ološkog pregleda i psihološke pripreme pacijenta, kako od strane lekara i medicinskog osoblja, tako i od porodice. Preemptivna analgezija trebalo bi da smanji bolni odgovor pacijentu nakon hirurške intervancije. Najčešće se koriste: anksiolitici, opioidi, antagonisti NMDA, NSAIL, antiepileptici. Nakon operativnog zahvata najčešće je u upotrebi kombinacija opioida i NSAIL, kao i razne druge tehnike (epiduralna analgezija, kontinuirani blokovi, PCA).

Neadekvatna postoperativna analgezija uzrokuje usporen oporavak pacijenta, promenjen imunološki odgovor, pojavu vegetativnih simptoma, promenu u perifernom i centralnom nervnom sistemu, sa prelaskom akutnog u hroničan postoperativni bol.

Abstract

Acute postoperative pain occurs in all patients immediately after surgery. Every fifth patient, after major surgical interventions, feels strong or even unbearable pain, as well as insufficient relief after the application of analgesic therapy. From a physiological point of view, pain is a normal biological response and is a sign that anatomical, bodily and functional integrity has been compromised. Analgesia is the achievement of insensitivity to pain. The skill of treating pain implies the choice of one or more drugs or non-pharmacological agents that will provide maximum efficiency with minimal side effects for each patient separately. There is a difference between patients in the perception of pain as well as in the response to therapy. When choosing analgesics, it is necessary to give the safest effective drug in the lowest dose that will give a satisfactory effect, while avoiding clinically significant interactions with other drugs.

Multimodal analgesia acts on all aspects of the pain axis, including stimulation, modulation, inflammation, and psychological component and aims (combination of drugs and therapeutic procedures) to create a synergistic pain control regime, which ultimately has the effect of faster and safer patient recovery and success as a result of treatment.

A good assessment of pain enables an adequate choice of analgesic method as well as an assessment of their success. For pain, assessments are mainly used: visual analog scale (VAS), speech scale, numerical scale, the scale for pain assessment with faces. The therapeutic goal on VAS is from 0 to 4.

Treatment of postoperative pain will begin during the anesthetic examination and psychological preparation of the patient by the doctor and medical staff, as well as by the family. Preemptive analgesia should reduce the patient's painful response after surgery. The most commonly used are anxiolytics, opioids, NMDA antagonists, NSAIDs, antiepileptics. After surgery, a combination of opioids and NSAIDs is most often used, as well as various other techniques (epidural analgesia, continuous blocks, PCA).

Inadequate postoperative analgesia causes slow recovery of the patient, altered immune response, the appearance of vegetative symptoms, changes in the peripheral and central nervous system with the transition from acute to chronic postoperative pain.

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APSTRAKT 5S 2021; 2(1): 5–5 ABSTRACT 5E

Informisanost o HPV virusu i HPV vakcini
Knowledge about HPV virus and HPV vaccine

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Apstrakt

Najčešća polno prenosiva bolest današnjice je infekcija humanim papiloma virusom. Procene su da kod žena sa urednim citološkim nalazom širom sveta prevalencija HPV infekcije iznosi 11.7%. Humani papiloma virus (HPV) je u poslednje 2 decenije promenio lice karcinoma grlića materice. Na sreću, mlađe generacije imaju bolje prognoze u poređenju s onima sa HPV negativnim tumorima. Kako se sve više dijagnosticira rak grlića materice povezan sa HPV infekcijom, zdravstveni radnici imaju značajnu ulogu u prevenciji, terapiji pregleda, toku prenosa i istoriji HPV-a.

Identifikovano je preko 200 tipova i oko 45 genotipova HPV i klasifikovani su kao genotipovi visokog rizika i genotipovi niskog rizika, a na osnovu njihovog onkogenog potencijala i odnosa prevalencije karcinoma grlića materice i njegovih prekursora. Anogenitalne bradavice su najčešća klinička manifestacija neonkogene HPV infekcije i jedna od najčešćih polno prenosivih bolesti širom sveta. Iako se smatraju benignim, veoma su zarazne i imaju visok stepen recidiva. Većina infekcija HPV prolazi bez ikakvih simptoma,

štaviše, većina zaraženih i ne zna da ima infekciju. U Portugaliji je istraživanje pokazalo da je, od uključena 162 ispitanika muškog pola i 400 ispitanika ženskog pola, prosečne starosti 34 godine, HPV otkriven kod 95,3% ispitanika, 96,8% kod muškaraca i 91,6% kod žena. Među muškarcima koji imaju seksualne odnose sa muškarcima HPV je otkriven kod 98,5% i to HPV 6 i HPV 11, kao najčešći genotipovi.

Kontroverze o HPV vakcinaciji naglasile su da koncept informisanja nije lak. Informisanost se može tumačiti na različite načine, u zavisnosti od ugla gledanja. S druge strane, pragmatična epistemologija, smatra da je pojam znanja, tj. informisanosti skup teorija koje ispunjavaju neku svrhu živog organizma. Strukturalizam veruje da je znanje dijalog između pojedinaca, nešto što ljudi rade zajedno. Tengstrom (1987) ukida korišćenje izraza znanja, naglašavajući da to može postojati samo u ljudskom biću, ne u neinformisanim objektima, kao što su knjige ili računari.

U Srbiji su registrovane dve vakcine protiv HPV-a, dvovalentna protiv tipova 6 i 11 i četvorovalentna protiv tipova 6,11,16 i 18, dok je u SAD-u registrovana i devetovalentna protiv tipova 6,11,16,18,31,33,45,52 i 58. Od 2007. godine, programi vakcinacije primenjuju se u mnogim zemljama sveta.

Deca treba da prime vakcinu najbolje u uzrastu od 11 do 12 godina i to pre stupanja u seksualne odnose. Nacionalni program vakcinacije kod devojčica starih između 9 i 11 godina sproveden je u Čileu sa četvorovalentnom vakcinom od 2014. godine. Istraživanje sprovedeno na internetu će delimično prikazati koliki je stepen informisanosti. Upitnik su svojevoljno popunili anonimni ispitanici.

Abstract

The most common sexually transmitted disease today is human papillomavirus infection. It is estimated that the prevalence of HPV infection in women with regular cytological findings worldwide is 11.7%. The human papillomavirus (HPV) has changed the face of cervical cancer in the last 2 decades. Fortunately, the younger generation has a better prognosis compared to those with HPV-negative tumors. As cervical cancer associated with HPV infection is increasingly diagnosed, health professionals play a significant role in prevention, screening therapy, transmission course, and HPV history.

Over 200 types and about 45 genotypes of HPV have been identified and classified as high-risk and low-risk genotypes, based on their oncogenic potential and the prevalence ratio of cervical cancer and its precursors. Anogenital warts are the most common clinical manifestation of non-oncogenic HPV infection and one of the most common sexually transmitted diseases worldwide. Although they are considered benign, they are highly contagious and have a high rate of recurrence. Most HPV infections pass without any symptoms, moreover, most of those infected do not know they have an infection. In Portugal, a study of 162 male and 400 female subjects, with an average age of 34, included HPV in 95.3%, 96.8% in men, and 91.6% in women. Among men who have sexual intercourse with men, HPV was detected in 98.5%, namely HPV 6 and HPV 11 as the most common genotypes.

The controversy over HPV vaccination has highlighted that the concept of information is not easy. Knowledge can be interpreted in different ways, depending on the point of view. On the other hand, pragmatic epistemology considers the notion of knowledge to be a set of theories that fulfill some purpose of a living organism. Structuralism believes that knowledge is a dialogue between individuals, something that people do together. Tengstrom (1987) abolishes the use of the term knowledge, emphasizing that it can only exist in a human being, not in uninformed objects, such as books or computers.

Two vaccines against HPV have been registered in Serbia, divalent against types 6 and 11 and quadrivalent against types 6,11,16, and 18, while in the USA a nine-valent vaccine has been registered against types 6,11,16,18,31, 33,45,52 and 58. Since 2007, vaccination programs have been implemented in many countries around the world.

Children are recommended to receive the vaccine at the age of 11 or 12, before having their sexual intercourse. The national vaccination program for girls between the ages of 9 and 11 has been implemented in Chile with the quadrivalent vaccine since 2014. Research conducted on the Internet will partially show the level of information. The questionnaire was filled inadvertently by anonymous respondents.

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APSTRAKT 6S 2021; 2(1): 6–6 ABSTRACT 6E

Zloupotreba psihoaktivnih supstanci kod pacijenata u supstitucionom programu

The abuse of psychoactive substances in patients in the substitution program

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Apstrakt

Nezakonita upotreba droga, posebno kanabisa, uobičajena je kod pojedinaca zavisnih od opijata. Ova činjenica može potencijalno da utiče na lečenje zavisnika na negativan način.

Lečenje metadonskom supstitucijom je farmakoterapija opijatskim agonistima koja je indikovana kod osoba zavisnih od opijata. Inicijacija tretmana za održavanje metadonom je zakonski regulisan proces koji zahteva sporo i pažljivo titriranje doziranja kako bi se izbegao rizik od prekomerne doze. Titracija doze odvija se kroz faze inicijacije, indukcije i stabilizacije pre nego što se dostigne faza održavanja.

Činjenica je da, na osnovu nalaza eksperimentalnih modela zavisnosti od opijata, postoje hipoteze da upotreba kanabinoida, putem njegove interakcije sa opioidnim sistemom, može uticati na opioidnu signalizaciju u mozgu, čime je naučno pokušana da se objasni česta upotreba kanabinoida kod opijatske zavisnosti, posebno prilikom redukcije opijata u terapiji. Više grupa autora izvestile su o sinergiji između kanabinoida i opijata kada se primenjuju istovremeno. Od značaja je da je, nakon postizanja stabilne doze metadona, došlo do pada upotrebe kanabisa u uzorku kao celini. Ovo bi mogao biti direktni efekat metadona, ali nije pronađeno da doza metadona ima veze sa stopama upotrebe kanabisa.

U studiji koja je upoređivala otkrivanje upotrebe supstanci tokom prve godine supstitucione terapije primećeno je slično, ali manje dramatično smanjenje upotrebe kanabisa među pacijentima koji su na održavanu metadonu.

I buprenorfinska i metadonska supstitucija je rezultirala dramatičnim smanjenjem upotrebe nedozvoljenih opijata, uprkos uobičajenoj upotrebi kanabisa.

Abstract

The illegal use of drugs, especially cannabis, is common among the opiate addicts. This fact can potentially affect the treatment of addicts in a negative way.

Methadone substitution treatment is pharmacotherapy with opiate agonists indicated in opiate addicts. Initiation of methadone maintenance treatment is a legally regulated process that requires slow and careful titration of the dosage to avoid the risk of overdose. Dose titration takes place through the initiation, induction and stabilization phases before the maintenance phase is reached.

It is the fact that based on the findings of experimental models of opiate dependence, there are hypotheses that cannabinoid use through its interaction with the opioid system may affect opioid signaling in the brain, thus scientifically trying to explain the frequent use of cannabinoids in opiate dependence, especially in opiate reduction. therapy. Several groups of authors have reported synergies between cannabinoids and opiates when administered concomitantly. It is important that after achieving a stable dose of methadone, there was a decrease in the use of cannabis in the sample as a whole. This could be a direct effect of methadone, but no dose of methadone has been found to be related to cannabis use rates.

A study comparing the detection of substance use during the first year of substitution therapy observed a similar but less dramatic decrease in cannabis use among methadone-maintained patients.

Both buprenorphine and methadone substitution have resulted in a dramatic reduction in illicit opiate abuse in spite of conventional cannabis use.

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Alergijski bronhioloalveolitis – hipersenzitivni pneumonitis – prikaz slučaja

Allergic bronchoalveolitis - hypersensitivity pneumonitis – case report

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Apstrakt

Alergijski bronhioloalveolitis je imunološko zapaljenje koje zahvata plućni intersticijum, terminalne bronhiole i alveoli, usled preosetljivosti na antigene organske prašine biljnog i životinjskog porekla. Sinonimi za ovo oboljenje su hipersenzitivni pneumonitis, ekstrinzički alergijski alveolit. Imunopatogeneza hipersenzitivnog pneumonitisa se odvija tako što antigeni (termofilne aktinomicete, proteini ptica, proteini poreklom od svinja, mikrospore faeni, itd…) bivaju udahnute u disajne organe gde ih fagocituju alveolarni makrofagi, a ovi aktivirani luče mnoge citokine. Aktiviraju se i T limfociti delujući na B limfocite, a ovi luče antitela klase IgG, IgM i IgA. Ova antitela se nalaze u 50 % obolelih, ali nisu znak bolesti, već samo ekspozicije. Bolesnici imaju febrilnost, groznicu, kašalj, dispneju i leukocitozu.

Prikaz slučaja: Prikazujemo bolesnika starog 47 godina koji dolazi zbog povišene telesne temperature (38,9º C), malaksalosti, kašlja, otežanog disanja i gušenja. Ovakve epizode je imao nekoliko puta u toku godine. Objektivnim pregledom utvrđeno je da je febrilan, auskultatorno na plućima su se čuli niskotonski zvižduci. Na radiografiji pluća nalazila su se sitna difuzna zasenčenja, više bazalno, bez uvećanja hilusnih limfnih žlezda.

Funkcionalni testovi su pokazivali smanjenje vitalnog kapaciteta sa manjom redukcijom FEV1. Rutinske laboratorijske analize ukazale su na umereno ubrzanu sedimentaciju (SE :45 mm/ prvi sat), leukocitozu (13,5) sa limfocitozom od 63 %. Pošto pacijent nije reagovao na klasičnu antibiotsku terapiju za pneumoniju kako je započeto lečenje, urađeno je alergološko testiranje na inhalatorne alergene, gde je postojala senzibilizacija na polene trava i dat je predlog za imunološko ispitivanje zbog podatka iz anamneze da se iz hobija bavi gajenjem golubova. Nakon hospitalizacije na grudnom odeljenju i dodatnih ispitivanja (povišeni IgG, u bronhoalveolarnom ispirku su dominirali limfociti na račun makrofaga), uspostavljena je dijagnoza alergijskog bronhioloalveolitisa. Pacijent je dobro odreagovao na kortikosteroidnu terapiju, a dat je savet da prekine sa gajenjem golubova.

Zaključak: Dobro uzeta lična anamneza, radna anamneza (hobi), ubrzana sedimentacija, leukocitoza, povećanje IgG u serumu, gušenje bez postojanja insuficijencije i smanjenje tegoba nakon prekida ekspoziciji alergogenim materijama, upućuju na dijagnozu alergijskog bronhioloalveolitisa. Ovo je naročito značajno, ukoliko su pacijenti u radnoj sredini izloženi prašini biljnog i životinjskog porekla, jer je alergijski bronhioloalveolitis na listi profesionalnih bolesti.

Abstract

Allergic bronchioloalveolitis is an immune inflammation that affects the pulmonary interstitium, terminal bronchioles and alveoli due to hypersensitivity to antigens of organic dust of plant and animal origin. Synonyms for this disease are hypersensitive pneumonitis, extrinsic allergic alveolitis. The immunopathogenesis of hypersensitivity pneumonitis takes place by antigens (thermophilic actinomycetes, avian proteins, proteins derived from pigs, microspores, etc.) are inhaled into the respiratory organs where they are phagocytosed by alveolar macrophages, and these activated secrete many cytokines. T lymphocytes are also activated by acting on B lymphocytes, and these secrete IgG, IgM and IgA class antibodies. These antibodies are found in 50% of patients, but they are not a sign of the disease, but only exposure. Patients have fever, chills, cough, dyspnea and leukocytosis.

Case report: We present a 47-year-old patient who comes due to fever (38.9º C), malaise, cough, shortness of breath and suffocation. He had episodes like this several times during the year. An objective examination determined that he was febrile, and low-pitched whistles were heard on the lungs. On the radiography of the lungs, there were small diffuse shadows, more basal, without enlargement of the hilar lymph glands.

Functional tests showed a decrease in vital capacity with less reduction in FEV1. Routine laboratory analyzes indicated moderately accelerated sedimentation (SE: 45 mm / first hour), leukocytosis (13.5) with lymphocytosis of 63%. Since the patient did not respond to the classic antibiotic therapy for pneumonia as the treatment began, allergological testing for inhaled allergens was performed, where there was sensitization to grass pollens, and a proposal for immunological testing was given due to data from a history of pigeon breeding. After hospitalization in the thoracic department and additional examinations (elevated IgG, bronchoalveolar lavage was dominated by lymphocytes at the expense of macrophages), which contributed to the diagnosis of allergic bronchioloalveolitis. The patient responded well to corticosteroid therapy and was advised to stop breeding pigeons.

Conclusion: A well-taken personal history, work history (hobby), accelerated sedimentation, leukocytosis, increased serum IgG, suffocation without insufficiency and reduction of discomfort after cessation of exposure to allergenic substances suggest the diagnosis of allergic bronchioloalveolitis. This is especially important if patients are exposed to dust of plant and animal origin in the work environment. because allergic bronchioloalveolitis is on the list of occupational diseases.

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Kliničke i laboratorijske osobine infekcije izazvane herpes simpleks virusom tip 1 i tip 2

Clinical and laboratory characteristics of infection caused by herpes simplex virus type 1 and type 2

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Apstrakt

Uvod: Infekcija herpes simpleks virusom prepoznata je još u vreme antičke Grčke. Istoričar Herodot opisao je pojavu ulceracija u usnoj duplji i vezikula na usnama, koje su bile praćene povišenom temperaturom i to stanje je nazvao *herpes febrilis*. Reč herpes je grčkog porekla, potiče od reči herpein i opisuje način širenja herpetičnih lezija po koži, a doslovno bi značila „puzati, mileti". Rimski imperator Tiberius je prepoznao herpes kao zaraznu bolest, a da bi sprečio širenje labijalne infekcije, uveo je „zabranu ljubljenja na javnim skupovima". Prvi pokušaji lečenja herpesa takođe potiču iz staroga Rima, od lekara Celzusa, koji je herpetične promene spaljivao usijanim gvožđem. U 16. veku Šekspir u svojoj tragediji „Romeo i Julija" daje prvi književni opis herpetičnih lezija kroz lik dame sa „plikom na usnama". Genitalni herpes prvi put je opisan u 18. veku kod Astruca, lekara francuske kraljevske porodice. Tokom 19. veka objavljeni su brojni naučni radovi sa temom transmisije infekcije herpesom i razlikovanja ove infekcije od drugih sličnih bolesti. Prvi dijagnostički testovi, objašnjenja patofizioloških mehanizama i jasno opisane kliničke prezentacije infekcije herpes simpleks virusom pojavile su se u 20. veku

Cilj rada:
- Analiza kliničkih i laboratorijskih karakteristika novorođenčadi sa infekcijom izazvanom herpes simpleks virusom (HSV);
- procena učestalosti neonatalnog herpesa (NH) u našoj sredini;
- ispitivanje korelacije seroloških i molekularnih metoda dijagnostike;
- definisanje kriterijuma za dijagnostičke i terapijske postupke.

Materijal i metode: Analizirani su podaci o novorođenčadi i odojčadi uzrasta ≤ 45 dana sa sumnjom na infekciju HSV u periodu od januara 2003. do maja 2015. godine. Dokazana HSV infekcija je podrazumevala ispoljenu kliničku sliku NH i pozitivan PCR i/ili serologiju na HSV. Za ispitivanje incidencije NH korišćeni su podaci Republičkog zavoda za statistiku Srbije. Analizirane su kliničke manifestacije, laboratorijske analize, ishod lečenja, kao i kvantifikovanje težine bolesti korišćenjem skorova SNAP II i SNAPPE II. Za statističku analizu korišćene su deskriptivne i analitičke metode.

Rezultati: Studija ima 168 ispitanika, 29 sa dokazanom, 133 sa suspektnom i 6 sa asimptomskom HSV infekcijom. Incidencija NH tokom ispitivanog perioda je 3,01 na 100.000 živorođenih. U periodu od 2010. do 2015. godine, sa uvođenjem rutinske PCR dijagnostike zabeležen je porast incidencije na 4,78 na 100 000 živorođenih. Najveći broj novorođenčadi sa dokazanom

Abstract

Introduction: Herpes simplex virus infection was recognized in ancient Greece. Historian Herodotus described the appearance of ulcers in the oral cavity and vesicles on the lips, which were accompanied by fever, and he called this condition herpes febrilis. The word herpes is of Greek origin, it comes from the word herpein and describes the way herpetic lesions spread on the skin, and it would literally mean "creep, mile". The Roman emperor Tiberius recognized herpes as a contagious disease, and in order to prevent the spread of labial infection, he introduced a "ban on kissing at public gatherings". The first attempts to treat herpes also come from ancient Rome, from the doctor Celsus, who burned herpetic changes with hot iron. In the 16th century, Shakespeare in his tragedy "Romeo and Juliet" gives the first literary description of herpetic lesions through the character of a lady with an "envelope on her lips". He first described genital herpes in the 18th century with Astruc, a doctor of the French royal family. During the 19th century, numerous scientific papers were published on the topic of transmission of herpes infection and distinguishing this infection from other similar diseases. The first diagnostic tests, explanations of pathophysiological mechanisms and clearly described clinical presentations of Herpes simplex virus infection appeared in the 20th century.

The aim of the paper:
- The analysis of clinical and laboratory characteristics of newborns with herpes simplex virus (HSV) infection,
- The estimation of the frequency of neonatal herpes (NH) in our environment,
- Correlation testing of serological and molecular diagnostic methods,
- Defining criteria for diagnostic and therapeutic procedures.

Materials and methods: Data on newborns and infants aged ≤45 days with suspected HSV infection in the period from January 2003 to May 2015 were analyzed. Proven HSV infection included a clinical NH picture and positive PCR and / or serology for HSV. The data from the Republic Statistical Office of Serbia were used to examine the incidence of NH. Clinical manifestations, laboratory analyzes, treatment outcome, as well as quantification of disease severity using SNAP II and SNAPPE II scores were analyzed. Descriptive and analytical methods were used for statistical analysis.

Results: The study has 168 subjects, 29 with proven, 133 with suspected and 6 with asymptomatic HSV infection. The incidence of NH during the study period was 3.01 per 100,000 live births. In the period 2010-2015. year, with the introduction of

infekcijom (72,45%) imao je herpesni encefalitis, 24,1% je imalo diseminovani oblik i 3,5% lokalizovani oblik bolesti. Većina infekcija uzrokovana je HSV-2 tipom (55,2%). Teži oblik bolesti imala su novorođenčad sa HSV-1 infekcijom. Ukupna smrtnost iznosila je 13,8%.

Zaključak: Učestalost neonatalnog herpesa u našoj populaciji odgovara učestalosti u ostalim evropskim zemljama. Sa unapređenjem dijagnostičkih metoda očekujemo dalji porast incidencije. Osobenosti NH u našoj sredini su veći broj HSV-2 infekcija i češća pojava herpes encefalitisa. Smrtni ishod je češći kod HSV-1 infekcije.

routine PCR diagnostics, an increase in incidence was recorded to 4.78 per 100,000 live births. The largest number of newborns with a proven infection (72.45%) had herpes encephalitis, 24.1% had a disseminated form and 3.5% a localized form of the disease. Most infections are caused by HSV-2 type (55.2%). Newborns with HSV-1 infection had a more severe form of the disease. Total mortality was 13.8%.

Conclusion: The frequency of neonatal herpes in our population corresponds to the frequency in other European countries. With the improvement of diagnostic methods, we expect a further increase in incidence. The peculiarities of NH in our environment are a higher number of HSV-2 infections and a more frequent occurrence of herpes encephalitis. Fatal outcome is more common with HSV-1 infection.

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Prikaz slučaja u Specijalnoj bolnici Merkur – efekat promene stila života i savremene medicinske terapije na glikoregulaciju

Case report in Mercury Special Hospital - the effect of lifestyle change and modern medical therapy on glycoregulation

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Apstrakt

Uvod i cilj rada: Diabetes mellitus definiše se kao hronično stanje u kome dolazi do povećanja nivoa glukoze u krvi zbog nemogućnosti organizma da proizvede dovoljnu količinu insulina ili je sposobnost iskorišćavanja insulina neadekvatna. Nedostatak insulina ili nesposobnost ćelija da odgovore na dejstvo insulina dovodi do povećanja nivoa glukoze u krvi, odnosno hiperglikemije, koja predstavlja osnovnu karakteristiku diabetes mellitusa. Prekomerna težina i gojaznost se definišu kao prekomerno nakupljanje masnog tkiva do stepena koji utiče na fizičko i psihosocijalno zdravlje, stanje pojedinca i kvalitet života. Gojaznost se smatra „zdravstvenom katastrofom" u razvijenim i zemljama u razvoju, zbog svoje učestalosti koja je u konstantnom porastu širom sveta. Posledica ove epidemije je, pre svega, razvoj insulinske rezistence i diabetes mellitusa tip 2 u kombinaciji sa faktorima rizika, smanjenom fizičkom aktivnošću i sedenternim načinom života. Većina osoba sa diabetes mellitusom tip 2 imaju prekomernu težinu ili su gojazni, a kod onih koji nisu, često postoji bar povećana količina abdominalnog masnog tkiva. Gojaznost je povezana sa brojnim medicinskim, psihološkim i socijalnim stanjima, od kojih je najopasniji tip 2 diabetes mellitusa. Početkom veka je procenjeno da je broj osoba sa diabetes mellitusom tip 2 oko 171 miliona ljudi, i smatra se da će se taj broj do 2030. godine povećati na 360 miliona. Učestalost diabetes mellitusa tip 2 je od 3 do 7 puta veća kod gojaznih odraslih osoba, u odnosu na osobe sa normalnom telesnom težinom. Odrasle osobe sa indeksom telesne mase >35 kg/m2 su u 20 puta većem riziku za razvoj diabetes mellitusa tip 2 u odnosu na osobe čiji je ITM između 18.5kg/m2 i 24.9kg/m2. Smatra se da za svaki 1 kg povećanja telesne težine postoji 4.5% veći rizik za razvoj dijabetesa. S obzirom na to da višak masnog tkiva predstavlja značajnu prepreku u postizanju dobre glikoregulacije, terapijski pristupi u lečenju diabetes mellitusa, koji istovremeno deluju na kontrolu glikemije i kontrolu telesne težine, predstavljaju poseban izazov u savremenoj medicini.

Prikaz slučaja: Pacijent dolazi na lečenje i edukaciju u Specijalnu bolnicu Merkur. Primenjena je medicinsko nutritivna terapija u kalorijskom unosu 3200 kcal. Makronutritivni odnos je 55% ugljenih hidrata, 15% belančevina, 30% masti. Primenjena je savremena medikamentozna terapija: GLP-1, SGLT2-inhibitori, metformin. Cilj je postizanje dobre glikoregulacije i redukcija telesne težine. Pacijent je praćen 6 meseci, od aprila do oktobra 2019. godine.

Rezultati: Pacijent MD, životne dobi 55 godina, ugostitelj, pušač, diabetes mellitus unazad 5 godina na terapiji metforminom 2g.

Abstract

Introduction and aims of the work: Diabetes mellitus is defined as a chronic condition in which there is an increase in blood glucose levels due to the inability of the body to produce a sufficient amount of insulin or the ability to use insulin is inadequate. Lack of insulin or inability of cells to respond to the action of insulin leads to an increase in blood glucose levels, which is hyperglycemia, which is the basic characteristic of diabetes mellitus. Overweight and obesity are defined as excessive accumulation of adipose tissue to the extent that it affects physical and psychosocial health, an individual's condition, and quality of life. Obesity is considered a "health catastrophe" in developed and developing countries because of its constant increase worldwide. The consequence of this epidemic is primarily the development of insulin resistance and type 2 diabetes mellitus in combination with risk factors, reduced physical activity, and a sedentary lifestyle. Most people with type 2 diabetes mellitus are overweight or obese, and those who do not often have at least an increased amount of abdominal fat. Obesity is associated with a number of medical, psychological, and social conditions, the most dangerous of which is type 2 diabetes mellitus.

At the beginning of the century, it was estimated that the number of people with type 2 diabetes mellitus is around 171 million people, and it is estimated that this number will increase to 360 million by 2030. The incidence of type 2 diabetes mellitus is 3 to 7 times higher in obese adults compared to people with normal body weight. Adults with a body mass index> 35 kg / m2 are 20 times more likely to develop type 2 diabetes mellitus than individuals with a BMI between 18.5kg / m2 and 24.9kg / m2. It is believed that for every 1 kg of weight gain, there is a 4.5% higher risk of developing diabetes. Since excess adipose tissue is a significant obstacle to achieving good glycoregulation, therapeutic approaches in the treatment of diabetes mellitus, which simultaneously act on glycemic control and weight control, represent a special challenge in modern medicine.

Case report: The patient comes for treatment and education at a Special hospital "Merkur". Medical nutritional therapy was applied in a caloric intake of 3200 kcal. The macronutrient ratio is 55% carbohydrates, 15% protein, 30% fat. Modern drug therapy was applied: GLP-1, SGLT2-inhibitors, metformin. The goal is to achieve good glycoregulation and weight reduction. The patient was followed for 6 months from April to October 2019.

Results: Patient MD aged 55 years, caterer, smoker, diabetes mellitus back 5 years on metformin 2g therapy. Associated diseases hypertension, hyperlipidemia, obesity TT 153kg, TV-

Pridružena oboljenja hipertenzija, hiperlipidemija, gojaznost TT 153kg, TV-176cm, BMI-49,4kg/m2, procenat masti u telu 40%,(61kg), OS-155cm. Profil glikemija: od 16-22,1mmol/L, HbA1c-11,7%, hol-4,6mmol/L, tg-4,18mmol/L, kreatinin-81μmol/L, eGFR-94ml/min, ALT-50U/L, AST-52U/L, Hgb-151g/L, Er-4,71x1012, Le-7,65x109, TSH-2,7, fT4-11,6, fT3-5,78. Na prvom pregledu uvedena terapija metformin 2g, dapaglizofin 10mg, liraglutid 1,8mg, eosuvastatin 10mg, fenofibrat 160mg i dijeta 3200kcal. Drugi pregled nakon 3 meseca: TT-123,5kg, BMI-39,9kg/m2, procenat masti 36,6%, (45,2 kg), HbA1c-7,8%, glikemije u profilu od 6,7 od 9,5 mmol/L, AST-20U/L, ALT-25U/L, kreatinin-73μmol/L, eGFR-99ml/min, thol-3,88mmol/L, tg-1,65mmol/L, Le-8,6x109, Er-4,45x1012, Hgb-133g/L. Nastavljen isti model lečenja. Treća kontrola nakon 6 meseci: TT-113,5 kg, BMI-36,6 kg/m2, procenat masti 35,8% (40,6kg), HbA1c-5%, glikemije u profilu od 4,6 do 7,5 mmol/L, kreatinin-70μmol/L,e GFR-101ml/min, Le-7,9x109, Er-4,62x1012, Hgb-140g/L, t hol-4,5mmol/L, tg-1,01mmol/L, AST-23U/L, ALT-29U/L. Sve vreme praćenja pacijent bez registrovanih hipoglikemija, bez promena u parametrima krvne slike.

Zaključak: Primenom savremene terapije i promenom stila života dolazi se do redukcije telesne težine 6,5 kg prosečno mesečno na račun masti u telu, uz postizanje optimalne glikoregulacije.

176cm, BMI-49.4kg / m2, body fat percentage 40%, (61kg), OS-155cm. Glycemic profile: from 16-22.1mmol / L, HbA1c-11.7%, chol-4.6mmol / L, tg-4.18mmol / L, creatinine -81μmol / L, eGFR-94ml / min, ALT-50U / L, AST-52U / L, Hgb-151g / L, Er-4.71x1012, Le-7.65x109, TSH-2.7, fT4-11.6, fT3-5.78. Metformin 2g, dapaglizofin 10mg, liraglutide 1.8mg, eosuvastatin 10mg, fenofibrate 160mg and diet 3200kcal were introduced at the first examination. Second examination after 3 months: TT-123.5kg, BMI-39.9kg / m2, fat percentage 36.6 %, (45.2 kg), HbA1c-7.8%, glycemia in the profile of 6.7 of 9.5 mmol / L, AST-20U / L, ALT-25U / L, creatinine-73μmol / L, eGFR -99ml / min, thol-3.88mmol / L, tg-1.65mmol / L, Le-8.6x109, Er-4.45x1012, Hgb-133g / L. The same treatment model was continued. Third control after 6 months: TT-113.5 kg, BMI-36.6 kg / m2, fat percentage 35.8% (40.6 kg), HbA1c-5%, glycemia in the profile of 4, 6 to 7.5 mmol / L, creatinine-70μmol / L, e GFR-101ml / min, Le-7.9x109, Er-4.62x1012, Hgb-140g / L, t hol-4.5mmol / L, tg -1.01mmol / L, AST-23U / L, ALT-29U / L. All the time the patient was monitored without registered hypoglycemia, without changes in the parameters of the blood count.

Conclusion: With the application of modern therapy and lifestyle changes, there is a reduction of body weight of 6.5 kg on average per month at the expense of body fat with the achievement of optimal glycoregulation.

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Značaj vizuelne urgentne medicine u smanjenju „door to door time"

The importance of visual emergency medicine in reducing "door to door time"

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Apstrakt

Akutni infarkt miokarda, moždani udar i trauma, poslednjih decenija predstavljaju vodeće uzroke smrti, kako u svetu, tako i kod nas. Kako su vremenom zdravstvene ustanove postajale istovremeno i specijalizovani centri za STEMI, MU, politraumu i druga urgentna stanja, tako je ustanovljeno pravilo „zlatnog sata"; „door to puncture time" – vreme kraće od 90 minuta za endovaskularno lečenje MU, nastalog usled okluzije velikog krvnog suda: „door to balloon time" – vreme kraće od 90 minuta za pPCI kod STEMI, kao i druge vremenske ciljeve za različita hitna stanja. Efikasan tretman svakog od ovih urgentnih stanja je vremenski zavisan, tako da su brzo postavljanje dijagnoze, stabilizacija i transport pacijenta u što kraćem vremenskom periodu od ključnog značaja. Sprovedene su brojne studije koje su analizirale faktore koji doprinose skraćenju „door to door" vremena, a koje su pokazale da aktiviranje sale za kateterizaciju, odnosno osoblja specijalizovanog za zbrinjavanje određenog urgentnog stanja direktnim slanjem podataka, putem audio i video zapisa od strane ekipe HMP još dok je pacijent na putu do specijalizovanog zdravstvenog centra, značajno skraćuje vreme do ciljne intervencije i smanjuje stepen mortaliteta i morbditeta. To se može postići implementiranjem standardizovanog sistema sa video komunikacijom između dispečerskog centra i ekipa na terenu, lica koja pozivaju dispečerski centar u cilju pružanja hitne medicinske pomoći, kao i urgentnog centra ili drugih celina u okviru zdravstvenih ustanova koje treba angažovati u slučaju potrebe, uz mogućnost prebacivanja tekuće video komunikacije sa ekipama ili pacijentima na ove celine. Da bi se ovi zahtevi ostvarili, potrebno je da i zdravstvene ustanove i pacijenti zadovoljavaju određene telekomunikacione, hardverske i softverske uslove.

Ovaj kurs ima za cilj obučavanje medicinskih radnika, pre svega lekara zaposlenih u različitim službama, o uspostavljanju međusobne video komunikacije i prenosa podataka u realnom vremenu između ovih ustanova, kako bi se omogućio „konzilijarni pregled" pacijenta pre njegovog pristizanja u tercijarnu zdravstvenu ustanovu, što bi dovelo do značajnog skraćenja „door to door" vremena i optimalizovanja ishoda lečenja. Pored STEMI mreže, plan je da se formira STROKE mreža, TRAUMA mreža, ARREST mreža i ULTRAZVUK mreža. Ultrazvuk koristimo podjednako u svim fazama reanimacije, pre nego što dođe do srčanog zastoja, tokom same kardiopulmonalne reanimacije, kao i u periodu nakon toga. Pre sprovedenih reanimacionih mera, ultrazvuk možemo primeniti kod pacijenata bez svesti, sa bolom u grudima i/ili sumnjom na AKS, kod hipotenzivnih, dispnoičnih pacijenata sa cijanozom, politraumatizovanih, za ultrazvučnu procenu tupe traume abdomena – „fast protokol" i kod jatrogenih komplikacija. U toku same CPCR, ultrazvukom možemo da potvrdimo PEA ili asistoliju, sumnju na tamponadu perikarda, efektivnost kompresija i ROSC. Takođe, uz pomoć ultrazvuka mogu se izvesti intervencije kao perikardiocenteza i pleuralna punkcija.

Abstract

Acute myocardial infarction, stroke, and trauma, in recent decades, are the leading causes of death both in the world and in our country. As health care institutions became specialized centers for STEMI, stroke, polytrauma, and other emergencies at the same time, the rule of the "golden hour" was established; "Door to puncture time" - time shorter than 90 minutes for endovascular treatment of stroke caused by occlusion of a large blood vessel; "Door to balloon time" - a time less than 90 minutes for PCI in STEMI, as well as other time targets for various emergencies. Effective treatment of each of these emergencies is time-dependent, so rapid diagnosis, stabilization, and transportation of the patient in the shortest possible time are crucial. Numerous studies have been conducted that analyzed the factors that contribute to shortening the "door to door" time, which showed that the activation of the catheterization room, or staff specializing in emergency care by sending data directly, via audio and video by the HMP team while is a patient on the way to a specialized health center, significantly shortens the time to targeted intervention and reduces mortality and morbidity. This can be achieved by implementing a standardized system with video communication between the dispatch center and field teams, persons calling the dispatch center to provide emergency medical care, as well as an emergency center or other units within health facilities to be engaged if necessary, with the possibility switching ongoing video communication with teams or patients to these units. In order to meet these requirements, it is necessary that both health care institutions and patients meet certain telecommunication, hardware, and software requirements.

This course aims to train medical workers, primarily doctors employed in various services, to establish mutual video communication and real-time data transfer between these institutions in order to enable "consultation" of the patient before his arrival in a tertiary health institution, which would lead to significantly shorten the "door to door" time and optimize treatment outcomes. In addition to the STEMI network, the plan is to form a STROKE network, a TRAUMA network, an ARREST network, and an ULTRASOUND network. We use ultrasound equally in all phases of resuscitation, before cardiac arrest occurs, during cardiopulmonary resuscitation as well as in the period after that. Prior to resuscitation measures, ultrasound can be used in unconscious patients with chest pain and/or suspected ACS, in hypotensive, dyspnoeic patients with cyanosis, polytraumatized, for ultrasound assessment of blunt abdominal trauma - "fast protocol" and in iatrogenic complications. During CPCR itself, ultrasound can confirm PEA or asystole, suspicion of pericardial tamponade, compression effectiveness, and ROSC. Interventions such as pericardiocentesis and pleural puncture can also be reported with the help of ultrasound.

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Medicinska reč **Medical Word**

APSTRAKT 11S 2021; 2(1): 13–13 ABSTRACT 11E

Dijetetski značaj veštačkih zaslađivača
Dietary significance of artificial sweeteners

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Apstrakt

Veštački zaslađivači su sintetičke zamene za šećer, ali se mogu dobijati i proizvodnjom iz nekih biljaka koje prirodno sadrže šećere. Svi veštački zaslađivači su mnogo puta slađi od običnog šećera i potrebna je samo mala količina veštačkog zaslađivača da zameni kašiku šećera. Oni nemaju kalorijske vrednosti.

Cilj edukacije je prikazivanje aktuelnih činjeničnih podataka o veštačkim zaslađivačima, njihovim karakteristikama i dokazima o njihovoj bezbednosti, koji su od značaja za dobru farmaceutsku praksu. Svi zaslađivači koji se upotrebljavaju u prehrambenoj industriji podležu strogim ispitivanjima kvaliteta i zdravstvene bezbednosti. Zbog rastućeg trenda gojaznosti, uloga niskokalorijskih zaslađivača značajna je za smanjenje energetskog unosa, te je potrebno da se nutricionisti - dijetetičari upoznaju sa novinama u ovoj oblasti. Veštački zaslađivači se koriste i u ishrani obolelih od dijabetesa i ne utiču na nivo insulina. Dokazano je da je konzumacija odobrenih zaslađivača u granicama prihvatljivog dnevnog unosa bezbedna tokom trudnoće, kao i detinjstvu.

Abstract

Artificial sweeteners are synthetized substitutes for sugar, but they can also be obtained by production from some plants that naturally contain sugars. All artificial sweeteners are much sweeter than regular sugar and only a small amount of artificial sweetener is needed to replace a spoonful of sugar. They have no caloric value.

The aim of the training is to present current factual data on artificial sweeteners, their characteristics, and evidence of their safety, which are important for good pharmaceutical practice. All sweeteners used in the food industry are subject to strict quality and health safety tests. Due to the growing trend of obesity, the role of low-calorie sweeteners is important for reducing energy intake, it is important for nutritionists and dieticians to get acquainted with the novelties in this area. Artificial sweeteners are also used in the diet of diabetics and do not affect insulin levels. It has been proven that the consumption of approved sweeteners within the limits of acceptable daily intake is safe during pregnancy, as well as in childhood.

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APSTRAKT 12S 2021; 2(1): 14–15 ABSTRACT 12E

Dijabetesno stopalo – u praksi, na terenu
Diabetic foot - in field practice

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Apstrakt

Dijabetesno stopalo je hronična komplikacija diabetea mellitusa i definiše se kao skup različitih pojava i poremećaja koji se ispoljavaju na stopalu kod osoba obolelih od dijabetesa, a posledica su, pre svega, oštećenja perifernih nerava i krvnih sudova. Prema definiciji SZO dijabetesno stopalo je ono stopalo koje je narušenog funkcionalnog integriteta zbog infekcije, rana i razaranja tkiva, te oštećenja nerava i bolesti krvnih sudova nogu. Neuro-ishemijske promene mogu da se komplikuju dodatnom infekcijom. Pojava ulceracija na stopalu, nastanak gangrene i posledične amputacije značajni su uzroci morbiditeta i invalidnosti dijabetičara.

Dijabetesno stopalo predstavlja veliki medicinski, socijalni, ekonomski, lični (jer značajno umanjuje kvalitet života obolelog), ali i problem društva u celini. Javlja se kod svakog četvrtog ili petog pacijenta obolelog od dijabetesa, a amputacija će biti sprovedena u 10-30% slučajeva, s tim što je po nekim izvorima 50-80% preventivnog tipa. Amputacija udova kod dijabetičara je petnaest puta češća nego u opštoj populaciji. Oko 70% netraumatskih amputacija se regrutuje iz ove grupe bolesnika,

Edukacija pacijenta i njegove porodice veoma je važna u prevenciji, te je potrebno savetovati pacijente da svakodnevno obavljaju detaljan pregled stopala i da, po potrebi, koriste ogledalo za nedostupne delove, svakodnevno peru stopala blagim sapunom u mlakoj vodi, pravilno seku nokte i pažljivo uklanjaju žuljeve i zadebljanja na koži, da nose adekvatnu, udobnu obuću. Takođe je potrebno posebno skrenuti pažnju na smanjen zaštitni senzibilitet u odnosu na termičke, mehaničke i hemijske agense. Neophodno je delovati i na ostale faktore rizika, kao što su loša glikoregulacija i pušenje.

Dijagnoza dijabetesnog stopala postavlja se na primarnom nivou zdravstvene zaštite, na osnovu subjektivnih tegoba bolesnika i standardnog pregleda stopala. U proceni dijabetesnog stopala uzimaju se u obzir vaskularni i neurološki status, prisustvo infekcije, deformiteti i mehanički pritisak na pojedine delove stopala. Skrining za otkrivanje osoba sa rizikom da razviju dijabetesno stopalo vrši se na primarnom nivou zdravstvene zaštite i to obaveznim pregledom obolelih od dijabetesa najmanje jednom godišnje. Anamnezom se dolazi do podataka o prisustvu neurovaskularnih simptoma, inspekcijom se otkrivaju anatomske anomalije i deformiteti stopala, poremećena statika i opterećenje sa patološkim pritiscima na pojedine delove stopala, promene na tim mestima, kao što su zadebljanja kože, žuljevi, ulceracije i druge lezije, promena boje kože, suvoća kože, prisustvo fisura, ragada i edema.

Osnovni pregled podrazumeva:
1. Procenu vaskularnog statusa – palpacija pedalnih pulseva, čije odsustvo zahteva dalje ispitivanje, dopler krvnih sudova, an-

Abstract

Diabetic foot is a chronic complication of diabetes mellitus and is defined as a set of various phenomena and disorders that manifest on the foot in people with diabetes, and the consequence is primarily damaging to peripheral nerves and blood vessels. According to the WHO definition, a diabetic foot is one that has impaired functional integrity due to infection, wounds and tissue destruction, and nerve damage, and blood vessel disease of the legs. Neuro-ischemic changes can be complicated by additional infection. Occurrence of ulcerations on the foot, gangrene, and consequent amputation are significant causes of morbidity and disability in diabetics.

Diabetic foot is a great medical, social, economic, as personal problem, because it significantly reduces the quality of life of the patient. Also, it is the problem of society as a whole. It occurs in every fourth or fifth patient with diabetes, and amputation will be performed in 10-30% of cases, but according to some sources it is 50-80% of the preventive type. Limb amputation in diabetics is fifteen times more common than in the general population. About 70% of non-traumatic amputations are recruited from this group of patients.

Education of the patient and his family is very important in prevention, so it is necessary to advise patients to perform a detailed examination of the feet every day and to use a mirror for inaccessible parts, wash the feet daily with mild soap in lukewarm water, cut nails properly and carefully remove blisters and thickening. on the skin, to wear adequate, comfortable footwear. It is also necessary to pay special attention to the reduced protective sensitivity in relation to thermal, mechanical, and chemical agents. It is necessary to act on other risk factors, such as poor glucoregulation and smoking.

The diagnosis of diabetic foot is made at the primary level of health care, based on the subjective complaints of the patient and a standard examination of the foot. Vascular and neurological status, the presence of infection, deformities, and mechanical pressure on certain parts of the foot are taken into account in the assessment of the diabetic foot. Screening to detect people at risk of developing diabetic foot is performed at the primary level of health care by mandatory examination of diabetics at least once a year. Anamnesis provides data on the presence of neurovascular symptoms, inspection reveals anatomical anomalies and deformities of the foot, disturbed statics, and load with pathological pressures on certain parts of the foot, changes in those places, such as skin thickening, blisters, ulcers, and other lesions, changes of the skin color, dry skin, the presence of fissures, rhagades and edema.

The basic examination includes:
1. Assessment of vascular status - palpation of pedal pulses, the absence of which requires further examination, Doppler of blood

giografija, rentgengrafija stopala. Takođe je potrebno utvrditi i kakva je boja i temperatura kože stopala.
2. Procenu neurološkog statusa – skrining za prisustvo neuropatije vrši se na osnovu kliničkog neuropatskog skora, Semes-Njeinsteintovog (10 gramskog mikrofilamenta) za procenu somatosenzitivnog praga i ispitivanjem praga osetljivosti na vibracioni senzibilitet zvučnom viljuškom.

Cilj rada je ispitivanje prisustva ove komplikacije kod pacijenata na kućnom lečenju, obolelih od diabetes mellitusa, stepen edukovanosti pacijenata o značaju i načinu prevencije, kao i ispitivanje navika pacijenata u vezi sa negom stopala i ukazivanje na važnost prevencije dijabetesnog stopala.

Metoda rada je inspekcija, palpacija, pregled uz pomoć mikrofilamenta, anamnestički podaci o postojanju subjektivnih tegoba i anketa o edukovanosti i navikama u vezi sa negom stopala.

vessels, angiography, X-ray of the foot. It is also necessary to determine the color and temperature of the skin of the feet.
2. Assessment of neurological status - screening for the presence of neuropathy is performed on the basis of clinical neuropathic score, Semes Neinstein's (10-gram microfilament) for assessment of somatosensation threshold and examination of sensitivity threshold to vibration sensitivity with a tuning fork.

The aim of this study was to examine the presence of this complication in-home treatment patients with diabetes mellitus, the level of education of patients about the importance and method of prevention, as well as patient habits related to foot care, and to point out the importance of diabetes foot prevention.

The method of work is inspection, palpation, examination with the help of microfilament, anamnestic data on the existence of subjective problems, and surveys on education and habits related to foot care.

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Medicinska reč | **Medical Word**

APSTRAKT 13S | 2021; 2(1): 16–16 | ABSTRACT 13E

Starenje i žensko zdravlje
Aging and women's health

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Apstrakt

Klimakterijum kao prelazni period prelaska iz reproduktivne faze života u senijum traje prilično dugo i praćen je različitim akutnim, tranzitornim simptomima estrogenog deficita. Ovi simptomi su vazomotorni i psihološki. Senijum pak karakterišu trajni efekti estrogenog deficita koji se ispoljavaju involutivnim promenama na urogenitalnim organima, promenama u koži i kosi, osteoporozi i promenama u kardiovaskularnom sistemu.

Sve ovo umnogome narušava kvalitet života žene, pa je cilj ovog rada da se upoznamo sa efektima nedostatka ženskih polnih hormona i mogućnostima terapijskih postupaka, bilo da su oni vezani za hormonsku supstitucionu terapiju ili pak za nove metode dostupnih anti-aging i ostalih terapijskih programa. Takođe, cilj je i upoznavanje sa indikacijama i kontraindikacijama za terapijske procedure, kao i sa pozitivnim terapijskim, ali i mogućim neželjenim efektima.

Sa produženjem životnog veka, žena trećinu svog života provodi u stanju estrogenog deficita. Upravo zbog toga je od velikog socioekonomskog i medicinskog značaja tretman poremećaja i oboljenja uslovljenih menopauzom, kao i popravljanje života žene i njenog zdravstvenog stanja u senijumu.

Abstract

Menopause, as a period of transition from the reproductive phase of life to senium, lasts quite a long time and is accompanied by various acute, transient symptoms of estrogen deficiency. These symptoms are vasomotor and psychological. Senium, on the other hand, is characterized by lasting effects of estrogen deficiency, which are manifested by involutional changes in the urogenital organs, changes in the skin and hair, osteoporosis, and changes in the cardiovascular system.

All this greatly impairs a woman's quality of life, so the aim of this paper is to get acquainted with the effects of female sex hormone deficiency and the possibilities of therapeutic procedures, whether they are related to hormone replacement therapy or new methods of available anti-aging and other therapeutic programs, getting acquainted with the indications and contraindications for therapeutic procedures, as well as positive therapeutic but also possible side effects.

As life expectancy increases, a woman spends a third of her life in a state of estrogen deficiency. Precisely because of that, the treatment of disorders and diseases caused by menopause is of great socio-economic and medical importance, as well as the improvement of a woman's life and her health condition in senium.

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APSTRAKT 14S 2021; 2(1): 17–17 ABSTRACT 14E

Zbrinjavanje novorođenčeta nakon reanimacije
Caring for a newborn baby after resuscitation

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Apstrakt

Ukupna stopa preživljavanja kod dece kod koje je nastao kardiopulmonalni zastoj van bolnice je svega 6-8%, a veliki broj preživele dece ima značajna neurološka oštećenja. Zbog toga je brza i odlučna kardio-pulmonalna reanimacija vrlo bitna za uspostavljanje srčane radnje i cirkulacije, kao i za preživljavanje bez neuroloških sekvela. Stopa preživljavanja iznosi tek 27-33%. Posle uspešne reanimacije sledi stabilizacija, koja podrazumeva brzu procenu rizika, potrebu za dodatnim intervencijama i sprovođenje istih. Novorođenče je u posebnom riziku od hipoglikemije, te prvi korak podrazumeva obezbediti i.v. liniju.

Ekstra mere su usmerene na sprečavanje hipotermije. Nije retka i potreba za dodatnom potporom disanja, s obzirom na to da su respiratorni distres ili respiratorni distres sindrom najčešći razlozi boravka u jedinicama intenzivne neonatalne nege. Hipovolemija dovodi do složene cirkulatorne disfunkcije, što za posledicu ima nedovoljnu oksigenaciju tkiva i neadekvatnu ishranu tkiva, a sve to rezultira multiplom organskom disfunkcijom. Prisustvo infekcije dodatno otežava oporavak. Rođenje bolesnog deteta za roditelje predstavlja početak teške i duge borbe. Uzajamno poverenje jedino dovodi do uspeha u lečenju.

Abstract

The overall survival rate in children who developed cardiopulmonary arrest outside the hospital is only 6-8%, and a large number of surviving children have significant neurological impairments. Therefore, rapid and decisive cardio-pulmonary resuscitation is very important for the establishment of cardiac function and circulation, as well as for survival without neurological sequelae. The survival rate is only 27-33%. Successful resuscitation is followed by stabilization, which implies rapid risk assessment, the need for additional interventions, and their implementation. The newborn is at a special risk of hypoglycemia, and the first step involves providing i.v. line.

Additional measures are aimed at preventing hypothermia. The need for additional respiratory support is not uncommon, since respiratory distress or respiratory distress syndrome are the most common reasons for staying in neonatal intensive care units. Hypovolemia leads to complex circulatory dysfunction, which results in insufficient tissue oxygenation and inadequate tissue nutrition, all of which result in multiple organic dysfunctions. The presence of infection further complicates recovery. For parents, the birth of a sick child is the beginning of a difficult and long struggle. Mutual trust only leads to treatment success.

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APSTRAKT 15S 2021; 2(1): 18–18 ABSTRACT 15E

Профилактика на остеопорозата в училищна възраст
Prevention of osteoporosis in school-age

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Апстракт

В доклада се разглеждат въпроси, свързани със значението на профилактиката на остеопорозата в училищна възраст. Това заболяване е широко разпространено, особено в напреднала възраст, и е обявено за третото по социална значимост след сърдечно-съдовите и онкологичните заболявания.

Остеопорозата е прогресиращо метаболитно заболяване на костите, което се обуславя от нарушено равновесие между процесите на изграждане и разграждане на костната тъкан. Най-масово е разпространена първичната остеопороза. Тя засяга предимно жените в менопауза, тъй като организма им не приема подхранващите костния скелет хормон естрогени.

Важна причина за остеопорозата е формирането на много малка костна маса през детството и юношеството. Това е периодът на бързо скелетно развитие за достигане на пиковата костна маса. Недостигането на оптималната пикова костна маса означава риск от остеопороза в късния живот на индивида.

Основно значение за лечението на остеопорозата има своевременното откриване и ранната профилактика на заболяването. Загубата на костна маса протича незабелязано и без симптомно, в продължение на години докато не настъпят болки в кръста, намаляване на ръста, изкривяване на гръбначния стълб и фрактура.

Медицинските сестри, работещи в училищата, имат важна роля в профилактиката на остеопорозата. Те трябва да участват активно в обучението на децата, като спомагат за изграждане на навици за здравословен начин на живот. Установено е, че при правилен начин на живот, максималната костна маса в ранния живот успешно се противопоставя на костната загуба свързана с остаряването.

Основно изискване към медицинската сестра е правилното разбиране на медико-социалните проблеми на учениците, имащи склонност към развитие на остеопороза. Изучаването и изследването на тези проблеми е предпоставка за подобряване на грижите и намаляване на риска от развитие на заболяването. За това е необходимо непрекъснато повишаване на квалификацията и професионалните умения на медицинската сестра, което изисква постоянно запознаване с новостите на медицинската наука и развитието на апаратурата.

Abstract

This paper deals with issues related to the importance of osteoporosis prevention in school age. This disease is widespread, especially among elderly people, and is in third place in terms of social significance, after cardiovascular diseases and malignancies.

Osteoporosis is a progressive metabolic bone disease, which is caused by a disturbed balance between the process of creation and decomposition of bone tissue. Primary osteoporosis is the most common. It mainly affects women in menopause, because their body does not accept estrogen into the bone tissue.

An important cause of osteoporosis is the formation of very low bone mass in childhood and adolescence. It is a period of rapid skeletal development and reaching the highest bone mass.

The lack of optimal development of bone mass in that period means the risk of osteoporosis in the late life of the individual.

Early detection and early prevention of the disease are necessary for the treatment of osteoporosis. The bone loss remains unnoticed and asymptomatic over the years until lower back pain, stunted growth, spinal curvature, and fracture occur.

School nurses play an important role in preventing osteoporosis. They should be actively involved in the education of children, helping to build healthy living habits. It has been established that with a proper lifestyle, maximum bone mass in early life successfully counteracts bone loss associated with aging.

The basic task of a nurse is to properly understand the medical and social problems of students, which can be of influence on the development of osteoporosis. Studying and researching these problems is a prerequisite for improving care and reducing the risk of developing the disease. This requires the improvement of the qualifications and professional skills of the nurse, which requires the ability to get familiar with medical science and the development of equipment.

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Medicinska reč **Medical Word**

APSTRAKT 16S 2021; 2(1): 19–19 ABSTRACT 16E

Virusne bolesti ženskog genitalnog trakta
Viral diseases of the female genital tract

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Apstrakt

Polno prenosive infekcije čine veliku grupu oboljenja koja su izazvana različitim mikroorganizmima. Zbog visokih stopa morbiditeta i čestih komplikacija naročito kod osoba ženskog pola, ova oboljenja predstavljaju zdravstveni problem od opšteg značaja. Neke od polnih infekcija mogu biti asimptomatske, pa se inficirane osobe ne leče, te predstavljaju neprepoznate rezervoare zaraze. Za razliku od bakterijskih infekcija koje su izlečive, virusne infekcije često ostaju doživotno u organizmu inficirane osobe. Cilj ove edukacije je da se učesnici upoznaju sa najčešćim virusnim polnim infekcijama koje se javljaju u predelu vulve: genitalnim herpesom, genitalnim bradavicama – kondilomima i zaraznim moluskama.

Genitalni herpes je izazvan herpes simpleks virusom tip 2, a u kliničkoj slici dominiraju genitalne ulceracije koje zbog svojih karakteristika olakšavaju i transmisiju virusa humane imunodeficijencije. Stoga je bitno infekciju držati pod kontrolom uvođenjem supresivne terapije kod osoba koje imaju više od šest rekurentnih epizoda herpesa tokom jedne godine. S druge strane, infekcija kod trudnica u poslednjem trimestru trudnoće može preći na plod i izazvati ozbiljne komplikacije.

Kondilomi predstavljaju najčešću virusnu polno prenosivu infekciju u našoj sredini. Izazvani su benignim tipovima humanog papiloma virusa: tipom 6 i 11. Zbog čestih recidiva i nakon uklanjanja promena, kondilomi negativno utiču na kvalitet života inficiranih osoba. Neki tipovi humanog papiloma virusa imaju onkogeni potencijal i mogu izazvati karcinom grlića materice i vulve. Pregled za rano otkrivanje karcinoma grlića materice obavlja se jednostavnim Papanikolau testom.

Zarazne moluske zahvataju vulvu, kao i pubičnu i glutealnu regiju žena. Autoinokulacijom i brijanjem se lako raznose što produžava period infektivnosti obolele osobe. Veliki broj ovih lezija na koži može upućivati na sindrom stečene imunodeficijencije.

Učesnici edukacije biće upoznati sa etiologijom, kliničkom slikom, komplikacijama, najnovijim terapijskim protokolom i preventivnim merama u sprečavanju prenošenja i širenja ovih infekcija. Poseban značaj će biti u promociji vakcinacije žena protiv infekcije izazvane humanim papiloma virusima.

Abstract

Sexually transmitted infections make up a large group of diseases caused by various microorganisms. Due to high morbidity rates and frequent complications, especially among women, these diseases are a health problem of general importance. Some sexually transmitted infections can be asymptomatic, so infected people are not treated and are unrecognized reservoirs of infection. Unlike bacterial infections, which are curable, viral infections often remain in the body of an infected person for life. The aim of this training is to acquaint participants with the most common viral sexually transmitted infections that occur in the vulva: genital herpes, genital warts - condyloma, and infectious mollusks.

Genital herpes is caused by the herpes simplex virus type 2, and the clinical manifestation is dominated by genital ulcers, which, due to their characteristics, also facilitate the transmission of the human immunodeficiency virus. Therefore, it is important to keep the infection under control by introducing suppressive therapy in people who have more than six recurrent episodes of herpes in one year. On the other hand, infection among pregnant women in the last trimester of pregnancy can spread to the fetus and cause serious complications.

Condyloma is the most common viral sexually transmitted infection in our environment. They are caused by benign types of human papillomavirus: types 6 and 11. Due to frequent recurrences and after removal of the changes, condyloma negatively affects the quality of life of infected people. Some types of human papillomavirus have oncogenic potential and can cause cervical and vulvar cancer. Examination for early detection of cervical cancer is performed with a simple Papanicolaou test.

Infectious mollusks affect the vulva, as well as the pubic and gluteal regions of women. They are easily spread by autoinoculation and shaving, which prolongs the period of infectivity of the infected person. A large number of these skin lesions may indicate acquired immunodeficiency syndrome.

Participants will be introduced to the etiology, clinical picture, complications, the latest therapeutic protocol, and preventive measures to prevent the transmission and spread of these infections. It will be of special importance in the promotion of vaccination of women against infection caused by human papillomaviruses.

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APSTRAKT 17S 2021; 2(1): 20–20 ABSTRACT 17E

Helicobacter pylori
Helicobacter pylori

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Apstrakt

Helicobacter pylori uzorkuje više od 90% čireva želuca. Do 1982. godine kada je Helicobacter pylori otkriven, smatralo se da su glavni uzroci čira želuca i dvanaestopalačnog creva jače začinjena i zakiseljena hrana, stres i loše životne navike. Do otkrića bakterije, pacijenti su dobijali različite lekove koji su samo ublažavali simptome bolesti, ali nisu dovodili do izlečenja, pa su se nakon prestanka uzimanja terapije, simptomi u većini slučajeva vraćali. Sada je jasno da je uzročnik bolesti kod tih pacijenata bila bakterija koja je preživela.

Helicobacter pylori je spiralna bakterija koja je nađena na sluznici želuca. Jedina je bakterija koja može preživeti u izrazito kiselom želudačnom sadržaju, sa vrlo malo kiseonika, pri temperaturi od 37C. Osim na želudačnoj sluznici, ova bakterija je kod ljudi otkrivena i na ranicama na sluznici usne šupljine, u zubnim naslagama, u slini, a dokazana je i u stolici. U čovekovoj okolini (voda, hrana, otpadne vode) Helicobacer pylori se nalazi samo ponekada, s obzirom na to da pripada bakterijama vrlo osetljivim na različite nepovoljne činioce okoline, a i tada samo u svom kuglastom obliku, za koji nije dokazano da uzrokuje bolest.

Način prenošenja Helicobacter pylori infekcije još nije potpuno istražen. Sva dosadašnja saznanja govore u prilog tome da se infekcija prenosi direktno od zaražene osobe na zdravu na tri glavna načina:
– želudac – usta
– usta – usta
– stolica – usta.

Postoje i naznake nekih drugih puteva zaraze (iz okoline putem vode ili preko mačaka, pasa i dr.), ali je i to potrebno detaljnije ispitati.

Najbrže se zaraze mala deca koja žive u lošim socijalno-ekonomskim uslovima i gusto naseljenim mestima. Ove infekcije su najčešće kod dece koja dele krevet sa roditeljima ili drugom decom, u sredinama u kojima majka prežvaće hranu koju daje detetu ili detetovu cuclu stavlja prethodno sebi u usta. Infekcija je češća i kod dece koja su smeštena u ustanove različitog tipa.

Abstract

Helicobacter pylori cause more than 90% of gastric ulcers. Until 1982, when Helicobacter pylori were discovered, the main causes of stomach and duodenal ulcers were considered to be more spicy and acidic foods, stress, and bad life habits. Until the discovery of the bacterium, the patients received various medications that only alleviated the symptoms of the disease, but did not lead to a cure, so after stopping the therapy, the symptoms returned in most cases. It is now clear that the cause of the disease in these patients was a surviving bacterium.

Helicobacter pylori is a spiral bacterium found on the stomach lining. It is the only bacterium that can survive in extremely acidic stomach contents, with very little oxygen at a temperature of 37 °C. Except in the stomach lining, this bacterium has been detected in humans on wounds on the oral mucosa, in dental plaque, in saliva, and it has also been proven to appear in the stool. Helicobacer pylori are found in the human environment (water, food, wastewater) only occasionally since it belongs to bacteria very sensitive to various adverse environmental factors, and even then only in its spherical form, which has not been proven to cause disease.

The mode of transmission of Helicobacter pylori infection has not yet been fully investigated. All previous findings suggest that the infection is transmitted directly from an infected person to a healthy person in three main ways:
– stomach-mouth
– mouth-mouth
– stool-mouth.

There are also indications of some other ways of infection (from the environment through water or through cats, dogs, etc.), but this also needs to be examined in more detail.

Small children living in poor socio-economic conditions and densely populated places are most likely to get infected quickly. These infections are most common in children who share a bed with their parents or other children, in environments where the mother chews food she gives the child or puts the baby's pacifier in her mouth beforehand. The infection is more common in children placed in institutions of various types.

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Профил на водите за къпане – метод за оценка на риска и осигуряване на качеството на водите за къпане

Bathing water profile - method for risk assessment and bathing water quality assurance

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Апстракт

Изискванията към качеството на водите за къпане (това са водите в открити водни площи, използвани масово от хората за къпане – море, язовири, реки, езера) са регламентирани в Директива 2006/7/ЕО за управление качеството на водите за къпане.

Основната цел на Директива 2006/7/ЕО за водите за къпане е да се намалят стомашно-чревните заболявания и други предаващи се с водата опасности за здравето. Поради това Директивата изисква, освен провеждането на мониторинг, да бъдат изготвени и профили на водите за къпане, в които да се съдържа по-подробна информация за всяка зона за къпане по отношение нейното местоположение физико-географски и климатични характеристики, вероятни и установени източници на замърсяване, мерки които се предприемат при установени несъответствия и за подобряване на качеството на водите за къпане и т.н.

Профила на водата за къпане има за цел да проучи, анализира и представи оценка на риска за източниците на фекално замърсяване и пътищата за осъществяването му и набляга на показателите за фекално замърсяване - Ешерихия коли (E.coli) и чревни ентерококи.

При изготвянето на профилите за водите за къпане, трябва ясно да бъдат идентифицирани и оценени причините за замърсяване, които могат да въздействат върху водите за къпане и да застрашат здравето на къпещите се, като се представи риска от възникване на краткотрайно замърсяване:
– предвижданите характер, честота и продължителност на очакваното краткотрайно замърсяване;
– подробности за всички останали причини за замърсяване, включително взетите мерки за управление и графика за тяхното отстраняване;
– взетите мерки за управление по време на краткотрайно замърсяване и означение и контактни детайли на органите, отговорни за предприемане на такива действия.

В профила на водите за къпане, трябва да бъдат идентифицирано и разположението на мястото за мониторинг.

Профила на водите за къпане е полезен инструмент за информиране на обществеността за характеристиките и рисковете свързани с водите за къпане в конкретна зона.

Abstract

Bathing water quality requirements (waters on open water surfaces, which people widely use for bathing - sea, dams, rivers, lakes) are regulated by Directive 2006/7 / EC on bathing water quality management.

The main objective of the Bathing Water Directive 2006/7 / EC is to reduce gastrointestinal diseases and other water-borne diseases. Therefore, in addition to monitoring, the Directive requires the development of bathing water profiles, which contain more detailed information on each bathing area in terms of its location, geographic and climatic characteristics, probable and identified sources of bathing, pollution, taking measures in case of inconsistency, improving the quality of bathing water, etc.

The profile of bathing water aims to study, analyze and present the risk assessment for sources of fecal contamination and ways of its implementation and emphasizes the indicators of fecal contamination - Escherichia coli (E. coli) and intestinal enterococci.

When compiling a bathing water profile, the causes of pollution that may affect bathing water and endanger the health of bathers must be clearly identified and assessed, in order to determine the risk of short-term pollution:
– predict the nature, frequency, and duration of expected short-term pollution;
– details of any other causes of pollution, including management measures taken and a timetable for their elimination;
– management measures taken during short-term pollution and marking and contact details of the authorities responsible for taking such actions.

The location of the monitoring site must also be identified in the profile.

The bathing water profile is a useful tool for informing the public about the characteristics and risks associated with bathing water in a particular area.

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Pain Release Phenomenon (PRP)

Pain Release Phenomenon (PRP)

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Apstrakt

PRP (Pain Release Phenomenon) je terapijska tehnika koju je uveo Brajan Maligan, u cilju kontrole hroničnog bola u ekstremitetima, za simptome koji su prisutni duže od 6 nedelja, a nakon crpljenja svih ostalih mogućnosti i procedura. U ovoj tehnici primenjuju se različiti stimulusi, od kompresije, mišićne kontrakcije, do istezanja, koji provociraju bolne nadražaje, u različitim gradusima pokreta i vremenskim intervalima. Stanje bolnog pokreta se usmerava u fazu progresije, počinje iz slobodnog zglobnog položaja, a završava se u odabranom nametnutom, u kojem se očekuje da eksterni nadražaj, udružen sa fiziološkim ili akcesornim pokretom, redukuje bol. Tehnika je indikovana za sve oblike neuromuskuloskeletnog bola, koji ne reaguju na konvencionalnu fizioterapiju, a kontraindikovana je i uslovljena u fazi akutizacije, intenzitetom i prirodom bola.

Kompresione tehnike primenjuju se u problematici metatarzofalangealnih zglobova, sezamoida, metatarzokuboidnog zgloba, zgloba prvog metakarpusa i trapezne kosti, sastava graškaste i trouglaste kosti, patefemoralnog zgloba, kao i vratne kičme.

PRP kao oblik mišićne kontrakcije, odnosno otpora, primenu nalazi u tretmanu stanja tendinitisa tetive dugog opružača palca, bola u kuku, De Kervenovog tenosinovitisa, teniskog i golferskog lakta, hroničnog bola u ramenu, i akutnog vratnog uvrnuća. PRP fenomen koncipiran je kroz multimodalni pristup. Elementom repeticije utiče na adaptivnu sposobnost tkiva, a neurofiziološkim mehanizmom dovodi do desenzitizacije.

Abstract

PRP (Pain Release Phenomenon) is a therapeutic technique introduced by Brian Mulligan, in order to control chronic pain in the extremities, for symptoms that are present for more than 6 weeks, and after drawing all other possibilities and procedures. In this technique, various stimuli are applied, from compression, muscle contraction, to stretching, which causes painful stimuli, in different degrees of movement and time intervals. The state of painful movement is directed to the phase of progression, starting from the free joint position, and ending in the selected imposed one, in which the external stimulus, combined with physiological or accessory movement, is expected to reduce pain. The technique is indicated for all forms of neuromuscular skeletal pain, which do not respond to conventional physiotherapy, and is contraindicated and conditioned in the acute phase, by the intensity and nature of the pain.

Compression techniques are applied in the problems of metatarsophalangeal joints, sesamoids, cuboid-metarsal joints, joints of the first metacarpus and trapezius bone, pea-shaped, and triangular bone composition, patellofemoral joint, as well as the cervical spine.

PRP as a form of muscle contraction, ie resistance, is used in the treatment of long tendon tendonitis, hip pain, De Kerven's tenosynovitis, tennis and golf elbow, chronic shoulder pain, and acute neck twisting. The PRP phenomenon is conceived through a multimodal approach, with the element of repetition it affects the adaptive ability of tissues, and by a neurophysiological mechanism, it leads to desensitization.

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Medicinska reč **Medical Word**

APSTRAKT 20S 2021; 2(1): 23–23 ABSTRACT 20E

Nagli gubitak sluha, iznenadna nagluvost
Sudden hearing loss, sudden partial deafness

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Apstrakt

Nagli gubitak sluha ili njegovo slabljenje često se susreće u otorinolaringološkoj praksi. Pacijenti iznenadnu nagluvost obično konstatuju u jutarnjim satima, nakon buđenja. Uzroci ove neprijatne pojave mogu biti različiti, a oštećenje sluha možemo podeliti na tri osnovna tipa. Ukoliko postoji poremećaj u sprovođenju zvučnih talasa na njihovom putu od spoljašnjeg uva do kohlee, reč je o konduktivnom oštećenju sluha. Drugi tip je senzorineuralna nagluvost, i ona znači poremećaj funkcije kohlee ili slušnog nerva. Ukoliko u audiološkom nalazu postoji kombinacija ova dva prethodno pomenuta tipa, govorimo o mešovitoj nagluvosti.

1. *Cerumen, kao uzrok nagluvosti*
Jedan deo pacijenata navodi da se tokom prethodnog dana kupao u bazenu, reci, ili da se slabljenje sluha pojavilo nakon kupanja i pranja kose. Na osnovu ovakvog anamnestičkog podatka zaključujemo da je uzrok čep cerumena, koji se kontaktom sa vodom pomerio u spoljašnjem slušnom hodniku. Problem ovog pacijenta obično rešavamo vrlo jednostavno, uklanjanjem čepa cerumena, spiranjem zvukovoda. Konduktivna nagluvost može biti uzrokovana i perforacijom bubne opne, prisustvom tečnosti u srednjem uvu, ili fiksacijom slušnih koščica, što je slučaj otoskleroze. Kod odraslih osoba najčešći uzrok konduktivnih i mešovitih nagluvosti su hronični zapaljenski procesi u srednjem uhu.

2. *Infekcije*
Niz infekcija, među kojima su razne bakterijske i virusne infekcije, vrlo često izazivaju akutnu nagluvost. Iznenadna gluvoća može biti prvi znak akustičnog neuroma, multiple skleroze, Menierove bolesti ili malog cerebelarnog moždanog udara. Među česte uzroke spadaju bakterijski meningitis, Lajmska bolest i infekcije unutrašnjeg uva (a ponekad i vestibularnog aparata).

3. *Idiopatska nagluvost*
Ukoliko pacijent prijavi da je gubitak sluha nastao naglo, bez prethodne bolesti ušiju, radi se o akutnoj idiopatskoj nagluvosti. Najčešće je reč o naglom slabljenju, ili potpunom gubitku sluha na jednom uvu, znatno ređe na oba. Ovakvo oštećenje sluha može biti propraćeno zujanjem u uvu, sa oštećenjem čula za ravnotežu ili bez oštećenja.

Značaj sestrinskih intervencija koje medicinske sestre - tehničari sprovode nad ovakvim pacijentima je od izuzetne važnosti.

Abstract

Sudden hearing loss, or impaired hearing, is common in otorhinolaryngological practice. Patients usually notice sudden partial deafness in the morning, after waking up. The causes of this unpleasant phenomenon can be different, and hearing impairment can be divided into three basic types. If there is a disorder in the conduction of sound waves on their way from the outer ear to the cochlea, it is conductive hearing damage. The second type is sensorineural hearing loss, and it means a disorder of the function of the cochlea or auditory nerve. If there is a combination of these two previously mentioned types in the audiological finding, we are talking about mixed hearing loss.

1. *Cerumen, as a cause of partial deafness*
One part of the patient states that they bathed in the pool during the previous day, say, or that hearing loss appeared after bathing and washing their hair. Based on this anamnestic data, we conclude that the cause is a cerumen plug, which moved in contact with water in the external auditory canal. We usually solve the problem of this patient very simply, by removing the cerumen plug, by rinsing the auditory canal. Conductive partial deafness can also be caused by perforation of the eardrum, the presence of fluid in the middle ear, or fixation of the auditory ossicles, which is the case with otosclerosis. In adults, the most common cause of conductive and mixed hearing loss is chronic inflammatory processes in the middle ear.

2. *Infections*
A number of infections, including various bacterial and viral infections, very often cause acute partial deafness. Sudden hearing loss can be the first sign of an acoustic neuroma, multiple sclerosis, Meniere's disease, or a small cerebellar stroke. Common causes include bacterial meningitis, Lyme disease, and infections of the inner ear (and sometimes the vestibular apparatus).

3. *Idiopathic partial deafness*
If the patient reports that the hearing loss occurred suddenly, without previous ear disease, it is acute idiopathic deafness. It is most often a sudden weakening, or complete loss of hearing in one ear, much less often in both. This type of hearing loss can be accompanied by tinnitus, with or without damage to the sense of balance. The importance of nursing interventions that nurses-technicians perform on such patients is extremely important.

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Medicinska reč **Medical Word**

APSTRAKT 21S 2021; 2(1): 24–24 ABSTRACT 21E

Protezni stomatitis – etiopatogeneza i terapijski pristup

Denture stomatitis - etiopathogenesis and therapeutic approach

Ivica Glišić

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Apstrakt

Protezni stomatitis je najčešća zapaljenska reakcija koja se javlja kod osoba koje nose zubne proteze, sa najčešćom lokalizacijom na palatinalnoj sluzokoži. Etiopatogeneza zapaljenja je multifaktorijalna i kompleksna. Infekcija gljivicama iz roda Candida, prevashodno Candida albicans, loša oralna higijena i dugotrajno nošenje proteze su najznačajniji etiološki faktori. Razvoju zapaljenske reakcije mogu doprineti i neki opšti činioci kao što je pušenje, upotreba lekova i sistemske bolesti, poput dijabetesa melitusa. Kako je zapaljenje najčešće bez subjektivnih simptoma, a ima veliku prevalenciju među nosiocima zubnih proteza, poželjno je pacijentima zakazivati redovne preglede kako bi se rano postavila dijagnoza i sprovela adekvatna terapija.

U radu je dat prikaz etiopatogeneze proteznog stomatitisa i najčešće terapijske procedure koje se sprovode pri njegovom lečenju.

Abstract

Denture stomatitis is the most common inflammatory reaction that occurs in people who wear dentures, with the most common localization on the palatal mucosa. The etiopathogenesis of inflammation is multifactorial and complex. Infection with fungi of the genus Candida, primarily Candida albicans, poor oral hygiene, and long-term wearing of dentures are the most important etiological factors. Some general factors, such as smoking, drug use, and systemic diseases, such as diabetes mellitus, can also contribute to the development of an inflammatory reaction. As inflammation is usually without subjective symptoms, and it has a high prevalence among denture users, it is desirable to schedule regular examinations for patients in order to make an early diagnosis and conduct adequate therapy.

The paper presents the etiopathogenesis of denture stomatitis and the most common therapeutic procedures performed in its treatment.

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APSTRAKT 22S 2021; 2(1): 25–25 ABSTRACT 22E

Najčešći uzroci umiranja radno sposobnog stanovništva u Srbiji

The most common causes of death of the working age population in Serbia

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[2]ZZZR "Železnica Srbije" – Ogranak Niš

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Apstrakt

Prevremeno umiranje se definiše kao umiranje stanovništva pre 65. godine, u nekim visokorazvijenim zemljama na primer u Australiji je pre 70, a u Japanu pre 80. godine života. Masovne hronične nezarazne bolesti (MHNB) su najčešći uzrok prevremenog umiranja stanovništva životne dobi od 30 do 50 godina širom sveta. Prema podacima Svetske zdravstvene organizacije (SZO) 82% od ukupnog broja prevremenog umrlog stanovništva je iz srednje razvijenih i zemalja u razvoju. U ovim zemljama, svake godine od MHNB umre više od 12 miliona radno aktivnog stanovništva. Kardiovaskularne bolesti (KVB) i to ishemijska bolest srca i mozga prvi su uzrok prevremene smrtnosti sa prevalencom od 46,2%. Na drugom mestu su maligne bolesti sa 21,7%, na trećem su hronične respiratorne bolesti sa 10,7% i na četvrtom dijabetes sa 4%. Prema SZO najveći rizik od prevremenog umiranja od jedne do navedene četiri bolesti imaju stanovnici jugoistočne Azije, istočnog mediteranskog regiona i afričkog kontinenta.Više od 3/4 prevremeno umrlih je umrlo zbog KVB i dijabetesa. Oko 2/3 svih umrlih od malignih bolesti je iz srednje razvijenih i zemalja u razvoju, a približno 90% svih koji umru od hroničnih respiratornih bolesti je iz ovih zemalja. Prema podacima danske kohortne studije koja je obuhvatila preko 130.000 osoba uzrasta od 30 do 69 godina procenjena je sirova stopa incidencije od akutnog koronarnog sindroma od 234 na 100.000. U Srbiji vodeći uzrok umiranja muškaraca životne dobi od 55. do 64. godine je infarkt miokarda, a kod žena je to infarkt mozga. Godišnje od dijabetesa u Srbiji umre oko 3.500 osoba i dijabetes se nalazi na 4. mestu kao uzrok umiranja stanovništva.

Radno aktivno stanovništvo provodi u proseku trećinu vremena na radu. Faktori rizika koji deluju u radnoj sredini, a mogu dovesti do povećanog obolevanja i umiranja od MHNB su: buka, hemijski i biološki agensi koji kontaminiraju vazduh, stres, pušenje, zloupotreba alkohola, fizička neaktivnost, neadekvatna visokokalorijska ishrana sa povećanim sadržajem masti i soli i smanjenim unosom dijetetskih vlakana. Prevencija prevremene smrtnosti pojedinca smatra se glavnim ciljem za društvo.

Abstract

Premature death is defined as the death of the population before the age of 65, in some highly developed countries, for example in Australia it is before the age of 70, and in Japan before the age of 80. Mass chronic non-communicable diseases (MHNBs) are the most common cause of premature death in people aged 30 to 50 worldwide. According to the World Health Organization (WHO), 82% of the total number of premature deaths is from middle-income countries and developing countries. In these countries, more than 12 million people in employment die each year from MHNB. Cardiovascular diseases (CVD) and ischemic heart and brain diseases are the first cause of premature mortality with a prevalence of 46.2%. In second place are malignant diseases with 21.7%, in third place are chronic respiratory diseases with 10.7% and in fourth place is diabetes with 4%.

According to the WHO, the residents of Southeast Asia, the eastern Mediterranean region, and the African continent have the highest risk of premature death from 1 to the above 4 diseases. More than 3/4 of premature deaths died due to CVD and diabetes. About 2/3 of all deaths from malignant diseases are from middle-income countries and developing countries, and approximately 90% of all deaths from chronic respiratory diseases are from these countries. According to the data of the Danish cohort study, which included over 130,000 people aged 30 to 69, the raw incidence rate of the acute coronary syndrome was estimated at 234 per 100,000. In Serbia, the leading cause of death in men aged 55 to 64 is myocardial infarction, and in women, it is a cerebral infarction. About 3,500 people die of diabetes in Serbia every year and it is in 4th place as the cause of death of the population.

The working active population spends on average a third of their time at work. Risk factors that act in the work environment and can lead to increased morbidity and mortality from mass chronic non-communicable diseases (are noise, chemical and biological agents that contaminate the air, stress, smoking, alcohol abuse, physical inactivity, and inadequate high-calorie diet with increased fat and salt content, and reduced intake dietary fiber. Prevention of premature mortality of an individual is considered a major goal for the society.

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Medicinska reč **Medical Word**

APSTRAKT 23S 2021; 2(1): 26–26 ABSTRACT 23E

Laparoskopske i klasične holecistektomije
Laparoscopic and classical cholecystectomies

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Apstrakt

Uvod: Akutni holecistitis je akutno zapaljenje zida žučne kesice praćeno abdominalnim bolom i febrilnošću, u 90% slučajeva udruženo sa bilijarnom kalkulozom (žučni kamenci). Primarni faktor u razvoju akutnog holecistitisa je opstrukcija vrata žučne kesice ili cistikusa impaktiranim kalkulusom. Opstrukcija dovodi do mehaničke prepreke, porasta intraluminalnog pritiska, ishemije zida žučne kesice i staze žuči. Bakterijska infekcija je sekundarna, najčešće gram-negativnim bakterijama porekla iz digestivnog trakta. U manje od 10% bolesnika akutni holecistitis je izazvan drugim uzročnicima – direktna trauma bilijarnog trakta, torzija žučne kesice i uvrtanje vaskularne petlje, posle hirurških zahvata na abdominalnm organima, infekcija Sallmonelom typhi, infekcije u bazenu portne vene, poliarteritis, infestacija askarisom, kompresija ili okluzija cistikusa limfnim čvorovima, edematozni pankreatitis.

Cilj rada: Radom smo obuhvatili kalkuloze žučne kese sa raznim nivoima upale zida žučne kese i uporedili odnos broja klasičnih (CCH) i laparoskopskih holecistektomija (LCH), i utvrdili prednosti LCH u odnosu na CCH.

Materijal i metode rada: Retrospektivno smo obradili period od 2016. do 2019. godine. U tom periodu je 35,74% intervencija urađeno klasičnom metodom (CCH), dok je laparoskopskom metodom (LCH) urađeno 64,74% holecistektomija. Uvidom u histo-patološki nalaz utvrdili smo da je klasičnom metodom operisano više akutnih upala zida žučne kese (52%), nego laparoskopskom metodom (oko 30%). Kod laparoskopske holecistektomije su dominirale hronične upale zida žučne kese. Opšte stanje pacijenta preoperativno smo procenjivali na osnovu ASA-skora od I–IV. Laparoskopskom metodom je operisano 105 pacijenata (15%) ASA-skora III i IV, dok su klasičnom metodom operisana 53 pacijenta (7%) istog ASA-skora. Starosna dob pacijenata se kretala od 16 do 82 godine, gde je kod LCH metode bilo 10 pacijenata, dok je kod CCH bilo samo 4 pacijenta. Svi pacijenti su imali standardne laboratorijske analize, EKG, skopiju ili grafiju pluća.

Rezultati rada: U našoj seriji nismo imali nekih značajnih intraoperativnih komplikacija. Postoperativni dvadesetčetvoročasovni nadzor u Odeljenju intezivne nege sproveden je kod svih operisanih pacijenata klasičnom metodom (100%), dok su pacijenti operisani laparoskopskom metodom zahtevali takav nadzor u samo 7%. Postoperativni oporavak kod CCH je trajao u proseku 7 dana, dok je kod LCH trajao dva dana.

U *zaključku* možemo reći da je LCH metoda u odnosu na CCH metodu mnogo komfornija i mnogo povoljnija kako za pacijenta, tako i za ceo operativni tim.

Abstract

Introduction: Acute cholecystitis is an acute inflammation of the gallbladder wall accompanied by abdominal pain and fever, in 90% of cases associated with biliary calculosis (gallstones). The primary factor in the development of acute cholecystitis is obstruction of the neck of the gallbladder or cystic by impacted calculus. Obstruction leads to a mechanical obstruction, an increase in intraluminal pressure, ischemia of the gallbladder wall and bile duct. Bacterial infection is secondary, most often to gram-negative bacteria originating from the digestive tract. In less than 10% of patients, acute cholecystitis is caused by other causes - direct biliary tract trauma, gallbladder torsion, and vascular loop twisting, after abdominal surgery, Salmonella typhi infection, portal vein pool infections, polyarteritis, ascariasis infection lymph node cystic occlusion, edematous pancreatitis.

Aim of the study: We included gallbladder calculi with different levels of gallbladder wall inflammation and compared the ratio of classical (CCH) and laparoscopic cholecystectomies (LCH), and determined the advantages of LCH over CCH.

Material and methods of work: We retrospectively covered the period from 2016 to 2019. In that period, 35.74% of interventions were performed by the classical method (CCH), while 64.74% of cholecystectomies were performed by the laparoscopic method (LCH). Insight into the histopathological finding revealed that the classical method operated on more acute gallbladder wall inflammations (52%) than the laparoscopic method (about 30%). Laparoscopic cholecystectomy was dominated by chronic inflammation of the gallbladder wall. The general condition of the patient was assessed preoperatively on the basis of ASA scores from I-IV. 105 patients (15%) of ASA-scores III and IV were operated by the laparoscopic method, while 53 patients (7%) of the same ASA-score were operated by the classical method. The age of the patients ranged from 16 to 82 years, where there were 10 patients with the LCH method, while with the CCH there were only 4 patients. All patients had standard laboratory tests, ECG, bronchoscopy or lung graph.

Results: We did not have any significant intraoperative complications in our series. Postoperative twenty-four-hour supervision in the Intensive Care Unit was performed in all operated patients by the classical method (100%), while patients operated by the laparoscopic method required such supervision in only 7%. Postoperative recovery in CCH lasted an average of 7 days, while in LCH it lasted two days.

In *conclusion*, we can say that the LCH method is much more comfortable and much more favorable for the CCH method, both for the patient and for the entire operating team.

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Качествени здравни грижи при пациенти с флеботромбози

High-quality nursing care for patients with phlebothrombosis

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Апстракт

Основно значение за удовлетвореността на пациентите има качеството на извършваните манипулации и процедури. Качеството на здравнитегрижиима важно значение за развитието на здравните заведения и до голяма степен зависи от професионалните умения на медицинските сестри.

В статията се разглеждат въпроси, свързани судовлетвореността на пациентите от качеството на здравните грижи. Анкетирани са 120 пациентис диагноза флеботромбоза.Това заболяване е с голяма социална значимост, като има значителна честота и в много от случаите остава неразпознато.

Abstract

The quality of performed manipulations and procedures is of great importance for patient satisfaction. The quality of health care is important for the development of health institutions and largely depends on the professional abilities of nurses.

The paper discusses issues related to patient satisfaction with the quality of health care. 120 patients were diagnosed with phlebothrombosis. This disease is of great social importance, has a significant frequency, and in many cases remains unrecognized.

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Živeti sa urostomom
Living with urostomy

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Apstrakt

Karcinom mokraćne bešike je najčešći tumor mokraćnih organa. Muškarci obolevaju dva do tri puta češće nego žene, ali je petogodišnje preživljavanje isto kod oba pola. Faktori rizika za nastanak bolesti su: hronična iritacija i infekcija, genetska predispozicija, a pušenje duvana je najznačajniji faktor rizika.

Simptomi su: hematurija, koja može biti bezbolna, totalna, spontana, stalna ili interminentna.

Dijagnoza karcinoma bešike se postavlja laboratorijskom analizom urina, a uretrocistoskopija sa bimanuelnom palpacijom u anesteziji je kamen temeljac u dijagnostici. Transuretralna resekcija sa PH verifikacijom je ključna za odluku o daljem lečenju.

Bolesnici sa invazivnim karcinomom leče se hirurški – radikalna cistektomija (odstranjivanje bešike). Zato se mora obezbediti derivacija urina: kontinentna – kada se od creva bolesnika formira rezervoar urina, ili inkontinentna – izvođenje urostome.

Urostoma predstavlja način izvođenja urina na prednji trbušni zid korišćenjem crevnog patrljka, kroz koji neprekidno ističe urin u kesu. Operacijom se odstranjuje bešika, a otvor za urin se napravi na stomaku, lokalizovan na donjem desnom delu abdomena, malo ispod pupka. Nega i obuka bolesnika su veoma važni za dalji kvalitet života i očuvanje aktivnosti bolesnika sa urostomom.

Cilj rada je prikazati i naglasiti značaj nege kod bolesnika sa urostomom.

Pravilna i adekvatna preoperativna i postoperatvna nega ovih bolesnika značajno utiču na uspešan ishod lečenja i sprečavanje nastanka postoperativnih komplikacija, koje su vrlo česte. Nega se sprovodi u svim fazama procesa zdravstvene nege: nega operisanog bolesnika, postavljanje sestrinske dijagnoze, planiranje nege, realizacija planiranih aktivnosti, evaluacija, kao i osposobljavanje bolesnika za normalan život. Postavljeni ciljevi mogu biti:

1. kratkoročni – otkloniti strah i bol, normalizovati vitalne funkcije, informisati pacijenta o operaciji, ne dozvoliti komplikacije,
2. dugoročni – navikavanje na novu životnu situaciju i prevazilaženje problema uglavnom psihološke prirode, a zatim i obuka pacijenta za život sa stomom i njeno održavanje.

Uloga medicinske sestre je veoma bitna u svim fazama, kako u toku prijema, preoperativne pripreme, tako i u postoperativnom praćenju pacijenta, u održavanju stome i edukaciji i obučavanju pacijenta za što ranije i uspešnije vraćanje svakodnevnim aktivnostima.

Abstract

Bladder cancer is the most common tumor of the urinary tract. Men get sick 2 to 3 times more often than women, but the five-year survival is the same for both genders. Risk factors for the disease are: chronic irritation and infection, genetic predisposition, and smoking tobacco is the most important risk factor. The symptoms are hematuria, which can be painless, total, spontaneous, permanent, or intermittent.

The diagnosis of bladder cancer is made by laboratory analysis of urine, and urethrocystoscopy with bimanual palpation under anesthesia is the base in the diagnosis. Transurethral resection with PH verification is crucial for the decision on further treatment.

Patients with invasive cancer are treated surgically - radical cystectomy (removal of the bladder). Therefore, urine derivation must be provided: continental - when a urine reservoir is formed from the patient's intestines, or incontinent - performing a urostomy.

Urostomy is a way of passing urine to the anterior abdominal wall using an intestinal stump, through which urine flows continuously into the bag. The operation involves bladder removal, and a urine opening is made in the abdomen, localized on the lower right part of the abdomen, just below the navel. Care and training of the patient are very important for the further quality of life and preservation of the activity of patients with urostomy.

The aim of this paper is to show and emphasize the importance of care in patients with a urostomy.

Proper and adequate preoperative and postoperative care of these patients significantly affects the successful outcome of treatment and prevention of postoperative complications, which are very common. Care is carried out in all phases of the health care process: care of the operated patient, setting a nursing diagnosis, care planning, the realization of planned activities, evaluation, as well as training the patient for a normal life. The set goals can be:

1. short-term - eliminate fear and pain, normalize vital functions, inform the patient about the operation, prevent complications,
2. long-term - getting used to a new life situation and overcoming problems mainly of a psychological nature, and then training the patient to live with a stoma and its maintenance.

The role of the nurse is very important in all phases, both during admission, preoperative preparation, and in postoperative monitoring of the patient, in maintaining the stoma and educating and training the patient to return to daily activities as soon as possible and successfully.

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APSTRAKT 26S 2021; 2(1): 29–29 ABSTRACT 26E

Korišćenje funkcionalnih aparata u terapiji distalnog zagrižaja

The use of functional apparatus in distal occlusion therapy

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Apstrakt

Funkcionalni aparati su ključni za uspeh u ranoj ortodontskoj terapiji. Veruje se da je njihova primena najkorisnija u periodu pretpubertetskog i pubertetskog ubrzanja rasta. Taj period se odnosi na doba od 10 do 12 godina za devojčice tj. od 11 do 13 godina za dečake. Cilj lečenja funkcionalnim aparatima je delovanje na mišiće i ligamente, čime se utiče na premeštanje i rast donje vilice unapred, kada je u pitanju distalni zagrižaj.

Aparati se koriste u cilju korekcije malokluzije u sve 3 prostorne ravni: sagitalnoj, vertikalnoj i transferzalnoj. U sagitalnoj dimenziji korigujemo distalni zagrižaj i uspostavljamo okluziju i klase po Angleu. U transferzalnoj dimenziji, aparati se primenjuju radi ekspanzije zubnih lukova. U vertikalnoj dimenziji, aparati se koriste za korekciju otvorenog ili dubokog zagrižaja. Najčešće se primenjuju mobilni funkcionalni aparati koji se sastoje od posebnih gornjih i donjih delova, kao što su Twin Block i M Block.

Drugi tipovi funkcionalnih aparata koriste se mnogo godina unazad, sastoje se iz jednog dela i njihova mana je nekomfornost za pacijente i nemogućnost korišćenja kod postojanja devijacije septuma ili bilo kakve druge opstrukcije disajnih puteva. U novije vreme koristimo i fiksne funcionalne aparate. Fiksne funkcionalne aparate možemo koristiti i posle pubertetskog ubrzanja rasta tj. kod post adolescenata i mladih odraslih osoba. Oni se koriste zajedno sa fiksnim aparatima. Značajan terapijski efekat postiže se veoma brzo, za oko 16 meseci. Oni su jako važni, jer drže donju vilicu 24 sata u anteriornom položaju.

Abstract

Functional apparatus is a key to success in early orthodontic therapy. It is believed that their application is most useful in the period of prepubertal and pubertal growth acceleration. This period refers to the age of 10 to 12 years for girls, ie. 11 to 13 years for boys. The goal of treatment with functional devices is to act on the muscles and ligaments, which affects the movement and growth of the lower jaw forward when it comes to distal bite.

The apparatus is used in order to correct malocclusion in all 3 spatial planes: sagittal, vertical, and transverse. In the sagittal dimension, we correct the distal bite and establish occlusion and classes according to Angle. In the transnasal dimension, the apparatus is used to expand the dental arches. In the vertical dimension, it is used to correct an open or deep bite. Most often, mobile functional devices are used, which consist of special upper and lower parts, such as Twin Block and M Block.

Other types of functional apparatus have been used for many years, they consist of one part and their disadvantage is the inconvenience for patients and the impossibility of using them in the presence of septal deviation or any other airway obstruction. Recently, we also use fixed functional apparatus. Fixed functional apparatus can be used even after pubertal growth acceleration, ie. in post adolescents and young adults. They are used together with fixed apparatus. The significant therapeutic effect is achieved very quickly, in about 16 months. They are very important because they keep the lower jaw in the anterior position for 24 hours.

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APSTRAKT 27S 2021; 2(1): 30–30 ABSTRACT 27E

Primena hipotermije u cilju neuroprotekcije kod ishemijskog moždanog udara

Application of hypothermia for neuroprotection in ischemic stroke

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Apstrakt

Uvod: Neuroprotekcija je terapijski postupak čiji je cilj svaki pokušaj da se cerebralno tkivo sačuva od ireverzibilnog oštećenja nakon moždanog udara. Brojna istraživanja vršena na polju farmakološke protekcije (STAIR) nisu dala očekivane rezultate, te su pretkliničke i kliničke studije svoje interesovanje usmerile ka nefarmakološkim postupcima neuroprotekcije. Nefarmakološki postupak od koga se mnogo očekuje je upravo primena hipotermije. Hipotermija se definiše kao telesna temperatura manja od 36 °C bez obzira na uzrok. Sa aspekta neuroprotekcije govori se o indukovanoj (terapijskoj) hipotermiji koja se najjednostavnije može definisati kao ciljano upravljanje (snižavanje) temperature zarad terapijskih benefita. Indukovana hipotermija može biti blaga, umerena, teška i duboka hipotermija. Metode i tehnike pomoću kojih se postiže indukovna hipotermija mogu biti invanzivne i neinvanzivne. Metode spoljašnjeg hlađenja pacijenta (neinvanzivni postupak) imaju svoje prednosti u smislu korišćenja u prehospitalnom nivou, ali i u nastavku kontinuirane primene po smeštaju u jedinici intenzivne nege, mogućnosti defibrilacije kroz oblogu, kontrolisanog hlađenja, zatim dostupnosti, jednostavnoj primeni, ne zahtevaju dodatnu sofisticiranu opremu.

Cilj: Prikazati benefite indukovane hipotermije u poboljšanju neurološkog ishoda kod pacijenata kod kojih je došlo do cerebralne globalne hipoksije.

Materijal i metode: Komparativna analiza dosadašnjih iskustava u primeni indukovane hipotermije u cilju neuroprotekcije.

Zaključak: Hipotermija se u dosadašnjim istraživanjima neuroprotekcije pokazala kao izuzetno efikasan postupak, posebno kada je reč o srčanom zastoju. Mehanizam neuroprotektivnog delovanja hipotermije je smanjenje metaboličkih potreba neurona, smanjenje otpuštanja slobodnih radikala i redukcija ulaska kalcijuma u ćelije, te u tom smislu smanjenje cerebralog edema.

Abstract

Introduction: Neuroprotection is a therapeutic procedure and its goal is to protect cerebral tissue from irreversible damage after a stroke. Numerous studies conducted in the field of pharmacological protection (STAIR) did not give the expected results, and preclinical and clinical studies have focused their interest on non-pharmacological neuroprotection procedures. The non-pharmacological procedure from which much is expected is the application of hypothermia.

Hypothermia is defined as a body temperature of less than 36 °C regardless of the cause. From the aspect of neuroprotection, we are talking about induced (therapeutic) hypothermia, which can be most simply defined as targeted management (lowering) of temperature for the sake of therapeutic benefits. Induced hypothermia can be mild, moderate, severe, and deep hypothermia. The methods and techniques used to achieve induced hypothermia can be invasive or non-invasive. Methods of external cooling of the patient (non-invasive procedure) have their advantages in terms of use in the prehospital level, but also the continuation of continuous application after placement in the intensive care unit, the possibility of defibrillation through the lining, controlled cooling, then availability, simple application, does not require additional sophisticated equipment.

Objective: To present the benefits of induced hypothermia in improving neurological outcomes in patients with cerebral global hypoxia.

Material and methods: Comparative analysis of previous experiences in the application of induced hypothermia for neuroprotection.

Conclusion: Hypothermia has so far been shown to be an extremely effective procedure in neuroprotection research, especially when it comes to cardiac arrest. The mechanism of the neuroprotective effect of hypothermia is a reduction in the metabolic needs of neurons, a reduction in the release of free radicals, and a reduction in the entry of calcium into cells, and in that sense a reduction in cerebral edema.

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APSTRAKT 28S 2021; 2(1): 31–31 ABSTRACT 28E

Infekcije urinarnog trakta
Urinary tract infections

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Apstrakt

Infekcije urinarnog trakta su jedna od najčešćih dijagnoza koje srećemo u kliničkoj praksi. Kod akutnih infekcija izazivač je jedan patogen, dok je kod hroničnih infekcija prisutno dva ili više izazivača. Koliformne bakterije, Escherichia coli kao najčešća među njima, odgovorne su za većinu ne-nozokomnijalnih infekcija i nekomplikovanih infekcija urinarnog trakta. Tip infekcije je ascedentni. Ovi izazivači su osetljivi na veliki broj antibiotika i imaju brz i dobar odgovor.

Nozokomnijalne infekcije često zahtevaju parenteralnu primenu antibiotika, zbog rezistencije pojedinih patogena. Bubrežne infekcije su poseban problem, jer neadekvatno lečenje može dovesti do gubitka funkcije bubrega. Ranije je broj izazivača veći od 105 /ml bio kriterijum za postavljanje dijagnoze. Danas znamo da 50% žena sa simptomatskim infekcijama ima manji broj izazivača. Analiza samo prisustva bakterija nije dovoljna za postavljanje adekvatne dijagnoze. Pijelonefritis i prostatitis zahtevaju terapiju u trajanju od jedne do dve nedelje, dok cistitis zahteva terapiju od jednog do tri dana.

Poseban problem predstavljaju infekcije donjeg i gornjeg genitalnog trakta, posebno u reproduktivnom periodu, jer mogu usloviti smanjenje reproduktivne sposobnosti. Mogu biti specifične i nespecifične infekcije, koje zahvataju donji genitalni trakt, a u težim slučajevima i gornji genitalni trakt. Najčešće su prisutne infekcije Candidom, bakterijska vaginoza, a od specifičnih Trichomonas, Mycoplasma, Ureaplasma i Chlamydia.

Abstract

Urinary tract infections are one of the most common diagnoses that we encounter in clinical practice. In acute infections, the causative agent is one pathogen, while in chronic infections, two or more causative agents are present. Coliform bacteria, Escherichia coli as the most common among them, are responsible for most non-nosocomial infections and uncomplicated urinary tract infections. The type of infection is ascending. These pathogens are sensitive to a large number of antibiotics and have a quick and good response.

Nosocomial infections often require parenteral antibiotics, due to the resistance of certain pathogens. Kidney infections are a special problem because inadequate treatment can lead to loss of kidney function. Previously, the number of pathogens greater than 105 / ml was the criterion for diagnosis. Today, we know that 50% of women with symptomatic infections have fewer causes. Analysis of the presence of bacteria alone is not sufficient to make an adequate diagnosis. Pyelonephritis and prostatitis require therapy for one to two weeks, while cystitis requires therapy for 1 to 3 days.

Infections of the lower and upper genital tract are a special problem, especially in the reproductive period, because they can cause a decrease in reproductive ability. There can be specific and non-specific infections, which affect the lower genital tract, and in severe cases, the upper genital tract. The most common infections are Candida, bacterial vaginosis, and of the specific Trichomonas, Mycoplasma, Ureaplasma, and Chlamydia.

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APSTRAKT 29S 2021; 2(1): 32–32 ABSTRACT 29E

Laboratorijska evaluacija faktora koji utiču na efikasnost lečenja aspirinom

Laboratory evaluation of factors affecting the efficacy of aspirin treatment

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Apstrakt

Uvod. Agregacija trombocita je, kao laboratorijski test za procenu funkcije trombocita, od posebnog značaja za optimalno vođenje antitrombocitne terapije i izdvajanje pacijenata koji pokazuju suboptimalni odgovor na primenu antitrombocitnih lekova, kao što su aspirin i klopidogrel.

Cilj istraživanja je bio odrediti stepen inhibicije agregacije trombocita metodom impedantne agregometrije kod pacijenata koji su uzimali različite preparate acetilsalicilne kiseline (ASA) u dozi od 100 mg dnevno.

Pacijenti i metode. Ispitivanje je obuhvatilo 215 pacijenata (110 muškaraca i 110 žena), koji su nakon infarkta miokarda sa naknadnom revaskularizacijom uzimali jedan od tri različita ASA preparata, pojedinačno ili u kombinaciji sa klopidogrelom. Od ukupnog broja, 89 pacijenata uzimali su aspirin protect (Bayer, Nemačka) – Grupa 1,66 pacijenata uzimali su cardiopirin (GL Pharma GMBH, Austrija) – Grupa 2, dok je 60 pacijenata bilo na andolu (Pliva, Hrvatska) – Grupa 3. Grupe su bile jednake u zastupljenosti faktora koji mogu biti od uticaja na agregaciju trombocita (starost, pol, pušenje, dijabetes, uzimanje drugih lekova). Funkcija trombocita merena je na impedantnom agregometru Multiplate (Multiplate Platelet Function Analyzer, Roche) iz uzoraka krvi sa heparinom korišćen ASPI i TRAP testa (rezultati su izraženi kroz površinu ispod agregacione krivulje u periodu ispitivanja (AU*min).

Rezultati. Postoji statistički značajna razlika u efikasnosti različitih ASA preparata (χ_{KW}^2=46,279; p<0,001), što se vidi i posebno kod pacijenata koji su na pojedinačnoj (χ_{KW}^2=26,344; p<0,001) i dvojnoj terapiji (χ_{KW}^2=23,498; p<0,001). Pacijenti koji su uzimali aspirin protect imali su značajno bolju efikasnost leka u poređenju sa pacijentima koji su uzimali cardiopirin (Z=5,472; p<0,001) i andol (Z=5,387; p=0,022). Postoji smanjeni efekat svih ASA preparata kod pušača, dok pacijenti koji uzimaju aspirin protect imaju 10,5 puta veću verovatnoću da budu responderi.

Zaključak. Različiti preparati acetilsalicilne kiseline posmatrani u ovom ispitivanju pokazuju laboratorijski značajno različitu efikasnost na funkciju trombocita merenu metodom impedantne agregometrije.

Abstract

Introduction: Platelet aggregation, as a laboratory test to assess platelet function, is of particular importance for optimal antiplatelet therapy and isolation of patients who show a suboptimal response to antiplatelet medications, such as aspirin and clopidogrel.

The aim of the study was to determine the degree of inhibition of platelet aggregation by impedance aggregometry in patients taking various acetylsalicylic acid (ASA) preparations at a dose of 100 mg daily.

Patients and methods. The study included 215 patients (110 men and 110 women) who took one of three different ASA preparations, alone or in combination with clopidogrel, after myocardial infarction with subsequent revascularization. Of the total number, 89 patients took Aspirin protect (Bayer, Germany) - Group 1, 66 patients took Cardiopirin (GL Pharma GMBH, Austria) - Group 2, while 60 patients were on Andol (Pliva, Croatia) - Group 3. The groups were equal in the presence of factors that may affect platelet aggregation (age, sex, smoking, diabetes, taking other medicines). Platelet function was measured on an implant aggregometer Multiplate (Multiplate Platelet Function Analyzer, Roche) from blood samples with heparin using ASPI and TRAP test (results were expressed through the area below the aggregation curve during the test period (AU * min)).

Results: There is a statistically significant difference in the efficacy of different ASA preparations (χ_{KW}^2 = 46.279; p <0.001), which is seen especially in patients on single (χ_{KW}^2 = 26.344; p <0.001) and dual therapy (χ_{KW}^2 = 23.498; p <0.001). Patients taking Aspirin protect had significantly better efficacy compared to patients taking Cardiopyrin (Z = 5.472; p <0.001) and Andol (Z = 5.387; p = 0.022). There is a reduced effect of all ASA preparations in smokers, while patients taking Aspirin protect are 10.5 times more likely to be responders.

Conclusion: The different acetylsalicylic acid preparations observed in this study show laboratory-significantly different efficacy on platelet function measured by impedance aggregometry.

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Запазване достойнството на онкоболните, предизвикателство пред специалистите по здравни грижи

Preserving the dignity of cancer patients, a challenge for healthcare professionals

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Апстракт

През последните години броят на онкологичните заболявания в световен мащаб значително нараства. Ежегодно повече от 12 млн. души се разболяват от рак и 7,6 милиона умират от болестта. Раковите заболявания са втората по честота причина за смърт след сърдечно-съдовите заболявания в Европейския съюз. Ето защо нуждата от палиативни грижи при онкоболните е осезаема. Тези грижи се предоставят на хора с активно, прогресивно и напреднало заболяване. При палиативните грижи пациентът и неговото семейство се разглеждат като свързана система,чиято основната задача е облекчаване на страданието и подобряване на качеството на живота на хората живеещи с или умиращи от животозастрашаващо заболяване.

Все по-голяма част от засегнатите от злокачествени заболявания са хора в активна и трудоспособна възраст, което от своя страна води до възникване на редица социални, икономически, психологически и етични проблеми.

Наблюдава се влошаване не само на психологичното равновесие, но и на социалната адаптация на онкоболния, което повдига редица етични въпроси свързани с правото на достоен и пълноценен живот на тези личности.

Затова изключително важна е и ролята на специалистите по здравни грижи, свързана с подпомагането и информирането на болните и техните семейства при вземането на решения, както и облекчаване страданията им независимо колко време им остава (Богданова и кол., 2014).

Целта на настоящата работа е да се проучат настроението и позицията, която имат пациентите с онкологични заболявания във връзка с поставената им диагноза и отношението формирано към тях, обръщайки специално внимание на етичната и хуманна страна, както и ролята на специалистите по здравни грижи свързано с изискващото се подкрепящо, мотивиращо и емпатично поведение към този важен сегмент от болни, като важна част от социално значимите заболявания.

Abstract

In recent years, the number of cancer patients worldwide has increased significantly. Every year, more than 12 million people get cancer and 7.6 million people passes away from the disease. Cancer is the second most common cause of death after cardiovascular disease in the European Union. That is why the need for palliative care in cancer patients is very important. This care is provided to people with active, progressive, and advanced diseases. In palliative care, the patient and his family are viewed as a connected system, whose main task is to alleviate suffering and improve the quality of life of people living with or dying from life-threatening diseases.

An increasing number of people suffering from malignant diseases are people of active and working age, which in turn leads to numerous social, economic, psychological, and ethical problems.

There is a deterioration not only of the psychological balance but also of the social adaptation of the cancer patient, which opens up ethical issues related to the right to a dignified and quality life for these individuals.

Therefore, the role of health workers is extremely important, related to helping and informing patients and their families in decision-making, as well as alleviating their suffering, regardless of how much time they have left (Bogdanova et al., 2014).

The aim of this paper is to study the mood and attitude of cancer patients in relation to their diagnosis and attitude towards them, paying special attention to the ethical and humanitarian side, as well as the role of health professionals in support, motivation, and empathic behavior towards patients.

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Epidemiologija malignih tumora i skrining u onkologiji
Epidemiology of malignant tumors and screening in oncology

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Apstrakt

Epidemiologija malignih tumora predstavlja proučavanje distribucije i determinanti ovih bolesti, sa ciljem da identifikuje uzroke i utvrdi mere prevencije. Epidemiologija malignih tumora je oruđe za procenu rizika, za preporuku odgovarajućeg skrining programa za populacije visokog rizika i procenu uspešnosti sprovedenih mera prevencije.

Svetsku populaciju danas čini više od 6 milijardi ljudi. Prema podacima SZO danas je u svetu više od 30 miliona obolelih od raka (prevalencija), a svake godine oboli oko 18,1 milion ljudi. Broj umrlih od malignih tumora 2018. godine iznosio je 9,6 miliona sa predviđanjima da 2020. god umre 12 miliona. Tokom života, jedan od pet muškaraca, i jedna od šest žena će oboleti od raka, a jedan od osam muškaraca i jedna od jedanaest žena će umreti od nekog oblika maligne bolesti. Trend povećanja broja obolelih je u korelaciji sa ukupnim porastom stanovništva i starenjem populacije, učestalosti faktora rizika i stilom života. Skoro polovina novih slučajeva malignih tumora i više od polovine smrtnih slučajeva od raka u svetu 2018. godine je registrovano u Aziji, s obzirom na to da na ovom kontinentu živi skoro 60% svetske populacije. U Evropi, koja čini samo 9% svetske populacije, registrovano je 23,4% svih slučajeva raka i 20,3% smrtnosti od raka. U Americi koja čini 13,3% svetske populacije, registrovano je 21% novo obolelih i 14,4% umrlih od raka. Veći procenat umrlih od raka u odnosu na procenat novootkrivenih je registrovan u Aziji (57,3% i 48,4%) i u Africi (7,3% i 5,8%).

Rak pluća, rak dojke i rak debelog creva su vodeće lokalizacije u oboljevanju i umiranju u svetu i čine zajedno jednu trećinu novoobolelih i umrlih osoba od raka u svetu. U svetu je najveća učestalost raka pluća, sa trendom pada u razvijenim zemljama, a rasta u zemljama u razvoju. Incidencija raste kod raka dojke, grlića, kolorektalnog karcinoma, prostate, melanoma kože, testisa, a jajnika negde raste, dok negde pada, leukemije i limfomi se ne menjaju. Incidencija grlića materice pada u EU. U svetu pada mortalitet raka dojke, grlića materice, kolorektalnog karcinoma kao rezultat sprovođenja skrining programa, kao i raka testisa, dok se rak prostate ne menja.

U Srbiji je 2015. godine ukupan broj obolelih od malignih tumora bio oko 150.000, broj novoobolelih 36.000, a umrlih više od 20.000. Vodeće lokalizacije u 2015. godini, kod žena su: rak dojke sa 24%, kolorektalni karcinom oko 10%, karcinom pluća oko 10%, rak grlića materice oko 6,3%, rak uterusa 5,7% i rak ovarijuma 4,4%. Muškarci najviše oboljevaju od karcinoma pluća 19,6%, kolorektalnog karcinoma 13,4%, karcinoma prostate 10,2%, karcinoma mokraćne bešike 6,6% i karcinoma želuca 3,7%. Srbija se, prema procenama Internacionalne agencije za istraživanje raka, među 40 zemalja Evrope, svrstava u grupu zemalja sa srednjim rizikom oboljevanja (nalazi se na 12. mestu) i visokim rizikom od umiranja (2. mesto odmah posle Mađarske) od malignih tumora u Evropi. Procenjene stope obolevanja i umiranja od svih malignih tumora su niže kod muškaraca nego kod žena.

Abstract

The epidemiology of malignant tumors is the study of the distribution and determinants of these diseases, with the aim of identifying the causes and determining prevention measures. The epidemiology of malignant tumors is a tool for risk assessment, for recommending an appropriate screening program for high-risk populations, and for assessing the success of implemented prevention measures.

Nowadays, the world's population is more than 6 billion people. According to the WHO, today there are more than 30 million cancer patients in the world (prevalence), and about 18.1 million people get sick every year. The number of deaths from malignant tumors in 2018 was 9.6 million, with predictions that 12 million will die in 2020. During their lifetime, one in five men and one in six women will develop cancer, and one in eight men and one in eleven women will die from some form of malignancy. The trend of increasing the number of patients is correlated with the total population growth and population aging, the frequency of risk factors, and lifestyle. Almost half of new cases of malignant tumors and more than half of cancer deaths in the world in 2018 were registered in Asia, considering that almost 60% of the world's population lives on this continent. In Europe, which makes up only 9% of the world's population, 23.4% of all cancer cases and 20.3% of cancer deaths are registered. In America, which makes up 13.3% of the world's population, 21% of new cases and 14.4% of cancer deaths have been registered. A higher percentage of cancer deaths compared to the percentage of newly diagnosed was registered in Asia (57.3% and 48.4%) and in Africa (7.3% and 5.8%).

Lung cancer, breast cancer, and colon cancer are the leading localizations in morbidity and mortality in the world and together constitute one-third of newly diagnosed and died of cancer in the world. The world has the highest incidence of lung cancer, with a declining trend in developed countries and an increase in developing countries. The incidence increases with breast, cervical, colorectal cancer, prostate, melanoma of the skin, testicles, and the ovaries grow somewhere while falling, leukemias and lymphomas do not change. The incidence of the cervix is falling in the EU. The mortality of breast cancer, cervical cancer, colorectal cancer is falling in the world as a result of the implementation of screening programs, as well as testicular cancer, while prostate cancer is not changing.

In Serbia, in 2015, the total number of patients with malignant tumors was around 150,000, the number of newly diagnosed patients was 36,000, and the number of deaths was more than 20,000. Leading localization in 2015, women are breast cancer 24%, colorectal cancer about 10% of lung cancer about 10% of cervical cancer around 6.3%, 5.7% of uterine cancer and ovarian cancer is 4.4%. Men suffer the most from lung cancer 19.6%, colorectal cancer 13.4%, prostate cancer 10.2%, bladder cancer 6.6% and gastric cancer 3.7%. According to the estimates of the International Agency for Research on Cancer, Serbia ranks among the 40 countries in Europe in the group of countries with a medium risk of disease (ranked 12th) and a high risk of dying (2nd place immediately after Hungary) from malignant tumors in Europe. Estimated rates of morbidity and mortality from all malignant tumors are lower in men than in women.

Analitičkom epidemiologijom su najčešći identifikovani uzročnici malignih oboljenja: duvan sa oko 25-35% smrtnosti, alkohol sa 3%, dijeta i način ishrane sa 30%, infekcije sa 5%, profesionalno izlaganje agensima sa 5%, jonizujuće zračenje naročito kod dece 2%, nejonizujuće zračenje, medikamenti, genetska sklonost 2%. Na približno dve trećine faktora rizika koji su odgovorni za nastanak malignih tumora moguće je uticati, menjati ih ili ih eliminisati. Čak 40% malignih tumora je moguće izbeći smanjenjem nezdravih stilova života. Ukoliko do bolesti ipak dođe, njen ishod je moguće poboljšati ranim otkrivanjem, adekvatnim lečenjem i rehabilitacijom uz odgovarajuće palijativno zbrinjavanje.

U okviru programa prevencije razlikuju se primarna, sekundarna i tercijarna prevencija. Primarna prevencija podrazumeva sprečavanje nastanka bolesti redukcijom ili eliminisanjem izloženosti uzročnim faktorima rizika ili imunizacijom, odnosno označava intervencije pre nastanka bolesti. Sekundarna prevencija podrazumeva skrining, otkrivanje bolesti u ranoj fazi bolesti tj. u presimptomatskoj fazi (interval od nastanka bolesti do pojave kliničkih simptoma i znakova bolesti) i rano lečenje. Tercijarna prevencija se odnosi na lečenje bolesnih osoba u kliničkoj fazi bolesti, a u cilju prevencije komplikacija bolesti uključujući smrtni ishod. Posebnu ulogu u ranom otkrivanju malignih tumora imaju skrining programi, kao vid sekundarne prevencije. Značaj skrininga je u dokazano smanjenoj smrtnosti za određeno maligno oboljenje. Skrining je program individualnog testiranja populacije korišćenjem različitih postupaka (fizikalni pregled, laboratorijska i dijagnostička procedura, upitnik itd...), gde pojedinac nema nijedan vidljiv simptom bolesti, da bi se otkrile one osobe koje već imaju razvijenu bolest ili veliku šansu da je dobiju. Skrining može biti selektivni, oportunistički, multipli (multifazni), i masovni (organizovani). Organizovani (masovni) skrining predstavlja organizovano masovno pozivanje ciljne populacije na testiranje i tumačenje testova, praćeno kontrolom kvaliteta i izveštavanjem. Izvodi se na celokupnoj populaciji ili na njenom većem delu. Obično se sprovodi u ciklusima od po nekoliko godina.

Prateći preporuke Svetske zdravstvene organizacije i iskustava evropskih zemalja u sprovođenju populacionih skrining programa, u Srbiji su 2009. godine doneti nacionalni programi, a od decembra 2012. godine je započeto sa sprovođenjem organizovanog decentralizovanog skrininga raka grlića materice, raka dojke i kolorektalnog raka. Na skriningu raka grlića materice obuhvaćene su žene uzrasta od 25 godina do 64 godine, koje se pozivaju na preventivni ginekološki pregled i citološki bris grlića materice (Papa test) jednom u tri godine. Na skrining raka dojke pozivaju se žene starosti od 50 do 69 godina. Mamografski pregledi predviđeni su da se za ovaj uzrast žena rade na dve godine, sa dva nezavisna čitača nalaza. Ciljana grupa za testiranje na rak debelog creva obuhvata građane oba pola, starosti od 50 do 74 godina, koji se jednom u dve godine pozivaju na testiranje na skriveno krvarenje u stolici (iFOB test). Ukoliko je pozitivan test, radi se dalje kolonoskopija i biopsija. Prvi ciklus skrininga raka dojke sproveden je u Srbiji tokom 2013/2014. godine, u 19 opština, pregledano je 78.576 žena i otkriveno je 290 karcinoma. U drugom ciklusu (2015/2016. godine), sprovedenom u 35 opština, pregledano je 99.953 žena i otkriveno je 287 karcinoma. U trećem ciklusu (2017/2018. godina) u 35 opština je pregledano 93.506 žena i otkriveno je 346 karcinoma.

U svetu se pored ova tri skrining programa, istražuju mogućnosti za skrininge drugih malignih tumora, ali još ne postoje prihvaćene preporuke zbog nepostojanja dovoljno dobrog testa i ubedljivih efekata skrininga. Najviše se istražuje za skrininge raka prostate, želuca, malignog melanoma, jajnika i želuca (za populaciju u Japanu). Organizovani skrining je od ogromnog značaja za smanjenje incidence i mortaliteta od malignih tumora, ali je organizovano veoma zahtevan. Neophodno je i dalje raditi na osnaživanju organizovanog skrininga za rak dojke, rak grlića materice i rak debelog creva na područjima gde se realizuje i uvesti ga na sva područja naše zemlje gde postoje uslovi za njegovo sprovođenje.

Analytical epidemiology is the most commonly identified cause of malignant diseases: tobacco with about 25-35% mortality, alcohol with 3%, diet and diet with 30%, infections with 5%, occupational exposure to agents with 5%, ionizing radiation, especially in children-2%, non-ionizing radiation, medications, genetic predisposition with 2%. Approximately two-thirds of the risk factors responsible for the development of malignant tumors can be affected, altered, or eliminated. As many as 40% of malignant tumors can be avoided by reducing unhealthy lifestyles. If the disease does occur, its outcome can be improved by early detection, adequate treatment, and rehabilitation with appropriate palliative care.

There is primary, secondary, and tertiary prevention within the prevention program. Primary prevention means preventing the onset of the disease by reducing or eliminating exposure to causal risk factors or immunization, ie means interventions before the disease onset. Secondary prevention includes screening, detection of diseases at an early stage of the disease, i.e., in the presymptomatic phase (interval from the onset of the disease to the appearance of clinical symptoms and signs of the disease), and early treatment. Tertiary prevention refers to the treatment of sick persons in the clinical phase of the disease, in order to prevent complications of the disease, including death. Screening programs, as a type of secondary prevention, have a special role in the early detection of malignant tumors. The importance of screening is in the proven reduced mortality for a particular malignant disease. Screening is a program of individual testing of the population using various procedures (physical examination, laboratory and diagnostic procedure, questionnaire, etc.), where an individual does not have any visible symptoms of the disease, to detect those who already have the disease or a high chance of getting it. Screening can be selective, opportunistic, multiple (multiphase), and mass (organized). Organized (mass) screening is an organized mass invitation of the target population for testing and interpretation of tests, followed by quality control and reporting. It is performed on the entire population or on a larger part of it. It is usually carried out in cycles of several years.

Following the recommendations of the World Health Organization and the experiences of European countries in the implementation of population screening programs, national programs were adopted in Serbia in 2009, and in December 2012 the implementation of organized decentralized screening for cervical cancer, breast cancer, and colorectal cancer began. Cervical cancer screening includes women aged 25 to 64, who are invited for a preventive gynecological examination and a cytological smear of the cervix (Pap test) once every three years. Women aged 50 to 69 are invited for breast cancer screening. Mammographic examinations are planned for this age of women for two years, with two independent readers of the findings. The target group for testing for colon cancer includes citizens of both sexes, aged 50 to 74, who are invited once every two years for testing for hidden bleeding in the stool (iFOB test). If the test is positive, colonoscopy and biopsy are performed. The first cycle of breast cancer screening was conducted in Serbia during 2013/2014, in 19 municipalities, 78,576 women were examined and 290 cancers were detected. In the second cycle (2015-2016), conducted in 35 municipalities, 99,953 women were examined and 287 cancers were detected. In the third cycle (2017/2018), 93,506 women were examined in 35 municipalities and 346 cancers were detected.

In addition to these three screening programs, the world is exploring the possibilities for screening other malignant tumors, but there are still no accepted recommendations due to the lack of a test that is good enough to be performed, and convincing screening effects. It is mostly researched for screening for the prostate, stomach, malignant melanoma, ovarian and stomach cancers (for the population in Japan). Organized screening is of great importance for reducing the incidence and mortality from malignant tumors, but the organization is very demanding. It is necessary to continue working on strengthening the organized screening for breast cancer, cervical cancer, and colon cancer in the areas where it is realized and to introduce it in all areas of our country where there are conditions for its implementation.

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APSTRAKT 32S 2021; 2(1): 36–36 ABSTRACT 32E

Prevencija osteoporoze
Prevention of osteoporosis

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Apstrakt

Osteoporoza predstavlja skeletno oboljenje sa poremećenom koštanom čvrstinom koje dovodi do povećanog rizika za pojavu preloma. Deli se na primarnu osteoporozu, koja uključuje postmenopauzalnu i senilnu, i sekundarnu osteoporozu, koja ima jasno definisane etiološke mehanizme (malapsorpcija, primena glukokortikoida, hiperaratireoidizam). Osteoporoza i povećani rizik za prelome su među najčešćim posledicama starenja kod žena. Ova bolest je u svetu dostigla pandemijske razmere, a da bi se uspešno smanjilo opterećenje javnog zdravlja, nužno je razviti strategije koje omogućavaju raniju identifikaciju žena koje su na riziku od preloma i omogućiti sigurnost i efikasnost preventivnih mera. Faktori rizika za osteoporozu su, pored starosti i ženskog pola, takođe i genetika, postmenopauzalni status, hipogonadizam ili prevremena insuficijencija jajnika, nizak indeks telesne mase, etnička pripadnost, reumatoidni artritis, niska koštana mineralna gustina, nedostatak vitamina D, nizak unos kalcijuma, pušenje, alkohol, imobilizacija i dugotrajna upotreba određenih lekova, kao što su glikokortikoidi, antikoagulansi, antikonvulzivi, inhibitori aromataze, hemoterapijski lekovi za kancer i agonisti hormona koji oslobađaju gonadotropin. Prevencija pojave osteoporoze uklanjanjem pomenutih faktora rizika na koje se može uticati, selekcija osoba sa visokim rizikom za frakturu i rano postavljanje dijagnoze su od presudnog značaja u borbi protiv osteoporotskih preloma. Strategije prevencije i lečenja osteoporoze i osteoporotskih preloma uključuju sledeće mere: izbegavanje pada korekcijom vidne oštrine, smanjenje potrošnje lekova koji menjaju budnost i ravnotežu, smanjenje opasnosti od pada kod kuće (uklanjanje klizavih podova, prepreka, nedovoljne svetlosti), izvođenje vežbi za poboljšanje mišićne snage, ravnoteže i održavanje koštane mase, prestanak pušenja i prekomernog unosa alkohola, adekvatan unos proteina, kalcijuma i vitamina D.

Sistemska osteoporoza i povećana stopa osteoporotičnih preloma su karakteristični za hronične inflamatorne bolesti kao što su reumatoidni artritis, spondiloartritisi, sistemski eritemski lupus, hronične inflamatorne bolesti creva i hronična opstruktivna bolest pluća. Kod većine ovih pacijenata, pored ostalih lekova, u terapiji se primenjuju i glukokortikoidi, koji nezavisno od drugih činilaca, imaju štetno delovanje na koštani metabolizam. Godine 2017. objavljene su najnovije ACR preporuke za prevenciju i lečenje glukokortikoidima indukovane osteoporoze. Preporuke lečenja osteoporoze uključuju, kod odraslih osoba sa niskim rizikom za prelom, lečenje samo kalcijumom i vitaminom D, dok kod odraslih osoba sa umerenim i visokim rizikom za prelom, lečenje kalcijumom i vitaminom D, uz dodatno lečenje osteoporoze, pri čemu su oralni bisfosfonati prva linija lečenja glukokortikoidima indukovane osteoporoze.

Abstract

Osteoporosis is a skeletal disease with impaired bone strength that leads to an increased risk of fractures. It is divided into primary osteoporosis, which includes postmenopausal and senile, and secondary osteoporosis, which has clearly defined etiological mechanisms (malabsorption, glucocorticoid use, hyperthyroidism). Osteoporosis and an increased risk of fractures are among the most common consequences of aging in women. This disease has reached pandemic proportions in the world, and in order to successfully reduce the burden on public health, it is necessary to develop strategies that enable earlier identification of women at risk of fracture and enable the safety and effectiveness of preventive measures. Risk factors for osteoporosis include genetics, postmenopausal status, hypogonadism or premature ovarian failure, low body mass index, ethnicity, rheumatoid arthritis, low bone mineral density, vitamin D deficiency, low calcium intake, and smoking. alcohol, immobilization, and long-term use of certain medicines, such as glucocorticoids, anticoagulants, anticonvulsants, aromatase inhibitors, cancer chemotherapeutic drugs, and gonadotropin-releasing hormone agonists. Prevention of osteoporosis by removing the mentioned risk factors that can be influenced, selection of persons at high risk for fracture, and early diagnosis are crucial in the fight against osteoporotic fractures. Strategies for prevention and treatment of osteoporosis and osteoporotic fractures include the following measures: avoiding falls by correcting visual acuity, reducing the consumption of drugs that change alertness and balance, reducing the risk of falls at home (removing slippery floors, obstacles, insufficient light), performing exercises to improve muscle strength, balance and maintenance of bone mass, smoking cessation and excessive alcohol intake, adequate intake of protein, calcium and vitamin D.

Systemic osteoporosis and an increased rate of osteoporotic fractures are characteristic of chronic inflammatory diseases such as rheumatoid arthritis, spondyloarthritis, systemic lupus erythematosus, chronic inflammatory bowel disease, and chronic obstructive pulmonary disease. In most of these patients, in addition to other drugs, glucocorticoids are used in therapy, which, independently of other factors, have a detrimental effect on bone metabolism. In 2017, the latest ACR recommendations for the prevention and treatment of glucocorticoid-induced osteoporosis were published. Recommendations for the treatment of osteoporosis include calcium and vitamin D treatment alone in low-risk adults for fracture, while calcium and vitamin D treatment in adults with moderate and high risk for fracture with additional osteoporosis treatment, with oral bisphosphonates inducing glucocorticoid-induced first-line treatment. osteoporosis.

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APSTRAKT 33S 2021; 2(1): 37–37 ABSTRACT 33E

Lekovi u laktaciji
Medicines in lactation

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Apstrakt

Sve što majka unese u organizam, a naročito lekovi, u određenoj količini se nađu u njenom mleku. Neki lekovi nisu štetni po odojče ni u velikoj koncentraciji, dok su drugi opasni čak i u tragovima.

Cilj savetovanja dojilja je da se odojče zaštiti od neželjenih efekata lekova, a da se majci obezbedi potrebna medikacija.

Lekovi u mleko uglavnom dospevaju procesom difuzije kroz membrane krvnih sudova i alveolarnih ćelija i njihova koncentracija u mleku je najveća u prva 4 do10 dana. Prema bezbednosnom profilu lekovi se dele u četiri kategorije:
– lekovi koji su verovatno bezbedni u laktaciji,
– lekovi koji su u većini slučajeva bezbedni u laktaciji,
– potencijalno opasni lekovi,
– lekovi koji nisu bezbedni za upotrebu u laktaciji.

Lekovi na različite načine utiču na odojče, u zavisnosti od svog mehanizma dejstva i farmakodinamskih karakteristika. Ukoliko je primena leka u periodu laktacije neophodna, treba se pridržavavati sledećih pravila: propisivati stare, proverene lekove, u najmanjoj dnevnoj dozi, kad god je moguće davati lek jednom dnevno, izbegavati podoj u periodu maksimalne koncentracije leka u krvi i izbegavati kombinacije lekova.

Abstract

Everything that the mother takes into the body, especially medicines, is found in a certain amount in her milk. Some medicines are not harmful to infants or in high concentrations, while others are dangerous even in trace amounts.

The goal of breastfeeding counseling is to protect the infant from the side effects of medication and to provide the mother with the necessary medication.

Medicines in milk mainly reach the process of diffusion through the membranes of blood vessels and alveolar cells, and their concentration in milk is highest in the first 4-10 days. According to the safety profile, medicines are divided into four categories:
– medicines that are probably safe during lactation,
– medicines that are safe in lactation in most cases,
– potentially dangerous medicines,
– medicines that are not safe for use in lactation.

Drugs affect the infant in different ways, depending on their mechanism of action and pharmacodynamic characteristics. If the use of the medicine during lactation is necessary, the following rules should be followed: prescribe old, tested medicines, in the lowest daily dose, whenever possible, once a day, avoid breastfeeding during the period of maximum concentration of the medicine in the blood and avoid combining medicines.

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Superiornost majčinog mleka
Superiority of breast milk

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Apstrakt

Srbija je među zemljama sa najnižom stopom dojenja u istočnoj Evropi, pokazuje nedavno sprovedeno istraživanje mreže SteadyHealth na uzorku od 200 majki u Srbiji, kako iz urbanih područja, tako i iz okolnih ruralnih sredina. Većina majki u Srbiji (9 od 10) započne dojenje svojih beba, ali i pored ovako visoke stope ranog dojenja, svega 13,7% majki isključivo doji svoje bebe tokom prvih šest meseci njihovog života.

Isključivo dojenje u prvih šest meseci ima brojne koristi. Opšti cilj je unapređenje i očuvanje zdravlja deteta. Faktori koji su prisutni u majčinom mleku, koji pružaju aktivnu ili pasivnu zaštitu, uključuju: imunoglobulin A – antitelo najviše prisutno u majčinom mleku, koje se proizvodi i izlučuje u dojkama kao odgovor na majčino izlaganje određenim bakterijama i virusima, i obezbeđuje zaštitu u novorođenčetovoj okolini, imunoglobulin G i imunoglobulin M – pružaju dalju zaštitu od specifičnih patogena, astme. Prema zaključcima Svetske zdravstvene organizacije (WHO), povećanjem stope dojenja moglo bi se sprečiti i do 10% smrtnosti dece mlađe od pet godina. Mnoge studije su, takođe, pokazale da je isključivo dojenje od najmanje šest meseci, kao i produženo dojenje, jedan od najefikasnijih načina za sprečavanje pojave alergija i poremećaja u razvoju. Dojenje je povezano sa najnižim rizikom od gojaznosti kasnije u životu. Dojenje ima zdravstvene prednosti za majku, uključujući nizak rizik od postpartum krvarenja i raka dojke i grlića materice, a utiče i na produženje amenoreje nakon porođaja. Dojenje takođe nosi ekonomske prednosti za porodicu i društvo i obezbeđuje optimalnu zaštitu novorođenčadi u društvima sa slabim higijenskim uslovima.

Dojenje može biti važan faktor u stvaranju veze između majke i deteta. Ta međusobna veza između majke koja doji i odojčeta, redovne bliske interakcije i kontakt koža na kožu tokom dojenja, ohrabruju međusobnu povezanost. U literaturi koja se bavi psihološkim razvojem dece stalno možemo pročitati studije koje su pokazale da metod hranjenja u ranom detinjstvu utiče na kognitivni razvoj deteta.

Cilj ovog rada je ispitivanje učestalosti dojenja, upoznatosti o značaju dojenja, zadovoljstvu informacijama koje su majke dobile pre porođaja o značaju dojenja.

Zadatak sprovedenog istraživanja je analizirati potrebe za zdravstveno vaspitnim radom sa trudnicama, porodiljama i sredinom u podršci dojenju.

Uzorak istraživanja su činile 60 majki koje su svoju decu dovele u savetovalište za zdravu decu Službe za zdravstvenu zaštitu dece Doma zdravlja Aleksinac. Za potrebe istraživanja korišćen je anketni upitnik (Socio – demografski i Ciljani upitnik).

Zaključak i predlog mera: Prikazani rezultati još jednom potvrđuju potrebu za kontinuiranim timskim radom. Preventivni rad pomaže da se shvati i usvoji značaj prevencije za kvalitetniji i zdraviji život deteta.

Abstract

Serbia is among the countries with the lowest breastfeeding rate in Eastern Europe, according to a recent survey conducted by the SteadyHealth network on a sample of 200 mothers in Serbia, both from urban areas and the surrounding rural areas. The majority of mothers in Serbia (9 out of 10) start breastfeeding their babies, but despite such a high rate of early breastfeeding, only 13.7% of mothers exclusively breastfeed their babies during the first six months of their lives.

Breastfeeding alone in the first six months has many benefits. The general goal is to improve and preserve the child's health. Factors present in breast milk that provide active or passive protection include: immunoglobulin A - an antibody most present in breast milk, which is produced and secreted in the breast in response to maternal exposure to certain bacteria and viruses and provides protection in the newborn environment, immunoglobulin G and immunoglobulin M- provide further protection against specific pathogens, asthma. According to the conclusions of the World Health Organization (WHO), increasing the breastfeeding rate could prevent up to 10% of mortality in children under the age of five. Many studies have also shown that only breastfeeding for at least six months, as well as prolonged breastfeeding, is one of the most effective ways to prevent allergies and developmental disorders. Breastfeeding is associated with the lowest risk of obesity later in life. It has health benefits for the mother, including a low risk of postpartum hemorrhage and breast and cervical cancer, and also affects the prolongation of amenorrhea after childbirth. It also brings economic benefits to the family and society and provides optimal protection for newborns in societies with poor hygienic conditions.

Breastfeeding can be an important factor in creating a bond between mother and child. This interrelationship between the breastfeeding mother and the newborn baby, regular close interactions and skin-to-skin contact during breastfeeding, encourage interconnectedness. In the literature dealing with the psychological development of children, we can constantly read studies that have shown that the method of feeding in early childhood affects the cognitive development of the child.

The aim of this paper is to examine the frequency of breastfeeding, awareness of the importance of breastfeeding, satisfaction with the information that mothers received before childbirth about the importance of breastfeeding.

The task of the conducted research is to analyze the needs for health education work with pregnant women, mothers, and the environment in support of breastfeeding.

The sample of the research consisted of 60 mothers who brought their children to the counseling center for healthy children of the Service for Health Protection of Children of the Health Center Aleksinac. For the needs of the research, a survey questionnaire was used (Socio-demographic and Target questionnaire).

Conclusion and proposed measures: The presented results once again confirm the need for continuous teamwork. Preventive work helps to understand and adopt the importance of prevention for a better and healthier life for a child.

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APSTRAKT 35S 2021; 2(1): 39–39 ABSTRACT 35E

Urgentna radiologija kardiovaskularnog sistema
Emergency radiology of the cardiovascular system

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Apstrakt

Urgentna, akutna stanja u kardiovaskularnoj patologiji najčešće se povezuju sa akutnom okluzijom krvnih sudova (KS) (arterija i vena). Ateroskleroza se navodi kao najčešći uzrok, mada postoji mnogo drugih činilaca koji mogu dovesti do okluzije KS. Ateroskleroza perifernih i koronarnih arterija jeste hronično, sporoprogredirajuće stanje koje dovodi do suženja arterija. U zavisnosti od stepena suženja nekog vaskularnog korita, mogu se pojaviti različiti simptomi. Kod nekih pacijenata se desi akutni događaj, često udružen s trombozom i/ili embolijom i/ili okluzijom arterije, koji može ugroziti život bolesnika. Periferna arterijska bolest (PAB) zahvata sve KS, uključujući karotidne, vertebralne, mezenterične, renalne, krvne sudove gornjih i donjih ekstremiteta. Posebno mesto u urgentnoj radiologiji KVS-a ima patologija aorte, preteća ruptura aneurizme, gde je disekcija aorte posebno rizična po život pacijenata. Mesto radiologije u dijagnostici akutnog infarkta miokarda, kao urgentnog stanja, za sada je ograničeno.

Učestalost PAB-a je značajno povezana sa godinama starosti: nije uobičajena pre 50. godine, u starijoj životnoj dobi rizici za PAB slični su onima koji su važni u etiologiji koronarne bolesti (KB): pušenje, dislipidemija, šećerna bolesti, hipertenzija. Posebno treba naglasiti da su studije pokazale da je pušenje značajniji faktor rizika koji ubrzava perifernu bolest arterija donjih ekstremiteta (PADE) nego kod bolesnika sa KB-om. Evropske preporuke za PAB nas upućuju na algoritam pregleda i metode lečenja PAB-a: porodična anamneza, fizički pregled, laboratorijski pregled. U akutnim stanjima KVS-a postoji čitava paleta radioloških metoda, od kojih su neke ključne za dalje lečenje. Osnovne dijagnostičke metode kod tromboza arterijskog i venskog sistema (KS donjih ekstremiteta, KS vrata, kao i visceralnih KS) jesu ultrazvučne metode: a) brahijalni indeks, b) duplex ultrazvuk (B-mod ehografija, pulsno-talasni dopler, kolor-dopler i ponjer dopler u cilju detekcije i lokalizacije vaskularnih lezija i kvantifikacije stepena i ozbiljnosti stenoze. Angiografija je bila zlatni standard vaskularnog imidžinga. Danas je to multidetektor kompjuterizovane tomografije (MDCT). Lečenje pacijenata uključuje interventne radiološke procedure, hirurško lečenje ili kombinaciju oba pristupa. Danas u lečenju PAB-a interventnim radiološkim metodama na raspolaganju imamo veliki broj različitih balona (obični, obloženi lekom, cutcing baloni), stentova (metalni, obloženi lekovima i biodegradibilni), sisteme za aterokat, aspiracione sisteme i druge modalitete.

Abstract

Urgent, acute conditions in cardiovascular pathology are most often associated with acute occlusion of blood vessels (arteries and veins). Atherosclerosis is cited as the most common cause, although there are many other factors that can lead to the occlusion of the blood vessels. Atherosclerosis of the peripheral and coronary arteries is a chronic, slow-progressing condition that leads to narrowing of the arteries. Depending on the degree of narrowing of a vascular bed, different symptoms can occur. In some patients, an acute event occurs, often associated with thrombosis and/or embolism and/or occlusion of the artery, which can be life-threatening. The peripheral arterial disease affects all blood vessels, including carotid, vertebral, mesenteric, renal blood vessels of the upper and lower extremities. A special place in the emergency radiology of the cardio-vascular system has aortic pathology, a threatening aneurysm rupture, where aortic dissection is especially risky for the life of the patient. The place of radiology in the diagnosis of acute myocardial infarction, as an urgent condition, is currently limited.

The frequency of peripheral arterial diseases is significantly related to age: it is not common before the age of 50, in old age the risks for peripheral arterial diseases are similar to those important in the etiology of coronary heart disease: smoking, dyslipidemia, diabetes, hypertension. In particular, studies have shown that smoking is a more significant risk factor that accelerates peripheral arterial disease of the lower extremities than in patients with KB. European recommendations for peripheral arterial diseases refer us to the algorithm of examination and methods of treatment of peripheral arterial disease: family history, physical examination, laboratory examination. In acute conditions of the cardiovascular system, there is a whole range of radiological methods, some of which are crucial for further treatment. The basic diagnostic methods for thrombosis of the arterial and venous system (blood vessels of the lower extremities, neck, as well as visceral blood vessels) are ultrasound methods: a) brachial index, b) duplex ultrasound (B-mode ultrasound, pulse-wave Doppler, color Doppler) and poner Doppler to detect and localize vascular lesions and quantify the degree and severity of stenosis. Angiography was the gold standard of vascular imaging. Today it is a multidetector computed tomography (MDCT). Treatment of patients includes interventional radiological procedures, surgical treatment, or a combination of both approaches. in the treatment of peripheral arterial diseases by interventional radiological methods, we have at our disposal a large number of different balloons (ordinary, drug-coated, cutting balloons), stents (metal, drug-coated and biodegradable), atherocat systems, aspiration systems, and other modalities.

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Prelom kuka: anatomija, klasifikacija i metodi lečenja
Hip fracture: anatomy, classification and treatment methods

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Apstrakt

Uvod: Jedan od najčešćih preloma kod starijih (14% od ukupnog broja svih preloma) su prelomi proksimalnog femura. Kod starijih nastaje kao posledica pada na istom nivou, a zbog osteoporoze. Ne tako često prelomi se događaju i kod mlađih osoba, ali kao posledica visokoenergetske traume. Ova povreda, ako se neadekvatno leči, značajno utiče na kvalitet života, a takođe je pokazan i povećan morbiditet kod starijih ljudi nakon ove povrede. Kako starost populacije raste, broj ovih preloma se povećava, a samim ti i sredstva koja se moraju planirati za lečenje ovih preloma.

Metodologija: Biće prikazana anatomija proksimalnog femura, tipovi preloma proksimalnog femura kao i mehanizam povrede koji dovodi do preloma u ovoj regiji. Posebno će se analizirati uticaj osteoporoze na prelome u ovoj regiji. U zavisnosti od tipa preloma, neki se mogu lečiti i neoperativno, ali najčešće ovaj prelom zahteva hiruško lečenje. Biće prikazani metodi neoperativnog i operativnog lečenja, rezultati takvog lečenja kao i potencijalne komplikacije. Analiziraće se dve hiruške tehnike u lečenju preloma proksimalnog femura: osteosinteza gama klinom i unutrašnjim fiksatorom po Mitkoviću.

Rezultati: Cilj lečenja je da se pacijent što pre vertikalizije i osposobi za samostalan hod kako bi se izbegle brojne komplikacije dugog ležanja. To se može obezbediti samo adekvatnim hiruškim tretmanom. Dobro poznavanje anatomije i karakteristika preloma omogućiće hirurgu da primeni pravi implantat kako bi obezbedio dobro zarastanje. Iako su biomehaničke studije davale prednost intramedularnoj fiksaciji u odnosu na ekstramedularne sisteme, kliničkim praćenjem se pokazalo da, ako se ispoštuje operativna tehnika, nema veće razlike u krajnjem funkcionalnom rezultatu.

Zaključak: Prelom kuka, najčešći u starijoj populaciji, značajan je zdravstveni problem koji će se u budućnosti povećavati. Samo adekvatno lečenje će dati dobar rezultat i smanjiti mortalitet koji je kod ovih pacijenata povećan. Izbor implantata ne utiče na krajnji rezultat, već procena tipa preloma i adekvatna hiruška tehnika.

Abstract

Introduction: One of the most common fractures in the elderly (14% of the total number of all fractures) is a fracture of the proximal femur. Among the elderly people, it occurs as a consequence of a fall at the same level, and due to osteoporosis. Fractures do not occur so often in younger people but as a consequence of high-energy trauma. This injury, if treated inadequately, significantly affects the quality of life, and it has also been shown to increase morbidity in the elderly after this injury. As the age of the population increases, the number of these fractures increases, and so do the resources that must be planned for the treatment of these fractures.

Methodology: The anatomy of the proximal femur, types of fractures of the proximal femur as well as the mechanism of injury leading to fractures in this region will be presented. The impact of osteoporosis on fractures in this region will be analyzed in particular. Depending on the type of fracture, some can be treated non-operatively, but most often this fracture requires surgical treatment. Methods of non-operative and operative treatment, results of such treatment as well as potential complications will be presented. Two surgical techniques in the treatment of proximal femoral fractures will be analyzed: gamma nail osteosynthesis and internal fixator according to Mitković.

Results: The goal of treatment is to enable the patient to walk independently as soon as possible in order to avoid numerous complications of long lie down. This can only be ensured by adequate surgical treatment. Good knowledge of the anatomy and characteristics of the fracture will enable the surgeon to apply the right implant to ensure good healing. Although biomechanical studies preferred intramedullary fixation over extramedullary systems, clinical monitoring has shown that if the operative technique is followed, there is no major difference in the final functional outcome.

Conclusion: Hip fracture, the most common in the elderly population, is a significant health problem that will increase in the future. Only adequate treatment will give a good result and reduce the mortality that is increased in these patients. The choice of implants does not affect the final result, but the assessment of the type of fracture and adequate surgical technique.

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Prikaz bakterijske rezistencije po klinikama
Presentation of bacterial resistance by clinics

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Apstrakt

Prema preporukama Svetske zdravstvene organizacije, praćenje stanja rezistencija bakterija u nekoj zdravstvenoj ustanovi podrazumeva analizu potrošnje antibiotika, strukture uzročnika infekcija kao i epidemiološko praćenje širenja multirezistentnih sojeva. Vrste patogenih bakterija i njihovi profili rezistencije razlikuju se od bolnice do bolnice kao i između odeljenja unutar iste institucije.

Rezistencija bakterija je prirodni biološki fenomen koji im omogućava opstanak. Karakteristične za bolničke uslove s obzirom na to da tu postoji veliki pritisak antibiotika što dovodi do eradikacije osetljivih i preživljavanja rezistentnih bakterija. Faktori koji pogoduju razvoju bakterijske rezistencije su prekomerna i neracionalna upotreba antibiotika i spori razvoj novih antibiotika. U radu je prikazana bakterijska rezistencija na Klinici za ortopediju, Klinici za urologiju i Klinici za anesteziju i intenzivnu terapiju za 2018. i 2019. godinu. Praćenje rezistencije je bitno, pošto se osetljivost mikroorganizama vremenom menja, a zbog primene mera za sprečavanje širenja rezistentnih sojeva i zbog adekvatnog terapijskog pristupa.

Abstract

According to the recommendations of the World Health Organization, monitoring the state of bacterial resistance in a health institution includes analysis of antibiotic consumption, the structure of the cause of the infection, as well as epidemiological monitoring of the spread of multidrug-resistant strains. The types of pathogenic bacteria and their resistance profiles differ from hospital to hospital as well as between departments within the same institutions.

Bacterial resistance is a natural biological phenomenon that allows them to survive. Characteristic of hospital conditions, given that there is a high pressure of antibiotics that leads to the eradication of sensitive and survival of resistant bacteria. Factors that favor the development of bacterial resistance are excessive and irrational use of antibiotics and sports development of new antibiotics. The paper presents bacterial resistance to Clinics for Orthopedics, Clinics for Urology, and Clinics for Anesthesia and Intensive Care for 2018 and 2019. Monitoring of resistance is important, as the susceptibility of microorganisms changes over time due to primary measures for the spread of resistant strains and due to an adequate therapeutic approach.