



Racionalni terapijski pristup asimptomatskoj bakteriuriji i kandiduriji

Rational Therapeutic Approach to Asymptomatic Bacteriuria and Candiduria

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Apstrakt

Asimptomatska bakteriurija (ABU) predstavlja prisustvo značajnog broja uropatogena u adekvatno uzorkovanom urinu, uz izostanak pojave pratećih simptoma i znakova urinarnе infekcije. Učestalost u populaciji varira u zavisnosti od pola, starosti, prisustva komorbiditeta, ali i drugih faktora. Najčešće izolovan uzročnik ABU je *Escherichia coli*, a potom slede ostale enterobacteriaceae, različite enterococcus vrste, streptococcus grupe B, kao i *Pseudomonas aeruginosa*. Shodno aktuelnim smernicama, antibiotski terapijski pristup asimptomatskoj bakteriuriji ne smatra se klinički opravdanim postupkom, osim u određenim izuzecima. Prisustvo ABU u trudnoći se u oko 20–30% netretiranih slučajeva komplikuje razvojem akutnog pijelonefritisa, naročito krajem drugog i početkom trećeg trimestra, čime može biti udruženo sa intrauterinim zastojem u rastu, prevremenim porođajem, odnosno neonatalnom smrću. Oralna primena „bezbednih“ antimikrobnih lekova u trudnoći u ovakvim slučajevima smatra se opravdanom, s obzirom na to da tretman ABU smanjuje učestalost razvoja akutnog pijelonefritisa na svega 2–3%. Pogodnim terapijskim pristupom smatra se i primena antimikrobnih lekova u sklopu pripreme pacijenta za invazivne genitourinarne procedure. Mada su stavovi još uvek neusaglašeni, poseban aspekt u domenu neophodnosti primene i izbora antibiotika pripada asimptomatskoj bakteriuriji kod pacijenata sa transplantiranim bubregom, naročito u periodu od meseca nakon intervencije, shodno činjenici da je manifestna infekcija urinarnog trakta, kao jedna od najčešćih visokorizičnih komplikacija kod ovakvih pacijenata, udružena sa posledičnom disfunkcijom grafta, sepsom, kao i visokim mortalitetom. U slučajevima prisustva asimptomatske bakteriurije kod dece, osoba starije životne dobi, dijabetičara, pacijenata sa povredom kičmene moždine, odnosno u okolnostima potrebe za permanentnom kateterizacijom mokraćne bešike, primena antibiotske terapije ne smatra se racionalnim terapijskim izborom. Upotreba antimikrobnih lekova u ovakvim situacijama nije udružena sa redukcijom učestalosti razvoja simptomatskih infekcija urinarnog trakta, dok sa druge strane, može biti u korelaciji sa rastom verovatnoće razvoja neželjenih efekata ovih medikamenata i razvojem bakterija otpornih na antibiotike.

Poznat je relativno veliki broj faktora rizika za razvoj kandidurije (plasiran urinarni kateter, prethodna primena antibiotika, starost pacijenta, dijabetes melitus, prethodni operativni zahvat, poremećaji na nivou genitourinarnog trakta), ali jasni di-

Abstract

Asymptomatic bacteriuria (ABU) is the presence of a significant number of uropathogens in adequately sampled urine, without accompanying symptoms and signs of urinary infection. The frequency in the population varies depending on gender, age, the presence of comorbidities, and other factors. The most frequently isolated causative agent of ABU is *Escherichia coli*, followed by other Enterobacteriaceae, various enterococcus species, group B streptococcus, and *Pseudomonas aeruginosa*. According to current guidelines, the antibiotic therapeutic approach to asymptomatic bacteriuria is not considered a clinically justified procedure, except in certain exceptions. The presence of ABU in pregnancy in about 20–30% of untreated cases is complicated by the development of acute pyelonephritis, especially at the end of the second and beginning of the third trimester, which can be associated with intrauterine growth retardation, premature birth, or neonatal death. Oral administration of “safe” antimicrobial drugs during pregnancy in such cases is considered justified, considering that the treatment of ABU reduces the frequency of development of acute pyelonephritis to only 2–3%. The use of antimicrobial drugs as part of patient preparation for invasive genitourinary procedures is considered a suitable therapeutic approach. Although the attitudes are still opposed, a special aspect in the domain of the necessity of application and choice of antibiotics belongs to asymptomatic bacteriuria in patients with a kidney transplant, especially in the period of one month after the intervention, according to the fact that urinary tract infection is manifest, as one of the most common high-risk complications in such patients, associated with subsequent graft dysfunction, sepsis, as well as high mortality.

In cases of asymptomatic bacteriuria in children, elderly people, diabetics, and patients with spinal cord injury, i.e. in the circumstances of the need for permanent catheterization of the urinary bladder, the use of antibiotic therapy is not considered a rational therapeutic choice. The use of antimicrobial drugs in such situations is not associated with a reduction in the frequency of the development of symptomatic urinary tract infections, while on the other hand, it may be correlated with an increase in the likelihood of the development of side effects of these drugs and the development of bacteria resistant to antibiotics.

A relatively large number of risk factors for the development of candiduria are known (placed urinary catheter, previous ad-



jagnostički kriterijumi za verifikovanje postojanja infekcije još uvek nisu u potpunosti definisani. Takođe, kandidurija ne mora inicijalno da bude udružena sa kandidemijom i uglavnom je asimptomatska. Klinička efikasnost eradikacije kandidate u domenu asimptomatske kandidurije u većini slučajeva nije dokazana, shodno čemu se suzdržavanje od primene antigljivične terapije kod ovakvih pacijenata može uglavnom smatrati opravdanom terapijskom opcijom.

Prisustvo bakterija i gljivica (*Candida-e*) u urinu ne smatra se inicijalno znakom bolesti, shodno čemu je individualni terapijski pristup zasnovan na aktuelnim smernicama, a naročito postojanju specifičnih indikacija, osnov racionalnog terapijskog pristupa kod pacijenata sa asimptomatskom bakteriurijom i kandidurijom.

Ključne reči: asimptomatska bakteriurija, asimptomatska kandidurija, terapijski pristup

ministration of antibiotics, age of the patient, diabetes mellitus, previous surgery, disorders at the level of the genitourinary tract), but clear diagnostic criteria for verifying the existence of infection have not yet been fully defined. Also, candiduria does not have to be initially associated with candidemia and is mostly asymptomatic. The clinical effectiveness of candida eradication in the domain of asymptomatic candiduria has not been proven in most cases, so refraining from the use of antifungal therapy in such patients can generally be considered a justified therapeutic option.

The presence of bacteria and fungi (*Candida*) in the urine is not initially considered a sign of disease, therefore an individual therapeutic approach based on current guidelines, and especially the existence of specific indications, is the basis of a rational therapeutic approach in patients with asymptomatic bacteriuria and candiduria.

Key words: asymptomatic bacteriuria, asymptomatic candiduria, therapeutic approach



Prva pomoć u zbrinjavanju kazuoma First Aid in Causoma Treatment

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Apstrakt

Hemijske povrede oka su po učestalosti ređe u odnosu na mehaničke, ali pošto mogu imati krajnje nepovoljan ishod, zaslužuju posebnu pažnju. Kada hemijske materije dospeju u oko, dovode do kaustičnih promena na zahvaćenom tkivu oka, pa se zato ove promene nazivaju kazome-causoma.

Prema definiciji, kazuome su povrede oka hemijskim sredstvima, pre svega kiselinama ili bazama, pri čemu najčešće stradaju strukture pomoćnog oka: kapci, vežnjača i rožnjača, ali i mogu biti zahvaćene i dublje strukture oka. Etiologija – kiseline i baze najčešće dovode do kazuoma. Od kiselina, u današnjim uslovima, najčešća je sumporna kiselina iz akumulatora, ali se sreće i hidrovodonična i sirćetna, a mnogo ređe i neke druge. Od baza danas najčešće su povrede kalcijum-hidroksidom, tj. gašenim krečom ili malterom, a znatno ređe natrijum-hidroksidom tj. živom sodom i amonijakom. Ove povrede mogu biti zadesne, pri radu u industriji, ali i namerne.

Pružanje prve pomoći podrazumeva stalno ispiranje povređenog oka, a cilj ispiranja je uklanjanje štetnog agensa iz oka, razblaženje tog agensa i skraćanje delovanja tog agensa u oku. Na mestu nezgode ispiranje se vrši običnom vodom i nastavlja se do zbrinjavanja u prvoj oftalmološkoj ambulanti gde se vrši ispiranje fiziološkim rastvorom. Ispiranje je potrebno vršiti i tokom transporta unesrećene osobe. Osim ispiranja, od velike važnosti je prevrtanje, tj. ektropija kapka da bi se olakšalo ispiranje cele površine rožnjače i konjunktive, ali i radi uklanjanja čvrstih čestica koje mogu dovesti do mehaničkih povreda.

Povređeno oko ne sme se zatvarati, niti treba stavljati prekomerno masti. Nakon adekvatne i pravilne prve pomoći, nadležnom oftalmologu će biti mnogo lakše u sprovođenju daljeg lečenja.

Abstract

Chemical eye injuries are less frequent than mechanical injuries, but since they can have an extremely adverse outcome, they deserve special attention. When chemical substances reach the eye, they cause caustic changes in the affected eye tissue, which is why these changes are called causoma.

Causoma is defined as injury to the eye by chemical means, primarily acids or bases, where the accessory eye structures are most often affected: the eyelids, iris, and cornea, but deeper structures of the eye can also be affected. Etiology - acids and bases most often lead to causoma. Of the acids, in today's conditions, the most common is sulfuric acid from batteries, but hydrogen and acetic acid can also be found, and much less often some others. Of the bases, today the most common injuries are caused by calcium hydroxide, i.e. with slaked lime or mortar, and much less often with sodium hydroxide, i.e. caustic soda and ammonia. These injuries can be accidental, during work in the industry, but also intentional.

Providing first aid involves constant rinsing of the injured eye, and the goal of rinsing is to remove the harmful agent from the eye, dilute that agent, and shorten the action of that agent in the eye. At the place of the accident, rinsing is done with plain water and continues until treatment in the first ophthalmology clinic, where rinsing is done with saline solution. Rinsing must also be done during the transport of the injured person. In addition to rinsing, tipping is of great importance, i.e. ectropion of the eyelid to facilitate the washing of the entire surface of the cornea and conjunctiva, but also to remove solid particles that can lead to mechanical injuries.

The injured eye must not be closed, nor should excessive ointment be applied. After adequate and correct first aid, the competent ophthalmologist will find it much easier to carry out further treatment.





Život i borba sa lupusom

Life and Struggle with Lupus

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Apstrakt

Lupus ili sistemski erimatozni lupus (SLE) je autoimuno oboljenje, nejasne etiologije, koje se odlikuje brojnim imunskim poremećajima, a može se ispoljiti kao promene na koži, zglobovima, serozama, centralnom nervnom sistemu i bubrezima. Tada imuni sistem postane hiperaktivan i napada zdravo tkivo. Genetski faktori, pol, rasa, poremećaj imunskog sistema, infektivni agensi i medikamenti imaju značajnu ulogu u patogenezi ovog oboljenja.

Jedna od najozbiljnijih komplikacija je lupus nefritis. Lupus nefritis je glavni uzrok morbiditeta i mortaliteta bolesnika sa sistemskim eritemskim lupusom. Oštećenje bubrega se javlja kod 60% pacijenata koji boluju od SLE, a kod 10%–20% bolesnika sa oštećenjem bubrega nastaje terminalni stadijum hronične slabosti bubrega. Ovo se dešava kada SLE uzrokuje da imunološki sistem napada bubrege tj. delove bubrega koji filtriraju krv za otpad. Simptomi lupus nefritisa su slični simptomima drugih bubrežnih bolesti. To su tamni urin, krv u urinu, penasti urin, često mokrenje (posebno noću), oticanje stopala, gležnjeva, visok pritisak.

Dijagnoza se postavlja na osnovu laboratorijskih analiza, sakupljanja dvadesetčetvorčasovnog urina, testova urina i biopsije bubrega i kriterijuma ACR (American College of Rheumatology). Imunokompleksi DNA-anti-DNA antitela imaju značajnu ulogu u patogenezi sistemskog eritemskog lupusa i lupus nefritisa. Visok titar antidsDNA-antitela, anti-Sm-antitela i anti-C1q-antitela sa velikom senzitivnošću i specifičnošću ukazuje na razvoj lupus nefritisa kod bolesnika sa sistemskim eritemskim lupusom. Upotreba agresivne imunosupresivne terapije popravlja preživljavanje bolesnika sa sistemskim eritemskim lupusom.

Novi terapijski protokoli treba da omoguće remisiju bolesti, kao i manju citotoksičnost u odnosu na standardnu, konvencionalnu terapiju. Rano otkrivanje sistemskog eritemskog lupusa i lupus nefritisa omogućava pravovremenu primenu odgovarajuće terapije, sprečava progresiju bolesti i razvoj završnog stadijuma hronične slabosti bubrega, smanjuje morbiditet i mortalitet i poboljšava kvalitet života ovih bolesnika. Bolest je hronična, sa progresivnim tokom, i danas se, po pravilu, više ne smatra smrtonosnom. Značajno bolja prognoza bolesti u novije vreme jeste rezultat ranijeg otkrivanja bolesti i napretka lečenja.

Abstract

Lupus or systemic lupus erythematosus (SLE) is an autoimmune disease of unclear etiology, which is characterized by numerous immune disorders and can be manifested as changes in the skin, joints, serosas, central nervous system, and kidneys. Then the immune system becomes hyperactive and attacks healthy tissue. Genetic factors, sex, race, disorder of the immune system, infectious agents, and medications play a significant role in the pathogenesis of this disease.

One of the most serious complications is lupus nephritis. Lupus nephritis is the main cause of morbidity and mortality in patients with systemic lupus erythematosus. Kidney damage occurs in 60% of patients suffering from SLE, and in 10%-20% of patients with kidney damage, the terminal stage of chronic kidney failure occurs. This happens when SLE causes the immune system to attack the kidneys, i.e. parts of the kidney that filter blood for waste. Symptoms of lupus nephritis are similar to symptoms of other kidney diseases. These are dark urine, blood in the urine, foamy urine, frequent urination (especially at night), swelling of the feet, and ankles, and high blood pressure.

The diagnosis is made based on laboratory analysis, twenty-four-hour urine collection, urine tests, kidney biopsy, and ACR (American College of Rheumatology) criteria. DNA-anti-DNA antibody immunocomplexes play a significant role in the pathogenesis of systemic lupus erythematosus and lupus nephritis. A high titer of anti-dsDNA-antibodies, anti-Sm-antibodies, and anti-C1q-antibodies with high sensitivity and specificity indicates the development of lupus nephritis in patients with systemic lupus erythematosus. The use of aggressive immunosuppressive therapy improves the survival of patients with systemic lupus erythematosus.

New therapeutic protocols should enable remission of the disease, as well as lower cytotoxicity compared to standard, conventional therapy. Early detection of systemic lupus erythematosus and lupus nephritis enables the timely application of appropriate therapy, prevents the progression of the disease and the development of the final stage of chronic kidney weakness, reduces morbidity and mortality, and improves the quality of life of these patients. The disease is chronic, with a progressive course, and today, as a rule, no longer considered lethal. The significantly better prognosis of the disease in recent times is the result of earlier detection of the disease and the treatment progress.

Kontinuirana infiltracija rane lokalnim anestetikom u terapiji akutnog postoperativnog bola

Continuous Wound Infiltration with Local Anesthetic in the Therapy of Acute Postoperative Pain

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Uvod: Postoperativni bol je rasprostranjen izazov sa kojim se susreću brojni pacijenti i može značajno uticati na njihov oporavak i kvalitet života. Upravljanje bolom i njegovo lečenje predstavljaju važne aspekte u savremenoj anesteziologiji. Kao deo multimodalnog pristupa u terapiji bola korišćena je specijalno dizajnirana pumpa i kateter (ON-Q) u kontinuiranoj infiltraciji rane levobupivakainom 0,125%, brzinom od 5ml/h.

Cilj: Istraživanje u okviru rada ima za cilj da pruži kompletno razumevanje kontinuirane infiltracije rane lokalnim anestetikom u terapiji akutnog postoperativnog bola.

Metoda rada: Za ispitivanje uspešnosti kontrole bola korišćena je numerička skala bola koju su pacijenti popunjavali 12, 24, 36, 48 i 72 sata nakon operacije.

Prikaz slučajeva i rezultati

- Pacijent 1: muškarac, starosti 53 godine bez komorbiditeta, primljen zbog apscesa skrotuma i velike femoralne kile sa desne strane.
- Pacijent 2: žena, starosti 78 godina, sa serijskom frakturom rebara i posledičnim hematotoraksom; od komorbiditeta su prisutni hipertenzija, atrijska fibrilacija i ranije kreirana kolostoma nakon resekcije kolona. Podvrgnuta video-asistiranoj torakoskopiji.
- Pacijent 3: muškarac, star 73 godine, sa prisutnim brojnim komorbiditetima, uključujući demenciju, hipertenziju, koronarnu bolest, infarkt miokarda i plasiranje 2 stenta, cerebrovaskularni insult. Podvrgnut totalnoj artroplastici kolena.

Intenzitet bola	pacijent 1	pacijent 2	pacijent 3
12h	2	5	3
24h	1	2	5
36h	1	2	4
48h	2	1	8
72h	1	1	4

Ukupna doza analgetika: paracetamol 3g, paracetamol 3g, novalgetol 12,5g, paracetamol 5g, novalgetol 7,5g.

Zaključak: Kontinuirana infiltracija rane lokalnim anestetikom je visokoeфикасна metoda terapije bola, prihvaćena u svetu kao deo multimodalnog pristupa lečenja postoperativnog bola, i ona omogućava adekvatnu optimalnu kontrolu bola, ranu mobilizaciju i brži oporavak.

Ključne reči: lokalni anestetik, postoperativni bol, kontinuirana infiltracija rane

Introduction: Postoperative pain is a widespread challenge faced by many patients and can significantly affect their recovery and quality of life. Pain management and its treatment are important aspects of modern anesthesiology. As part of a multimodal approach in pain therapy, a specially designed pump and catheter (ON-Q) was used in the continuous infiltration of the wound with levobupivacain 0.125%, at a rate of 5 ml/h.

Aim: Research within the paper aims to provide a complete understanding of continuous wound infiltration with local anesthetic in the treatment of acute postoperative pain.

Methods of paper: To examine the success of pain control, a numerical pain scale was used, which patients filled in 12, 24, 36, 48, and 72 hours after surgery.

Presentation of cases and results

- Patient 1: male, 53 years old without comorbidities, admitted for scrotal abscess and large femoral hernia on the right side.
- Patient 2: woman, 78 years old, with a serial rib fracture and consequent hemothorax; comorbidities include hypertension, atrial fibrillation, and previously created colostomy after colon resection. Subjected to video-assisted thoracoscopy.
- Patient 3: male, 73 years old, with numerous comorbidities present, including dementia, hypertension, coronary disease, myocardial infarction and placement of 2 stents, cerebrovascular insult. Underwent total knee arthroplasty.

Pain intensity	patient 1	patient 2	patient 3
12h	2	5	3
24h	1	2	5
36h	1	2	4
48h	2	1	8
72h	1	1	4

Total dose of analgesics: paracetamol 3g, paracetamol 3g, novalgetol 12.5g, paracetamol 5g, novalgetol 7.5g.

Conclusion: Continuous wound infiltration with local anesthetic is a highly effective method of pain therapy, accepted in the world as part of a multimodal approach to the treatment of postoperative pain, and it enables adequate optimal pain control, early mobilization, and faster recovery.

Key words: local anesthetic, postoperative pain, continuous wound infiltration



Uloga medicinskih sestara-tehničara u procesu deinstitucionalizacije

The Role of Nurses-Technicians in the Process of Deinstitutionalization

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Apstrakt

Svrha usluge *zaštićeno stanovanje* spada u usluge podrške za samostalan život i obezbeđivanje uslova i podrške osobama sa mentalnim smetnjama da žive u prirodnom okruženju, na maksimalnom nivou samostalnosti i integracije, te da se spreči ponovna hospitalizacija. Ova usluga podrazumeva podršku multidisciplinarnog tima, kako bi korisnici mogli da dobiju odmerenu podršku, i razviju ili osnaže svoje kapacitete za samostalno funkcionisanje.

Kroz ovu uslugu korisnici dobijaju podršku u sledećim oblastima:

- pomoć u realizaciji prava iz oblasti stručnog socijalnog rada;
- podrška u zadovoljenju svih neophodnih zdravstvenih potreba;
- održavanje domaćinstva, priprema hrane;
- nabavka i čuvanje garderobe i briga o njoj i o ličnim stvarima;
- razvoj i negovanje prijateljskih odnosa sa porodicom i starocima;
- razvoj sposobnosti za rešavanje problema;
- razvoj kapaciteta za uključivanje u zajednicu;
- usluge dnevnih programa vaspitnog rada, radne terapije i radnog angažovanja;
- obeležavanje značajnih datuma za korisnike;
- podrška u uključivanje u aktivnosti i sadržaje u lokalnoj zajednici i razvoj odnosa sa okruženjem.

Zadaci multidisciplinarnog tima:

- odabir novih kandidata i pribavljanje saglasnosti;
- procene kandidata;
- priprema korisnika na život u vanbolničkim uslovima;
- adaptacija korisnika;
- organizacija rada i programskih aktivnosti.

Prilikom procene korisnika za uslugu stanovanje uz podršku izrađuje se akcioni plan – okvir koji služi kao pomoć korisniku u prevazilaženju problema. On je osmišljen tako da može biti vid praktične podrške za oporavak pacijenta/korisnika na dnevnoj bazi, da bude podsetnik i vodič, ali i podsetnik na teška vremena. Dizajniran je kao pomoć za učenje o sebi, o tome šta pomaže, a šta ne i kako se napreduje više u kontroli vlastitog života i iskustva. Sadrži instrukcije za razvijanje plana u krizi, kao sredstvo za vođenje drugih u donošenju najboljih odluka za korisnika i brigu o njemu, kada njegovi problemi i simptomi budu toliko da to ne može učiniti za sebe.

Abstract

The purpose of the sheltered housing service is to support services for independent living and to provide conditions and support for people with mental disorders to live in a natural environment, at the maximum level of independence and integration, and to prevent re-hospitalization. This service includes the support of a multidisciplinary team so that users can receive measured support, and develop or strengthen their capacities for independent functioning.

Through this service, users receive support in the following areas:

- assistance in the realization of rights in the field of professional social work;
- support in meeting all necessary health needs;
- housekeeping, food preparation;
- procurement and storage of wardrobe and care of it and personal belongings;
- development and nurturing of friendly relations with family and elders;
- development of the ability to solve problems;
- development of capacities for inclusion in the community;
- services of daily programs of educational work, work therapy, and work engagement;
- marking important dates for users;
- support in involvement in activities and contents in the local community and development of relations with the environment.

Tasks of the multidisciplinary team:

- selection of new candidates and obtaining consent;
- evaluations of candidates;
- preparing users for life in outpatient conditions;
- user adaptation;
- organization of work and program activities.

During the evaluation of the user for the supported housing service, an action plan is drawn up - a framework that serves to help the user overcome problems. It is designed so that it can be a form of practical support for the recovery of the patient/user on a daily basis, to be a reminder and a guide, but also a reminder of difficult times. It's designed to help you learn about yourself, what works and what doesn't, and how to take more control of your own life and experience. It contains instructions for developing a crisis plan, as a means of guiding others in making the best decisions for the user and their care, when their problems and symptoms are so great that they cannot do it for themselves.

Akcioni plan uključuje:

- razvijanje tehnika za uspostavljanje blagostanja;
- razvoj dnevnog plana za održavanje blagostanja;
- razumevanje okidača i onog što u vezi sa njima korisnik može da uradi;
- utvrđivanje znakova koji ukazuju da je pogoršanje u toku i akcionog plana u vezi sa tim;
- planiranje u kriznoj situaciji;
- planiranje posle krize.

The action plan includes:

- developing techniques for establishing well-being;
- development of a daily plan for maintaining well-being;
- understanding triggers and what the user can do about them;
- determination of signs indicating that deterioration is underway and an action plan related to it;
- planning in a crisis situation;
- post-crisis planning.



Alkohol – alkoholizam – alkoholičar

Alcohol – Alcoholism – an Alcoholic

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Apstrakt

Reč alkohol (*al-gohlu*) je arapskog porekla i pripisuje joj se više značenja: *vrlo fin* ili *onaj koji pali, žari*. U govoru, kada kažemo alkohol, mislimo na etanol (C₂H₅OH), koji nastaje u procesu alkoholnog vrenja iz voćnih šećera.

Alkoholizam je bolest koja nastaje zbog nekontrolisane i redovne upotrebe alkoholnih pića. Alkoholičar je osoba koja nije u stanju da kontroliše pijenje alkohola.

Alkoholizam se ispoljava tako što osoba gubi kontrolu nad uzimanjem alkoholnih pića, što dovodi do zavisnosti, narušavanja fizičkog i psihičkog zdravlja. I pored narušavanja zdravlja, osobe koje su postale alkoholičari imaju poteškoće u porodici, na poslu, i uostalom sa samim sobom.

Apstinent (osoba koja ne pije već jedno vreme alkohol) ako popije čašicu alkohola, ne može stati na toj jednoj čašici. Posle prve popijene čaše alkoholnog pića ne može da stane, već se vraća nazad u zavisnost od alkohola. Zbog toga se ta prva čaša zove fenomen prve čaše. Ta jedna čaša traži ostale, tj. da se pijenje nastavi. I zbog ove činjenice lečeni alkoholičar ne sme više ni čašicu alkohola da popije.

Faze razvoja alkoholizma:

– *Faza primarnog kontakta* traje do primarnog kontakta s alkoholom, koji najčešće dolazi u srednjoj adolescenciji.

– *Faza eksperimentisanja* znači da se lica povremeno odaju piću, ali umereno i s granicom. Eksperimentišu se i alkoholom i svojim granicama. Ovo je, uglavnom, faza na kojoj se većina ljudi zadržava, jer se zadovolje nakon izvesnog broja ovakvih eksperimenata i mnogi ne prelaze u sledeću fazu.

– *Faza integrisanog pijenja* označava da je alkohol uklopljen u stil života. U težnji da bude prihvaćen i u svojoj želji za pićem neosuđivan od strane sredine, osoba bira sebi slično društvo. Počinje redovno da odlazi u kafane ili na različita mesta gde je konzumacija alkohola uobičajena pojava kako bi pio s društvom. Ipak, u ovoj fazi, osoba je i dalje sposobna da normalno izvršava svoje obaveze i da socijalno funkcioniše. Neki se na ovome zadrže.

– *Faza ekscenog pijenja* podrazumeva da takva osoba često i mnogo pije. Od ranog jutra kad ustane, pa za vreme boravka na poslu, u kući i sl. Ne bira se ni mesto, ni vreme, a i ne vodi se računa o količini unetog alkohola. U ovom slučaju je zavisnost očigledna i nedvosmisleno narušava socijalne odnose, kvalitet života i normalno funkcionisanje individue.

– *Faza malignog alkoholizma* karakteriše se priključenju alkohola u čovekov način života. Individua zdravstveno, društveno, psihički i fizički propada, gubi posao i porodicu i ljudi počinju da je preziru. Takva osoba ne može da živi bez alkohola, zavisnost prerasta u opsesiju, a celokupni kvalitet života se degradira.

Abstract

The word alcohol (*al-gohlu*) is of Arabic origin and is ascribed to several meanings: *highly flammable*, and *burning*. In speech, when we say alcohol, we mean ethanol (C₂H₅OH), which is produced in the alcoholic fermentation process from fruit sugars.

Alcoholism is a disease caused by the uncontrolled and regular use of alcoholic drinks. An alcoholic is a person who is unable to control their drinking.

Alcoholism manifests itself when a person loses control over the consumption of alcoholic beverages, which leads to addiction, and harms physical and mental health. In addition to impairment of health, people who have become alcoholics have difficulties in the family, at work, and in general with themselves.

If an abstinent (a person who has not drunk alcohol for some time) drinks a glass of alcohol, they cannot stop at that glass. After drinking the first glass of alcohol, they cannot stop but return to alcohol addiction. This is why that first cup is called the first cup phenomenon. After that one glass they are looking for more, that is to continue drinking. And because of this fact, the addict under treatment is not allowed to drink even a glass of alcohol.

Stages of development of alcoholism:

– *The stage of primary contact* lasts until primary contact with alcohol, which most often occurs in middle adolescence.

– *The experimentation stage* means that people occasionally indulge in drinking, but in moderation and with a limit. He experiments with alcohol and his limits. This is generally the stage where most people stay because they get satisfied after a certain number of such experiments and many do not move on to the next stage.

– *The stage of integrated drinking* means that alcohol is integrated into the lifestyle. To be accepted and not judged by the environment in their desire to drink, a person chooses similar company. They regularly start going to pubs or different places where alcohol consumption is a common occurrence in order to drink with the company. However, at this stage, the person is still able to carry out their duties normally and to function socially. Some dwell on this.

– *The stage of excessive drinking* implies that such a person drinks often and a lot. From the early morning when they get up, then during their stay at work, at home, etc. Neither the place nor the time is chosen, and the amount of alcohol consumed is not taken into account. In this case, the addiction is obvious and unequivocally disrupts social relations, quality of life, and normal functioning of the individual.

– *The stage of malignant alcoholism* is characterized by the inclusion of alcohol in a person's lifestyle. The individual deteriorates healthily, socially, mentally, and physically, loses their job and family, and people begin to despise them. Such a person cannot live without alcohol, the addiction turns into an obsession, and the overall quality of life decreases.



Preoperativna priprema za planiranu operaciju srca

Preoperative Preparation for Planned Heart Surgery

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Apstrakt

Operacija na srcu je složena hirurška intervencija. U situacijama kada se operacija izvrši na vreme i kod pacijenata sa pravom indikacijom, uspeh je, gotovo, zagarantovan. Ono što utiče na pozitivan ishod operacije, pored vrhunskog operativnog tima, najsavremenijih medicinskih aparata i materijala, edukovanog medicinskog osoblja, pomoćnog osoblja, jeste i dobropreoperativna priprema. Bolesnik se podvrgava dodatnim testovima, analizama, pregledima kako bi kardiolog, a i ostali članovi tima bili do detalja upoznati sa zdravstvenim stanjem pacijenta koji treba da se operiše. Na ovaj način uspeh operacije podiže se na viši nivo.

Preoperativnu pripremu čine više komponenti:

- psihička,
- klinička,
- laboratorijska,
- medikamentozna,
- fizička (sanitarna),
- neposredna,
- premedikacija.

Cilj detaljne preoperativne pripreme je smanjenje rizika od nastanka eventualnih komplikacija, bezbedno i efikasno obavljanje planirane operacije.

Pacijent je postavljanjem dijagnoze i indikacije za operaciju sasvim razumljivo zabrinut. S jedne strane postoji briga zbog same operacije, a sem toga postoji posebna briga zbog bola, anestezije, ishoda operacije, ali i kvaliteta života posle operacije srca.

Psihička priprema

Važan je kontakt pacijenta sa osobljem koje uliva poverenje u stručnost i znanje, detaljno obaveštenje o operativnom zahvatu i postupcima koji slede preoperativno i postoperativno.

Klinička priprema

Sprovodi se kod svih bolesnika i podrazumeva dodatne kliničke pokazatelje zdravstvenog stanja pacijenta. Ako pacijent ima neku hroničnu bolest, neophodna je konsultacija specijaliste i, po potrebi, određena dijagnostička ispitivanja.

Laboratorijska priprema

Svaki bolesnik treba da odradi određene laboratorijske analize u cilju sticanja uvida u zdravstveno stanje. Kontrolišu se: SE (sedimentacija), KKS (kompletna krvna slika), biohemija (glikemija, elektroliti, urea, kreatinin, hepatogram, gvožđe...), pregled urina (opšti i mikrobiologija), brisevi (nos, usna duplja, pazuh, prepone), virusologija, hemostaza (vreme krvarenja, koagulacije, INR), krvna grupa i Rh faktor.

Abstract

Heart surgery is a complex surgical intervention. In situations where the operation is performed on time and in patients with the right indication, success is almost guaranteed. What affects the positive outcome of the operation, in addition to the top operating team, the most modern medical devices and materials, educated medical staff, and auxiliary staff, is good preoperative preparation. The patient undergoes additional tests, analyses, and examinations so that the cardiac surgeon and other team members know about the health condition of the patient who needs to be operated. In this way, the success of the operation is raised to a higher level.

Preoperative preparation consists of several components:

- psychological,
- clinical,
- laboratory,
- medicinal,
- physical (sanitary),
- immediate,
- premedication.

The goal of detailed preoperative preparation is to reduce the risk of possible complications, and to perform the planned operation safely and efficiently.

The patient is understandably worried about the diagnosis and indication for surgery. On the one hand, there is concern about the operation itself, and in addition, there is special concern about pain, anesthesia, the outcome of the operation, but also the quality of life after heart surgery.

Mental preparation

The patient needs to have contact with a reliable staff that provides expertise and knowledge, as well as detailed information about the surgical procedure and the procedures that follow preoperatively and postoperatively.

Clinical preparation

It is carried out in all patients and includes additional clinical indicators of the patient's health condition. If the patient has a chronic disease, specialist consultation and, if necessary, certain diagnostic tests are necessary.

Laboratory preparation

Every patient should have certain laboratory analyses done to gain insight into their health condition. The following are controlled: SE (sedimentation), CBC (complete blood count), biochemistry (glycemia, electrolytes, urea, creatinine, hepatogram, iron...), urine examination (general and microbiology), swabs (nose, oral cavity, armpit, groin), virology, hemostasis (bleeding time, coagulation, INR), blood group and Rh factor.

Medikamentozna priprema

Odnosi se na lekove koje pacijent redovno uzima zbog hroničnih oboljenja koje leči. Najvažnije je da pacijent ne prekida svoju redovnu terapiju. Kada postoji potreba za korekcijom, pacijent na vreme dobija obaveštenje o daljem postupku. Idealno bi bilo kada bi pušači prestali da puše 2 nedelje pre operacije.

Fizička priprema

Priprema operativnog polja obavlja se dan pre operacije. Vršiti se brijanje, kupanje, oblačenje čistog ličnog veša, pročišćavanje creva. Na dan operacije važno je ne nositi veštačke vilice, kontaktna sočiva, nakit, šminku, lak za nokte.

Neposredna priprema

Dobro je i praktično u nekoliko navrata podsetiti pacijenta da ne jede i ne pije veče pred operaciju (najčešće od ponoći), jer može da se desi da zbog treme, straha, počne da jede ili zapali cigaretu.

Premedikacija ima za cilj da umiri bolesnika, spreči pojačano lučenje pljuvačke i pripremi ga za anesteziju.

Medicinal preparation

It refers to the medicines that the patient takes regularly for the chronic diseases he is treating. The most important thing is that the patient does not stop his regular therapy. When there is a need for correction, the patient receives timely notification of the further procedure. It would be ideal if smokers stopped smoking 2 weeks before the operation.

Physical preparation

Preparation of the operative field is performed the day before the operation. Shaving, bathing, putting on clean personal clothes, and colon cleansing are performed. On the day of surgery, it is important not to wear artificial jaws, contact lenses, jewelry, makeup, or nail polish.

Immediate preparation

It is good and practical to remind the patient on several occasions not to eat or drink the night before the operation (most often from midnight), because they may start eating or light a cigarette due to nervousness and fear.

Premedication aims to calm the patient, prevent increased secretion of saliva, and prepare him for anesthesia.



Naprasni srčani zastoj i naprasne smrti u urgentnoj medicini

Sudden Cardiac Arrest and Sudden Death in Emergency Medicine

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Apstrakt

Uvod: Naprasni srčani zastoj i naprasna srčana smrt često se koriste kao sinonimi, a ustvari predstavljaju različite entitete. Naprasni srčani zastoj je iznenadni prekid srčane aktivnosti koji je nereaktivan na spoljašnje nadražaje, pri čemu prestaje normalna disajna funkcija i izostaju znaci cirkulacije, a naprasna srčana smrt je prirodna i neočekivana, nastaje unutar jednog sata i počinje naglim gubitkom svesti. Oko 350.000 ljudi u Evropi umre od naprasne srčane smrti, a u SAD od 300.000 do 400.000 ljudi. To su, uglavnom, bili ljudi koji su bili savršenog zdravlja.

Urgentna medicina je grana medicine koja se fokusira na tretman akutnog oboljenja koje zahteva trenutnu medicinsku pažnju. Zbog toga je veoma bitno da se medicinske sestre i tehničari koji se bave urgentnom medicinom kontinuirano edukuju, jer pravilnom primenom protokola u mnogim urgentnim stanjima opasnost će biti svedena na minimum, postići će se izlečenje bez teških komplikacija i izbeći će se letalan ishod.

Etiologija naprasne srčane smrti je, uglavnom, ishemijska bolest srca. Najčešće se otkrije tek na obdukciji kada se otkriju vrlo retke bolesti kao uzročnici. Faktori rizika su nespecifični i specifični. Dijagnostika i skrining se rade na osnovu EKG-a, gde se vidi 95% abnormalnosti. Pored EKG-a, koristi se ehokardiografija, magnetna rezonanca, kateterizacija srca i pomoćne elektrofiziološke studije. Preživljavanje od naprasne smrti je prosečno 7,6%, pri čemu je kvalitet života dobar u narednih 12 meseci.

Medicinske sestre i tehničari u urgentnoj medicini imaju jasnu i veoma važnu ulogu, pa je to još jedan od razloga da se kontinuiranom edukacijom povećava sigurnost u radu. U Velikoj Britaniji medicinska sestra i tehničar su vođe tima u zbrinjavanju urgentnih stanja. Medicinska sestra i tehničar treba da budu svesni situacije, da prate ostale članove tima, da koordiniraju rad i izdaju jasna, kratka uputstva, donose odluke i sa članovima tima komuniciraju, jer se u urgentnoj medicini stvari ne podrazumevaju. Pored tehničkih veština, veoma je važno raditi i na netehničkim veštinama, gde komunikacija zauzima značajno mesto. Razvoj urgentne medicine je u direktnoj vezi sa tehnološkim napredovanjem društva, pa kontinuirana edukacija u urgentnoj medicini podrazumeva, pored savladavanja teorijskog znanja, i vladanje mnogim manuelnim veštinama, kao što je rukovanje opreme koja se koristi.

Zaključak: Pošto je naprasna smrt vodeći uzrok smrti, potrebna je optimizacija srčane funkcije. Kardiopulmonalnu reanimaciju treba sprovesti kako bismo sprečili nepovoljan ishod, a to podrazumeva kvalitetne manuelne kompresije ili mehaničke kompresije grudnog koša. Ključno je lečenje pacijenata koji su pod rizikom od naprasne smrti. Lanac

Abstract

Introduction: Sudden cardiac arrest and sudden cardiac death are often used as synonyms, but they are different entities. Sudden cardiac arrest is a sudden cessation of cardiac activity that is unresponsive to external stimuli, in which normal respiratory function ceases and signs of circulation are absent, sudden cardiac death is natural and unexpected, occurs within one hour, and begins with a sudden loss of consciousness. About 350,000 people in Europe die of sudden cardiac death, and in the USA from 300,000 to 400,000 people. These were, for the most part, people who were in perfect health.

Emergency medicine is a branch of medicine that focuses on the treatment of an acute illness that requires immediate medical attention. That is why nurses and technicians who deal with emergency medicine must be continuously educated, because with the correct application of the protocol in many emergencies, the danger will be reduced to a minimum, a cure will be achieved without serious complications and a fatal outcome will be avoided.

The etiology of sudden cardiac death is mainly ischemic heart disease. It is most often discovered only at autopsy when very rare diseases are discovered as the causative agents. Risk factors are non-specific and specific. Diagnostics and screening are done based on the ECG, where 95% of abnormalities are seen. In addition to EKG, echocardiography, magnetic resonance imaging, cardiac catheterization, and auxiliary electrophysiological studies are used. Survival from sudden death averages 7.6%, with good quality of life over the next 12 months.

Nurses and technicians in emergency medicine have a clear and very important role, so this is another reason to increase occupational safety through continuous education. In Great Britain, the nurse and the technician are the team leaders in emergency care. Nurses and technicians should be aware of the situation, monitor other team members, coordinate work and issue clear, short instructions, make decisions, and communicate with team members because things are not taken for granted in emergency medicine. In addition to technical skills, it is very important to work on non-technical skills, where communication plays an important role. The development of emergency medicine is directly related to the technological progress of society, so continuous education in emergency medicine implies, in addition to mastering theoretical knowledge, mastery of many manual skills, such as handling the equipment used.

Conclusion: Since sudden death is the leading cause of death, optimization of cardiac function is required. Cardiopulmonary resuscitation should be carried out to prevent an unfavorable outcome, and this implies high-quality manual compressions or mechanical compressions of the chest. The key is treating pa-



preživljavanja je snažan koliko je jaka i najslabija karika. Ljudski faktor je karika na kojoj se mora raditi, kontinuirano se edukovati, kako u tehničkim, tako i u netehničkim veštinama. Neophodno je raditi na planu i sprovođenju edukacije, a sve u cilju podizanja kvaliteta usuga koje pružamo.

tients who are at risk of sudden death. The chain of survival is only as strong as the weakest link. The human factor is a link that must be worked on, and continuously educated, both in technical and non-technical skills. It is necessary to work on the plan and implementation of education, all to raise the quality of the services we provide

Ishrana kod kardiovaskularnih bolesnika

Nutrition in Cardiovascular Patients

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Apstrakt

Uvod: Pravilnom brigom o sopstvenom zdravlju možemo ublažiti uticaj naslednih faktora za nastanak kardiovaskularnih bolesti. Redovna fizička aktivnost, umeren unos visoko-kalorične hrane, redukcija duvana i alkohola, između ostalog, učiniće naš život kvalitetnijim i boljim.

Ukoliko se bolest ipak pojavi, ne treba ignorisati problem, jer adekvatna terapija sprečava nastanak komplikacija. Ne treba zaboraviti kontrolu stresa i kvalitet spavanja, kao osnove dobrog zdravlja.

Preporuke kod povišenog krvnog pritiska i pratećih kardiovaskularnih poremećaja

Ishrana treba da bude usmerena na rešavanje povišenog nivoa masnoća u krvi, visokog krvnog pritiska i povišene telesne težine, pogotovo visokog procenta visceralnih masti koje direktno okružuju unutrašnje organe.

Idealan način da se ispoštuju preporuke jeste uključivanje zdravih namirnica u jelovnik, naročito proizvoda od celog zrna žita (hleba, testenina, pahuljica i mekinja od celog zrna, integralni pirinač), leguminoza (mahunarki), voća (malina, borovnica, ribizla, jagoda, kupina), kao i koštunjavog voća (badema, pistača).

U lakšim slučajevima može se jesti krto meso (teleće, živinsko, jagnjeće, pa i govede) i bela riba, kuvana ili pripremljena na puteru. Kod teških slučajeva treba izostaviti svako meso i masnoću, naročito ako postoji i oboljenje bubrega, što je dosta česta pojava.

Mineralne soli, naročito kuhinjsku so, treba izbegavati. U slučajevima teških srčanih mana, naročito ako postoji i oboljenje bubrega ili ako se pojavi otok, so se mora potpuno izostaviti. Da bi se hrana pripremila ukusnije, treba joj dodati malo drugih začina: limuna, slatke paprike i luka.

Uzimanje tečnosti mora se svesti na najmanju meru. U naročito teškim slučajevima ukupna količina tečnosti ne sme preći 600 g dnevno. Iako mleko predstavlja odličnu hranu za srčane bolesnike, pošto sadrži malo soli, ne može se davati u velikoj količini zbog toga što sadrži mnogo vode. U lakšim slučajevima, naročito ako nema otoka, može se uzimati do jedan litar dnevno. Upotreba alkohola zabranjena je svakom srčanom bolesniku, jer alkohol deluje vrlo loše na srčani mišić.

Ne treba zaboraviti da gotovo svaki srčani bolesnik kada se nalazi u dobrom stanju, podnosi dobro i vari gotovo svaku hranu. Preduga i stroga dijeta može dovesti do slabljenja organizma, koje nije ni poželjno ni potrebno. Uglavnom treba izbegavati teška jela i ona koja nadražuju, nadimaju ili izazivaju zatvor, a hraniti se više povrćem, voćem, mlečnom hranom, šećerom i testom. Obroci treba da budu manji i

Abstract

Introduction: By taking proper care of our health, we can mitigate the influence of hereditary factors on the development of cardiovascular diseases. Regular physical activity, moderate intake of high-calorie foods, and reduction of tobacco and alcohol, among other things, will make our lives better.

If the disease does appear, the problem should not be ignored, because adequate therapy prevents complications. We should not forget stress control and sleep quality, as the basis of good health.

Recommendations for high blood pressure and accompanying cardiovascular disorders

Nutrition should be aimed at solving elevated blood fat levels, high blood pressure, and increased body weight, especially a high percentage of visceral fat that directly surrounds the internal organs.

The ideal way to comply with the recommendations is to include healthy foods in the menu, especially whole grain products (bread, pasta, whole grain flakes, bran, integral rice), legumes, fruits (raspberries, blueberries, currants, strawberries, blackberries), as well as stone fruits (almonds, pistachios).

In mild cases, tender meat (veal, poultry, lamb, even beef) and white fish, cooked or prepared in butter, can be eaten. In severe cases, all meat and fat should be avoided, especially if there is kidney disease, which is quite common.

Mineral salts, especially table salt, should be avoided. In cases of severe heart defects, especially if there is also kidney disease or if swelling occurs, salt must be completely omitted. To make the food tastier, you should add some other spices: lemon, sweet pepper, and onion.

Fluid intake must be minimized. In particularly severe cases, the total amount of liquid must not exceed 600 g per day. Although milk is an excellent food for heart patients, since it contains little salt, it cannot be given in large quantities because it contains a lot of water. In mild cases, especially if there is no swelling, up to one liter per day can be taken.

The use of alcohol is prohibited for any heart patient because alcohol has a very bad effect on the heart muscle.

We should not forget that almost every heart patient when in good condition, tolerates well and digests almost any food. A too-long and strict diet can lead to a weakening of the body, which is neither desirable nor necessary. You should generally avoid heavy meals and those that irritate, bloat, or cause constipation, and eat more vegetables, fruits, dairy foods, sugar, and dough. Meals should be smaller and more numerous, 4 to 5 times a day. After the main meals, you should lie down for at least one hour.

mnogobrojniji, 4 do 5 puta na dan. Posle glavnih obroka treba ležati bar jedan sat.

Dijetu treba menjati prema stanju srca, pa je, prema tome, potrebno savetovati se s lekarom, koji jedini može, kontrolišući stanje srca, bubrega, jetre i pritiska krvi, odrediti kada koju hranu treba izostaviti ili ponovo upotrebljavati.

Pražnjenje creva treba da bude redovno. U slučaju zatvora odlično deluje gorka so u mlakoj vodi, ujutro.

Zaključak: Pravilnom brigom o sopstvenom zdravlju možemo ublažiti uticaj naslednih faktora za nastanak kardiovaskularnih bolesti. Redovna fizička aktivnost, umeren unos visokokalorične hrane, redukcija duvana i alkohola, između ostalog, učiniće naš život kvalitetnijim i boljim.

Ukoliko se bolest ipak pojavi, ne treba ignorisati problem, jer adekvatna terapija sprečava nastanak komplikacija. Ne treba zaboraviti kontrolu stresa i kvalitet spavanja, kao osnove dobrog zdravlja.

The diet should be changed according to the condition of the heart, so it is necessary to consult a doctor, who alone can, by controlling the condition of the heart, kidneys, liver, and blood pressure, determine when which foods should be omitted or used again.

Bowel movements should be regular. In case of constipation, bitter salt in lukewarm water, in the morning, works well.

Conclusion: By taking proper care of our health, we can mitigate the influence of hereditary factors on the development of cardiovascular diseases. Regular physical activity, moderate intake of high-calorie foods, and reduction of tobacco and alcohol, among other things, will make our lives better.

If the disease does appear, the problem should not be ignored, because adequate therapy prevents complications. We should not forget stress control and sleep quality, as the basis of good health.



Nasilje i babička profesija

Violence and Midwifery Profession

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Apstrakt

Nasilje je definisano od strane Svetske zdravstvene organizacije kao „korišćenje fizičke sile ili moći, preteće ili stvarne, protiv samog sebe, druge osobe, ili protiv grupe ili zajednice, što rezultiravisokom verovatnoćom od povreda, smrti, psihološkog povređivanja, lošeg razvitka osobe ili siromaštva”. Ova definicija uključuje samu nameru za izvršenja dela, bez obzira na ishod koji se stvara. Međutim, bilo šta što dovodi do štete ili povrede može biti opisano kao nasilje, iako nije bilo planirano kao delo nasilja (od strane osobe ili protiv osobe). Na više načina je moguće sprečiti nasilje. Postoji jaka veza između nivoa nasilja promenljivih faktora, kao što su: koncentrovano siromaštvo, nejednakost polova i prihoda, štetno konzumiranje alkohola i nedostatak sigurnog, stabilnog i negovateljskog odnosa između dece i roditelja.

Strategije koje se bore protiv osnovnih uzroka nasilja mogu biti efikasne u preventivi nasilja. Nasilje se može podeliti na tri kategorije:

- nasilje usmereno ka samom sebi,
- nasilje između osoba,
- kolektivno nasilje.

Nasilno delovanje može biti fizičko, seksualno, psihičko, emocionalno, digitalno nasilje, trgovina ljudima i zanemarivanje i nemarno postupanje.

Babička profesija je od vankada bila u *intimnoj* vezi sa ženama, gde je kao takva prepoznata i stavljena pod zaštitu UNESKA. Svaka treća žena pretrpela je neki vid nasilja. U Srbiji brojne žene zbog straha, nepoverenja u državne institucije, kao i zbog osude sredine, ne prijavljuju nasilje. U organizaciji UN u Srbiji, 24.11.2023.g. pokrenuta je kampanja „16 dana aktivizma protiv nasilja nad ženama”. Babice imaju značajnu ulogu u kampanji podizanja svesti kod žena da prepoznaju, prijave nasilje, kao i da pronađu način da se bore protiv njega. Na svim nivoima zdravstvene zaštitebabice predstavljaju prvi stepenik ka vraćanju poverenja.

Abstract

The World Health Organization defines violence as “the use of physical force or power, threatening or actual, against oneself, another person, or against a group or community, which results in a high probability of injury, death, psychological injury, poor personal development or poverty”. This definition includes the very intent to commit the act, regardless of the outcome that is created. However, anything that causes harm or injury can be described as violence, even though it was not intended as an act of violence (by or against a person). Violence can be prevented in several ways. There is a strong relationship between the level of violence of varying factors, such as concentrated poverty, gender and income inequality, harmful alcohol consumption, and the lack of a safe, stable, and nurturing relationship between children and parents.

Strategies that address the root causes of violence can be effective in preventing violence. Violence can be divided into three categories:

- self-directed violence,
- violence among persons,
- collective violence.

Violence may be physical, sexual, psychological, emotional, digital violence, human trafficking, and neglect and negligent treatment.

The midwifery profession has always had an *intimate* relationship with women, and it was recognized and placed under the protection of UNESCO. Every third woman has suffered some form of violence. In Serbia, many women do not report violence due to fear, mistrust of state institutions, as well as condemnation from the environment. Organized by the UN in Serbia, on 24th November 2023 the “16 days of activism against violence against women” campaign was launched. Midwives have an important role in the campaign to raise awareness among women to recognize and report violence, as well as to find a way to fight against it. At all levels of health care, midwives represent the first step towards restoring trust.





Sličnosti u obrazovanju babica, regulativi i praksi širom Evrope

Similarities in Midwifery Education, Regulation and Practice Across Europe

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Apstrakt

Dokazano je da su dobro obrazovane, regulisane i podržane babice koje rade u zdravstvenom sistemu koji pruža mogućnosti, najprikladniji negovatelji za žene i njihovu novorođenčad. Babice igraju vitalnu ulogu u smanjenju smrtnosti majki, smrti novorođenčadi i mrtvorodenosti, i doprinose zdravijim porodicama i produktivnijim zajednicama. Postoje značajne varijacije između evropskih zemalja u načinu na koji se babice obučavaju i u tome kako ispunjavaju svoj obim prakse. Većina zemalja nastoji da ojača profesiju babice, da unapredi obrazovanje, i da prati najbolje međunarodne standarde i smernice.

Cilj: Identifikovati sličnosti između evropskih zemalja, u pogledu obrazovanja babica, regulative i prakse, što bi mogla biti polazna tačka za usklađivanje profesije i obrazovanja u Evropi za dobijanje jake radne snage babica, a samim tim i stabilne i efikasne nege porodilja.

Metode: Da bi se postigao predloženi cilj, izvršena je pretraga literature za relevantne objavljene članke između 2013. i 2023. godine i to korišćenjem elektronskih baza podataka Medline, PubMed, Web of Science, Scopus, i Google Scholar.

Rezultati: Najočiglednija i najkorisnija sličnost koja je pronađena je da je u današnje vreme obrazovanje babica na akademskom nivou u većini evropskih zemalja. Ostale sličnosti, koje se povezuju sa jakom pozicijom babice u Evropi i sa visokim kvalitetom njihovih usluga jesu očuvan kult i poštovanje akušerstva kao profesije, nadzorna i mentorska praksa u obuci babica i nastavni plan i program sa holističkim pristupom, u kojem se teorijsko znanje veoma dobro učvršćuje praktično sa tutorom kao uzorom.

Zaključci: U većini evropskih zemalja postoji jasan napredak u obrazovanju babica, koje je sada na akademskom nivou, što pozitivno utiče na njihov učinak u praksi. Međutim, vrsta studija, direktan upis ili magistarska diploma ne utiče na regulisanje njihove profesije, niti pomaže u dobijanju punog obima prakse ili punog stepena autonomije. Profesija babice najbolje funkcioniše u zemljama u kojima je očuvano poštovanje prema istoj i gde država i zdravstveni sistem ulažu u babice i njihovo radno okruženje, obrazovanje i regulativu.

Ključne reči: babica, Evropa, obrazovanje, praksa, regulativa

Abstract

Evidence shows that well-educated, regulated, and supported midwives working in an enabling health system are the most appropriate caregivers for women and their newborns¹. Midwives play a vital role in reducing maternal mortality, newborn deaths and still births and contributing to healthier families and more productive communities. There are significant variations between the European countries in the way midwives are trained and in how they fulfill their scope of practice^{3, 4}. Most of the countries efforts to strengthen the midwifery profession, to improve the education, and to follow the best international standards and guidelines.

Objective: To identify similarities between the European countries in terms of midwifery education, regulation, and practice, that could be the starting point for an alignment of midwives; regulation and education in Europe for obtaining a strong midwifery workforce and stable/performance maternity services for all European women.

Methods: To achieve the proposed objective, a literature search was performed for the relevant published articles between 2013 and 2023 by using electronic databases of Medline, PubMed, Web of Science, Scopus, and Google Scholar.

Results: The most evident and benefic similarity found was that in our days, the midwifery education is at the academic level in the majority European countries. Other similarities that are associated with the strong position of midwifery in Europe and with high quality of midwives; services are the preserved cult and respect of midwifery, the supervising and mentoring practice in midwifery training and a curriculum with a holistic approach in which theoretical knowledge is very well reinforced practically with a tutor as a role model.

Conclusions: There is clear progress in the education of midwives in most European countries, being now at the academic level, which positively influences their performance in practice. However, the type of studies, direct entry or masters degree does not influence the regulation of the midwifery profession, it does not help to obtain the full scope of practice or the full level of autonomy. The midwifery profession works best in countries where the respect towards this profession has been preserved and the government and health system invest in midwives and in their work environment, education, and regulation.

Key words: midwifery, Europe, education, practice, regulation





LISA metoda za primenu surfaktanta kod novorođenčadi

LISA Method for Application of Surfactant in Newborn Children

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Apstrakt

Oslabljena funkcija pluća novorođenčadi je akutno, primarno oboljenje pluća novorođenčeta, nastalo kao posledica nedostatka surfaktanta. Respiratorni distress sindrom (RDS) je najčešće oboljenje koje dovodi do poremećaja disanja novorođene dece, naročito prevremeno rođene dece. Primarni nedostatak surfaktanta nastaje zbog poremećene sinteze, sinteze lošeg kvaliteta, pojačane razgradnje i apsorpcije, oslobađanja alveolarne tečnosti i disfunkcije endotela. Surfactant procentualno najvećim delom čine fosfolipidi. Surfactant ima zadatak da smanji površinsku napetost i održi stabilnost alveola. Razvoj pluća se deli u tri stadijuma (glandularni, kanalikularni, alveolarni). Da bi pluća preuzela svoju ulogu, u kratkom vremenu se moraju desiti promene. Alveolarna tečnost, koja ispunjava pluća do časa rađanja, mora biti odstranjena. Plućne alveole se moraju trajno ispuniti vazduhom, koji delom ostaje i na kraju ekspirijuma. Protok krvi kroz pluća se mora povećati šest do deset puta. Centar za disanje mora preuzeti svoju funkciju. Kod prevremeno rođene dece, kod koje nema dovoljno surfaktanta na kraju svakog izdisaja, veliki broj alveola ostaje kolabiran, tj. slepljen, pa prilikom sledećeg udisaja treba upotrebiti veliki pritisak kako bi se ponovo ispunile vazduhom. Predisponirajući faktori za nastanak RDS: prematuritet, asfiksija, hipotermija, muški pol, dete majke obolele od dijabetesa, familijarna predispozicija. Nedostatak surfaktanta dovodi do smanjenja disajnog volumena, smanjenja plućne komplijanse, poremećaja ventilaciono perfuzionog odnosa, povećanja plućne vaskularne rezistencije, povećanja disajnog rada. Klinička slika se ispoljava neposredno posle rođenja ili u prvih 4–6 sati po rođenju. Klinički simptomi definišu se trijasom (tahipneja, cijanoza, dispneja). Dijagnoza se postavlja na osnovu anamnestičkih podataka o trudnoći i porođaju majke, kliničke slike, RTG pluća, gasnih analiza. Cilj terapije kod oslabiljene funkcije pluća (RDS) je da se novorođenče održi u dobrom kliničkom stanju do početka sinteze sopstvenog surfaktanta. Inicijalni transport podrazumeva adekvatnu reanimaciju i transport u JINN. Trudnice koje su u visokom riziku od prevremenog porođaja treba da budu prebačene u perinatalne centre koji imaju iskustvo u terapiji RDS. Terapija surfaktantom ima važnu ulogu u lečenju RDS. Preparati životinjskog porekla odobreni u Evropi su: alveofakt, cufosurf. Surfactant se daje intratrahealno. Komplikacije RDS mogu biti rane i kasne. Rane komplikacije su respiratorne, kardiovaskularne neurološke, gastrointestinalne. Kasne komplikacije su BPD.

Abstract

Weakened lung function of newborns is an acute, primary disease of the lungs of newborns, caused as a result of lack of surfactant. Respiratory distress syndrome (RDS) is the most common disease that causes breathing disorders in newborns, especially premature babies. Primary surfactant deficiency is due to impaired synthesis, poor quality synthesis, enhanced breakdown and absorption, release of alveolar fluid, and endothelial dysfunction. The percentage of surfactant is mostly made up of phospholipids. Surfactant has the task of reducing the surface tension and maintaining the stability of the alveoli. Lung development is divided into three stages (glandular, canalicular, and alveolar). For the lungs to assume their role, changes must occur in a short time.

The alveolar fluid, which fills the lungs until the time of birth, must be removed. The lung alveoli must be permanently filled with air, which partially remains at the end of expiration. Blood flow through the lungs must increase six to ten times. The respiratory center must assume its function. In premature children, who do not have enough surfactant at the end of each exhalation, a large number of alveoli remain collapsed, i.e. stuck, so during the next inhalation, great pressure should be used to fill them with air again. Predisposing factors for the occurrence of RDS: prematurity, asphyxia, hypothermia, male gender, child of a diabetic mother, and family predisposition. The lack of surfactant leads to a decrease in respiratory volume, a decrease in lung compliance, a disturbance in the ventilation-perfusion ratio, an increase in pulmonary vascular resistance, and an increase in the work of breathing.

The clinical picture appears immediately after birth or in the first 4–6 hours after birth. Clinical symptoms are defined by a triad (tachypnea, cyanosis, dyspnea). The diagnosis is made based on anamnestic data on the mother's pregnancy and childbirth, clinical picture, X-ray of the lungs, and gas analysis. The goal of therapy in impaired lung function (RDS) is to maintain the newborn in a good clinical condition until the synthesis of its surfactant begins. Initial transport involves adequate resuscitation and transport to the NICU. Pregnant women who are at high risk of preterm birth should be transferred to perinatal centers that have experience in RDS therapy. Surfactant therapy has an important role in the treatment of RDS. Preparations of animal origin approved in Europe are alveofact, cufosurf. Surfactant is given intratracheally. Complications of RDS can be early or late. Early complications are respiratory, cardiovascular, neurological, and gastrointestinal. Late complications are BPD.



Krioterapija Cryotherapy

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Apstrakt

Krioterapija podrazumeva kontrolisano smrzavanje tkiva radi destrukcije njegovih pojedinih delova. Za izvođenje se koriste lako isparljive tečnosti.

Tečni azot se čuva u specijalnim posudama, kontejner bocama, iz kojih se sipa u sprej boce-brajmil i termos flaše iz kojih azot koristimo za terapiju. Relativno je jednostavna metoda, prilagođena za ambulantnu terapiju. Tehnika zamrzavanja se može obavljati pomoću drvenog štapića na koji se namota komadić vate umočen u tečni azot koji se nalazi u termos flaši i koji potom nanosimo na određenu leziju. Na sprej bocu možemo staviti određeni nastavak koji se koristi, u zavisnosti od veličine i lokalizacije promene koja se treba tretirati. Temperature od -25 i -50 se mogu postići, ukoliko se dovoljna količina tečnog azota u spreju ili štapiću aplikuje u roku od 30 sekundi. Tehnika zamrzavanja se obavlja sa daljine 1 – 1,5 cm od površine kože.

Indikacije za primenu krioterapije:

1. Infekcije humanim papiloma virusima (HPV infekcije)
 - a) *Verrucae vulgaris* – infektivne bradavičaste promene na koži koje se lokalizuju na dorzumima šaka i podlakticama.
 - b) *Verrucae planae juveniles* – zaravnjene bradavice boje normalne kože koje se lokalizuju na licu i dorzalnim stranama šaka.
 - v) *Verrucae plantares* – neravne bradavice lokalizovane na tabanima, okružene hiperkeratotičnim rubom. Na njihovoj površini uočavaju se crne tačkice, takozvani trombozirani kapilari.
 - g) *Condylomata acuminata* – kondilomi ili polne bradavice. Javljaju se u anogenitalnoj regiji ili u vidu vlažnih karfiolastih vegetacija. Izazvane su hpv infekcijom tip 6, 11, 16, 18, 31, 32, 33, 35. Svi tipovi virusa, osim 6 i 11, onkogeni su i mogu indikovati genitalnu displaziju koja prelazi u spinocelularni karcinom.
 - d) *Molluscum contagiosum* – virusna infekcija, karakteristična po pojavi kupolaste papule boje normalne kože i umbilikovanog centra koji dolazi do izražaja prilikom krioterapije.

Najčešći vid komplikacije krioterapije jeste pojava promrzlina koje su različitog inteziteta. Zamrzavanje lezija u čeonom podelu može da dovede do glavobolja, a u predelu kapičijuma do alopecije (gubitka kose). Hiperpigmentacije i hipopigmentacije su česte, posebno kada se koriste tehnike produženog zamrzavanja.

Abstract

Cryotherapy involves the controlled freezing of tissue to destroy its parts. Easily volatile liquids are used for execution.

Liquid nitrogen is stored in special containers, container bottles, from which it is poured into spray bottles and thermos bottles, from which we use nitrogen for therapy. It is a relatively simple method, adapted for outpatient therapy. The freezing technique can be performed using a wooden stick on which a piece of cotton dipped in liquid nitrogen in a thermos bottle is wound and which is then applied to a specific lesion. We can put a certain extension on the spray bottle that is used, depending on the size and localization of the change to be treated. Temperatures of -25 and -50 can be achieved if a sufficient amount of liquid nitrogen in a spray or stick is applied within 30 seconds. The freezing technique is performed from a distance of 1-1.5 cm from the surface of the skin.

Indications for the use of cryotherapy:

1. Human papilloma virus infections (HPV infections)
 - a) *Verrucae vulgaris* – infectious warty changes on the skin that are localized on the backs of the hands and forearms.
 - b) *Verrucae planae juveniles* – flattened warts of normal skin color that are localized on the face and dorsal sides of the hands.
 - v) *Verrucae plantares* – uneven warts localized on the soles of the feet, surrounded by a hyperkeratotic edge. Black dots, so-called thrombosed capillaries, can be seen on their surface.
 - g) *Condylomata acuminata* – condylomas or genital warts. They appear in the anogenital region or the form of wet cauliflower-like vegetation. They are caused by HPV infection types 6, 11, 16, 18, 31, 32, 33, 35. All types of viruses, except 6 and 11, are oncogenic and may indicate genital dysplasia progressing to squamous cell carcinoma.
 - d) *Molluscum contagiosum* – a viral infection, characterized by the appearance of a domed papule the color of normal skin and an umbilical center that comes to the fore during cryotherapy.

The most common type of complication of cryotherapy is the appearance of frostbite, which is of varying intensity. Freezing lesions in the frontal division can lead to headaches, and in the area of the capillium to alopecia (hair loss). Hyperpigmentation and hypopigmentation are common, especially when extended freezing techniques are used.





Intrahospitalne infekcije

Healthcare-Associated Infections

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Apstrakt

Uvod: Još odavno je uočeno da su intrahospitalne infekcije povezane sa raznim medicinskim manipulacijama, tj. dijagnostičko-terapijskim procedurama i radnjama. Naponi da se suzbije rizik od infekcije prilikom invazivnih medicinskih procedura, stari su koliko i same procedure.

Istorija razvoja bolničke službe obiluje primerima kućnih zaraza, iz grupe klasičnih infektivnih bolesti, koje su pratile čovečanstvo kroz vekove. Pegavi trbušni tifus, dizenterija i sepsa izazivali su prave bolničke epidemije. Morbili, šarlah, difterija, varicele, bronhopneumonije i druge bolesti dečijih bolnica, a i zaraznih odeljenja, širile su infekcijui na svoju okolinu. Koristeći u praksi otkrića o načinu širenja i suzbijanja infekcija, bolnice se postepeno oslobađaju intrahospitalnih infekcija, a samo grubi prekršaji osnovnih preventivnih pravila dovode do bolničkih infekcija. Međutim, nova grupa mikroorganizama širi se i ugrožava život bolesnika (virus infektivnog hepatitisa, stafilokokus piogens aureus, salmonela tifi murijum, klebsiela, proteus i virusne infekcije respiratornih puteva: grip i hemofilus influenzae).

Infekcija je biološki proces koji nastaje ulaskom patogenih i virulentnih mikroorganizama u makroorganizam. Pri tome dolazi do oštećenja tkiva, zbog delovanja mikroorganizama i do reakcije makroorganizma u vidu upale, odnosno „opšte reakcije organizma”, te i do pojave humoralnog i celularnog imuniteta.

Intrahospitalne infekcije su infekcije koje nastaju u hospitalizovanih bolesnika 2–3 dana po prijemu u bolnicu, u toku hospitalizacije i 2–3 dana po otpustu iz bolnice. Prema nekim istraživanjima u našoj zemlji, najmanje 5–10% bolesnika tokom boravka u bolnici dobije neku intrahospitalnu infekciju.

Uzročnici intrahospitalnih infekcija mogu biti:

- bakterije: ešerihija koli, klebsiela, enterobakter, stafilokokus aureus, pseudomonas aeruginosa, proteus, streptokokus piogensi dr.
- virusi influenzae, hepatitis B virus, hepatitis C virus, herpes virusi i dr.
- gljivice: candida albicans.

Posebnu značajnu ulogu u intrahospitalnim infekcijama imaju tzv. bolnički sojevi bakterija koji su otporni na većinu antibiotika.

Epidemiologija: Bolničke infekcije prepoznate su kao značajni javno-zdravstveni problem, kako u industrijski razvijenim, tako i u zemljama u razvoju, sa nizom posledica kao što su: medicinske, pravne, etičke, ekonomske. Početkom sedamdesetih godina prošlog veka, u svetu se prihvata novi pristup u sprečavanju i suzbijanju bolničkih infekcija, a kojičini uvođenje epidemiološkog nadzora nad intrahospitalnim infekcijama. Epidemiološki nadzor se definiše kao organizovano

Abstract

Introduction: A long time ago it was noticed that healthcare-associated infections are related to various medical manipulations, i.e. diagnostic and therapeutic procedures and actions. Efforts to reduce the risk of infection during invasive medical procedures are as old as the procedures themselves.

The history of the development of the hospital service abounds with examples of household infections, from the group of classic infectious diseases, which have accompanied humanity throughout the centuries. Spotted typhoid, dysentery, and sepsis caused real hospital epidemics. Measles, scarlet fever, diphtheria, varicella, bronchopneumonia, and other diseases in children's hospitals and infectious wards spread infections to their surroundings. Using in practice the discoveries about the way to spread and suppress infections, hospitals are gradually getting rid of healthcare-associated infections, and only gross violations of the basic preventive rules lead to hospital infections. However, a new group of wet organisms is spreading and endangering the patient's life (infectious hepatitis virus, staphylococcus pyogenes aureus, salmonella typhimurium, klebsiella, proteus and viral infections of the respiratory tract: influenza and hemophilus influenzae).

Infection is a biological process that occurs when pathogenic and virulent microorganisms enter a macroorganism. In doing so, tissue damage occurs due to the action of microorganisms and the reaction of macroorganisms in the form of inflammation, that is, “general reactions of the organism”, and the appearance of humoral and cellular immunity.

Healthcare-associated infections are infections that occur in hospitalized patients 2-3 days after admission to the hospital, during hospitalization, and 2-3 days after discharge from the hospital. According to some research in our country, at least 5-10% of patients get the infection during their stay in the hospital.

Causes of healthcare-associated infections can be:

- bacteria: escherichia coli, klebsiella, enterobacter, staphylococcus aureus, pseudomonas aeruginosa, proteus, streptococcus pyogenes, etc.
- influenza viruses, hepatitis B virus, hepatitis C virus, herpes viruses, etc.
- fungi: candida albicans.

A particularly significant role in healthcare-associated infections is played by the so-called hospital strains of bacteria that are resistant to most antibiotics.

Epidemiology: Hospital infections are recognized as a significant public health problem, both in industrially developed and developing countries, with several consequences such as: medical, legal, ethical, and economic. At the beginning of the seventies of the last century, a new approach to the prevention and suppression of hospital infections was accepted in



prikupljanje, obrada i tumačenje podataka o učestalosti bolničkih infekcija, od strane posebno osposobljene službe, a u cilju njihovog sprečavanja i suzbijanja. Nadzor se smatra osnovnom karikom u programu za sprečavanje i suzbijanje intrahospitalnih infekcija. Epidemiološki nadzor nad intrahospitalnim infekcijama u našim zakonskim propisima je usvojen kao neophodna komponenta u sprečavanju i suzbijanju infekcija u zdravstvenim ustanovama i on je postao zakonska obaveza svih zdravstvenih ustanova i epidemiologa. Ova zakonska obaveza realizovana je u svim našim zdravstvenim ustanovama formiranjem i radom Komisije za sprečavanje bolničkih infekcija.

the world, which was the introduction of epidemiological surveillance of healthcare-associated infections. Epidemiological surveillance is defined as the organized collection, processing, and interpretation of data on the frequency of hospital infections, by a specially trained service, to prevent and suppress them. Surveillance is considered a fundamental link in the program for the prevention and control of healthcare-associated infections. Epidemiological surveillance of healthcare-associated infections in our legislation was adopted as a necessary component in the prevention and control of infections in health institutions and it became a legal obligation of all health institutions and epidemiologists. This legal obligation was implemented in all our health institutions by the formation and work of the Commission for the Prevention of Hospital Infections.



Primena radne terapije kod bipolarnog afektivnog poremećaja

Application of Occupational Therapy in Bipolar Affective Disorder

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Apstrakt

Radna terapija se koristi za različite terapeutske funkcije. Prvo i najvažnije, ova oblast zdravstvene zaštite se fokusira na rehabilitaciju pojedinaca koji mogu imati fizičke, kognitivne ili mentalne barijere koje ih sprečavaju da na adekvatan način obavljaju svoje tipične svakodnevne funkcije. Na primer, pacijent koji pati od kognitivnog oštećenja, usled moždanog udara ili druge fizičke povrede, može da radi sa radnim terapeutom da poboljša svoju funkcionalnost. U terapiji, oni mogu da rade na rutinskim zadacima, kao što su higijena i briga o sebi, pokušavaju da obavljaju kućne poslove, pa čak i da komuniciraju u društvu u okruženju.

Cilj radne terapije je da pomogne pacijentima da poboljšaju svoju sposobnost, da preuzmu ulogu i da učestvuju u ovim vrstama aktivnosti. Radni terapeuti i asistenti radne terapije rade sa pojedincima svih uzrasta i porekla, od detinjstva i adolescencije, do odrasle dobi. Bez obzira na starost pacijenata, ovaj terapijski pristup može se koristiti za fizičko i kognitivno poboljšanje.

Bipolarni poremećaj je poremećaj raspoloženja koji se generalno karakteriše ciklusima i nivoima depresivnih i maničnih epizoda. Ovi nivoi manije (euforično stanje) i depresije mogu se dramatično razlikovati od osobe do osobe. Međutim, bipolarni poremećaj je i dalje izazov za svakog pojedinca koji pokušava da se nosi sa njim. Radna terapija se često koristi za pristup u oba ciklusa poremećaja kako bi se pomoglo pacijentima da poboljšaju svoj kvalitet života, reorganizuju svoje odgovornosti i prioritete, da se nose sa simptomima. Obično se radna terapija za bipolarni poremećaj fokusira na to kako ciklusi depresije i manije utiču na život i dobrobit pojedinca. Na primer, radni terapeut može podržati pacijenta pomažući mu da poboljša svoju sposobnost da obavlja značajne svakodnevne aktivnosti. Jedan od načina na koji se to radi je primena snaga svojih pacijenata da postavljaju ciljeve za poboljšanje.

Radni terapeuti i asistenti radne terapije, takođe, mogu pomoći osobama sa bipolarnim poremećajem, radeći na njihovoj kognitivnoj funkciji, kao što su obrasci komunikacije i razmišljanja, i izvršnoj funkciji, kao što su organizacija i samokontrola.

Nekoliko pristupa i metodologija koje radni terapeut ili asistent mogu koristiti:

1. Ocenjivanje: U ovom pristupu, radni terapeut će stvoriti postepene promene u nivou potražnje ili težine aktivnosti, što omogućava pacijentima da poboljšaju ili nauče nove veštine koje su im potrebne da postignu svoje specifične terapijske ciljeve.

Abstract

Occupational therapy is used for a variety of therapeutic functions. First and foremost, this healthcare field focuses on the rehabilitation of individuals who may have physical, cognitive, or mental barriers that prevent them from adequately performing their typical daily functions. For example, a patient suffering from cognitive impairment, due to a stroke or other physical injury, may work with an occupational therapist to improve their functionality. In therapy, they can work on routine tasks, such as hygiene and self-care, try to do household chores, and even interact socially in the environment.

The goal of occupational therapy is to help patients improve their ability to take on a role and participate in these types of activities. Occupational therapists and occupational therapy assistants work with individuals of all ages and backgrounds, from childhood and adolescence to adulthood. Regardless of the patient's age, this therapeutic approach can be used for physical and cognitive improvement.

Bipolar disorder is a mood disorder generally characterized by cycles and levels of depressive and manic episodes. These levels of mania (euphoric state) and depression can vary dramatically from person to person. However, bipolar disorder is still a challenge for any individual trying to go through it. Occupational therapy is often used to approach both cycles of the disorder to help patients improve their quality of life, reorganize their responsibilities and priorities, and cope with symptoms. Typically, occupational therapy for bipolar disorder focuses on how the cycles of depression and mania affect an individual's life and well-being. For example, an occupational therapist can support a patient by helping them improve their ability to perform meaningful daily activities. One way to do this is by leveraging your patients' strengths to set goals for improvement.

Occupational therapists and occupational therapy assistants can also help people with bipolar disorder by working on their cognitive function, such as communication and thinking patterns, and executive function, such as organization and self-control.

A few approaches and methodologies that an occupational therapist or assistant can use:

1. Assessment: In this approach, the occupational therapist will create gradual changes in the level of demand or difficulty of the activity, which allows patients to improve or learn new skills they need to achieve their specific therapeutic goals.



2. Igra uloga: Radni terapeuti mogu koristiti tehnike igranja uloga kako bi pomogli pacijentima sa bipolarnim poremećajem da poboljšaju različite aspekte svog pristupa društvenim situacijama. Na primer, ovaj metod se može koristiti u upravljanju anksioznošću, gde pacijenti sa ovim poremećajem mogu bolje razumeti specifične okidače ili probleme koje mogu imati kako bi ih prevazišli.

3. Kognitivno bihevioralna terapija (CBT): Iako CBT nije uvek povezana sa radnom terapijom, to je veoma efikasan pristup za osobe sa bipolarnim poremećajem. Sa CBT, radni terapeut može koristiti različite metode, kao što su tehnike samokontrole, koje će pomoći pojedincima da nauče da prepoznaju simptome svog poremećaja i nose se sa njima.

2. Role-playing: Occupational therapists can use role-playing techniques to help patients with bipolar disorder improve various aspects of their approach to social situations. For example, this method can be used in anxiety management, where patients with this disorder can better understand specific triggers or problems they may have in order to overcome them.

3. Cognitive Behavioral Therapy (CBT): Although CBT is not always associated with occupational therapy, it is a very effective approach for people with bipolar disorder. With CBT, an occupational therapist can use a variety of methods, such as self-management techniques, to help individuals learn to recognize and cope with the symptoms of their disorder.



Pravovremeno otkrivanje i lečenje najčešćih kožnih tumora glave i vrata

Timely Detection and Treatment of the Most Common Skin Tumors of the Head and Neck

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Apstrakt

Odelek za maksilofacijalnu hirurgiju, odeljenje ORL u Opštoj bolnici Kruševac bavi se lečenjem kožnih tumora glave i vrata. Pregledi izabranog lekara nose sa sobom nezaobilazan susret lice u lice sa pacijentom. Jako je važno da se u ovom neformalnom pregledu tumorska promena prepozna i pacijent uputi na dalje lečenje od strane specijaliste maksilofacijalne hirurgije, orl specijaliste i dermatovenerologa. Cilj ovog rada jeste prikaz kliničkih slučajeva radi edukacije medicinskog osoblja o važnosti ranog prepoznavanja kožnih tumora orl i maksilofacijalne regije.

U prezentaciji prikazano je pet slučajeva i to: dva pacijenta sa bazocelularnim karcinomom, pacijentkinja sa planoce-lularnim karcinomom, pacijent sa melanomom i pacijent sa keratoakan-tomom.

Bazocelularni karcinom kože, koji nastaje u epidermu, najčešći je karcinom ljudske populacije, sporo se razvija, lokalno je invazivan i relativno retko daje metastaze. Bazocelularni karcinom kože nastaje oštećenjem keratocitnih ćelija na nivou njihove DNK. Genska predispozicija i oštećenje kože koji nastaju radi povećanog UV zračenja, osnovni su razlozi za nastanak bazocelularnog karcinoma kože. U odnosu na druge karcinome, bazocelularni karcinom ima najmanji potencijal metastaziranja. Iz tog razloga često ćete čuti tvrdnju, i od lekara koji se bave karcinomima, da on nije opasan, zato što ne može da metastazira. Bazocelularni karcinom je potpuno izlečiv u svim slučajevima kada se na vreme dijagnostikuje i leči.

Planocelularni karcinom, po učestalosti javljanja, odmah je posle bazocelularnog karcinoma kože. U ranoj fazi, kada je neinvazivan, potpuno je izlečiv, a u kasnoj fazi, invazivnoj, ima mogućnost metastaziranja u okolna tkiva i unutrašnje organe. Postoji veliki broj različitih, uspešnih tertmana, za planocelularni karcinom kože. U osnovi su to hiruški i nehirurški tertmani.

Melanom je tumor melanocita, ćelija kože odgovornih za stvaranje melanina, pigmenta koji se stvara u koži. U ranoj fazi ćelije tumora nalaze se u najpovršnijim slojevima kože, a vremenom se šire ka dubljim slojevima, limfnim i krvnim sudovima, preko kojih se mogu proširiti do limfnih čvorova i unutrašnjih organa. Lečenje melanoma zavisi od stepena proširenosti bolesti u trenutku otkrivanja (stadijuma bolesti). Najuspešnije lečenje je rano otkrivanje i hiruško uklanjanje melanoma uz histopatološku analizu. Odluku o vrsti lečenja donosi konzilijum lekara, uz saglasnost pacijenta.

Abstract

The Department of Maxillofacial Surgery, ENT Department at the Kruševac General Hospital deals with the treatment of skin tumors of the head and neck. Examinations by the chosen doctor entail an inevitable face-to-face meeting with the patient. It is very important that in this informal examination, the tumor change is recognized and the patient is referred for further treatment by a specialist in maxillofacial surgery, an ear specialist, and a dermatovenerologist. This paper aims to present clinical cases to educate medical staff about the importance of early recognition of skin tumors of the ear, nose, and maxillofacial region.

Five cases were presented in the presentation: two patients with basal cell carcinoma, a patient with squamous cell carcinoma, a patient with melanoma, and a patient with keratoacanthoma.

Basal cell skin cancer, which originates in the epidermis, is the most common in the human population, develops slowly, is locally invasive, and metastasizes relatively rarely. Basal cell skin cancer is caused by damage to keratocyte cells at the level of their DNA. Genetic predisposition and skin damage caused by increased UV radiation are the main reasons for the occurrence of basal cell skin cancer. Compared to other cancers, basal cell carcinoma has the lowest potential for metastasis. For this reason, you will often hear the claim, even from doctors who deal with cancers, that it is not dangerous, because it cannot metastasize. Basal cell carcinoma is completely curable in all cases when it is diagnosed and treated in time.

Squamous cell carcinoma, in terms of frequency of occurrence, is immediately after basal cell carcinoma of the skin. In the early stage, when it is non-invasive, it is completely curable, and in the late stage, invasive, it has the possibility of metastasizing in the surrounding tissues and internal organs. There are several different, successful treatments for squamous cell carcinoma of the skin. They are surgical and non-surgical treatments.

Melanoma is a tumor of melanocytes, skin cells responsible for the production of melanin, the pigment that is produced in the skin. In the early stages, tumor cells are found in the most superficial layers of the skin, and over time they spread to deeper layers, lymphatic and blood vessels, through which they can spread to lymph nodes and internal organs. Melanoma treatment depends on the extent of the disease at the time of detection (disease stage). The most successful treatment is early detection and surgical removal of melanoma with histopathological analysis. The decision on the type of treatment is made by a council of doctors, with the consent of the patient.



Uz blagovremenu dijagnostiku i preoperativnu pripremu, kvalitetnu operativnu tehniku i adekvatnu protokolarnu postoperativnu terapiju, uz savremene medicinske protokole, značajno se može poboljšati i produžiti kvalitet života pacijenta sa navedenim vrstama tumora.

With timely diagnosis and preoperative preparation, high-quality operative technique, and adequate protocol postoperative therapy, along with modern medical protocols, the quality of life of patients with the mentioned types of tumors can be significantly improved and their life expectancy may be increased.



Stomatološke sestre pre i posle pandemije

Dental Nurses Before and After the Pandemic

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Apstrakt

Uvod: Pandemija kovid-19 doprinela je mnogim promenama na ličnom, porodičnom i socijalnom planu svakog pojedinca, ali dovela je i do značajnih promena u samom funkcionisanju zdravstvenog sistema. Brojni izazovi bili su pred zdravstvenim radnicima, pa čak se zahtevalo i otvaranje novih bolnica i službi koje su se specijalizovale za lečenje i podršku pacijentima obolelih od kovid-19 infekcije. O problemima i izazovima sa kojima su se susreli zdravstveni radnici tokom pandemije svedoče brojna istraživanja i saopštenja kako u domaćim, tako i u stranim publikacijama.

Cilj: Sagledati način prilagođavanja zdravstvenih radnika na reorganizaciju rada zdravstvenih ustanova tokom Pandemije kovid-19, kao i uticaj pandemije na mentalno zdravlje zaposlenih.

Metoda: Sistemski pregled istraživanja drugih istraživača. Upotrebljene su deskriptivna i indirektna opservaciona metoda.

Rezultati: Pregledom literature pokazano je da epidemije i pandemije imaju negativan uticaj na psihološko blagostanje zdravstvenih radnika, koji se manifestuje kroz širok spektar simptoma mentalnog zdravlja: stres, depresiju, anksioznost, nesanicu, strah, stigmu i emocionalnu iscrpljenost. Neadekvatna bolnička oprema i ograničena ponuda lične zaštitne opreme na početku pandemije, takođe su povezani sa višim nivoima psiholoških simptoma kod zdravstvenih radnika. Istraživanja su pokazala i da je učestalost neželjenih događaja među zdravstvenim radnicima zbog upotrebe LZO veoma visoka. Zdravstvene ustanove treba da preuzmu neophodne mere predostrožnosti i promene uslova rada tokom Pandemije kovid-19 kako bi sprečile neželjene događaje povezane sa upotrebom LZO i minimizirale štetu za zdravstvene radnike. Pandemija je izuzetno teško pogodila zdravstvene radnike, iako su dali sve od sebe da se adekvatno nose sa svim izazovima koje sa sobom nosi lečenje obolelih od kovid-19 infekcije. Neki istraživači ističu da osobe na rukovodećim pozicijama na nivou organizacije ili sistema treba da iskoriste ovu priliku da razviju ciljne strategije za ublažavanje ključnih stresora mentalnog zdravlja zdravstvenih radnika.

Zaključak: Zdravstveni sistem u celom svetu je zahtevao reorganizaciju koja je bila u skladu sa epidemiološkom situacijom i preporukama Svetske zdravstvene organizacije. Pandemija koronavirusa (kovid-19) je nesumnjivo imala psihološke posledice po zdravstvene radnike; radnici na prvoj liniji bili su posebno ugroženi. Neophodno je sprovoditi mere za ublažavanje uticaja Pandemije kovid-19 na mentalno zdravlje tako što će se zaštititi i promovisati psihološko blagostanje zdravstvenih radnika, tokom i nakon pandemije.

Ključne reči: pandemija, kovid-19, mentalno zdravlje, organizacija rada

Abstract

Introduction: The COVID-19 pandemic contributed to many changes on the personal, family, and social levels of each individual, but it also led to significant changes in the functioning of the health system itself. Healthcare workers faced numerous challenges and even the opening of new hospitals and services that specialized in treating and supporting patients suffering from COVID-19 infection were required. Multiple studies and announcements in domestic and foreign publications testify to the problems and challenges healthcare workers face during the pandemic.

Aim: To observe the way health workers adapt to the reorganization of the work of health institutions during the COVID-19 pandemic, as well as the impact of the pandemic on the mental health of employees

Method: Systematic review of research by other researchers. Descriptive and indirect observation methods were used.

Results: A review of the literature showed that epidemics and pandemics harm the psychological well-being of healthcare workers, which is manifested through a wide range of mental health symptoms: stress, depression, anxiety, insomnia, fear, stigma, and emotional exhaustion. Inadequate hospital equipment and a limited supply of personal protective equipment at the start of the pandemic have also been associated with higher levels of psychological symptoms in healthcare workers. Research has also shown that the frequency of adverse events among healthcare workers due to the use of PPE is very high. Healthcare facilities should take necessary precautions and changes in working conditions during the COVID-19 pandemic to prevent adverse events associated with the use of PPE and minimize harm to healthcare workers. The pandemic hit health workers extremely hard, although they did their best to adequately cope with all the challenges that come with treating patients with COVID-19 infection. Some researchers point out that those in leadership positions at the organizational or system level should use this opportunity to develop targeted strategies to alleviate key mental health stressors for healthcare workers.

Conclusion: The health system in the whole world required a reorganization that was aligned with the epidemiological situation and the recommendations of the World Health Organization. The coronavirus pandemic (COVID-19) undoubtedly had psychological consequences for healthcare workers; frontline workers were particularly vulnerable. It is necessary to implement measures to mitigate the impact of the COVID-19 pandemic on mental health by protecting and promoting the psychological well-being of healthcare workers, during and after the pandemic.

Key words: pandemic, covid-19, mental health, work organization





Bezbednost i zdravlje radnika – uslov za uspešno poslovanje

Safety and Health of Workers – Requirement for Successful Business

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Apstrakt

Uvod: Briga za zdravlje radnika suština je uspešnog poslovanja svakog preduzeća i ustanove, jer samo zdrav radnik može da omogućiti profit i napredak društva u celini.

Cilj: Ukazati na neophodnost zajedničke saradnje Službe medicine rada i lica za bezbednost i zdravlje na radu radnih organizacija, kako bi se ostvario zajednički cilj – zdrav radnik na zdravom radnom mestu.

Metodologija: Rad se zasniva na deskriptivnoj analizi podataka dobijenih kao rezultat dugogodišnjeg iskustva u radu ZZZZR Niš, ustanovi čija Služba medicine rada pruža zdravstvene usluge svih vrsta preventivnih pregleda radnika. U radu je korišćena i odgovarajuća važeća zakonska regulativa koja se odnosi na ovu oblast.

Rezultati: Zajedničko delovanje Službe medicine rada i lica za bezbednost na radu ima dvojakovo povratno dejstvo: s jedne strane je tim medicine rada koji obavlja sve zakonom propisane preventivne preglede radnika, izdaje izveštaje o radnoj sposobnosti, daje savete, u smislu unapređenja zdravlja radnika, zaštite od uticaja profesionalne štetnosti, prevencije povreda na radu, a s druge strane je lice za bezbednost na radu koje ima ulogu da, svojim znanjem o uslovima i zahtevima radnog mesta, pravilno i pravovremeno uputi radnika na odgovarajući preventivni pregled, kao i da svojom stručnošću utiče na poslodavca da razvije svest o značaju takvih pregleda.

Zaključak: Saradnja između Službe medicine rada i lica za bezbednost na radu bitan je preduslov za uspešno funkcionisanje svake radne organizacije čiji je cilj da svojim zaposlenima omogući zdrave radne uslove i da sačuva fizički i psihički zdravu radnu snagu koja će doneti profit i ekonomsko blagostanje u društvu.

Abstract

Introduction: Caring for the health of workers is the essence of the successful operation of every company and institution because only a healthy worker can enable the profit and progress of society as a whole.

Aim: Point out the necessity of cooperation between the Occupational Health Service and persons for safety and health at work in labor organizations, to achieve the common aim - a healthy worker in a healthy workplace.

Methodology: The work is based on a descriptive analysis of data obtained as a result of many years of experience in the work of the Institute of Health Protection Niš, an institution whose Department of Occupational Medicine provides health services for all types of preventive examinations of workers. In the paper, the appropriate legal regulations related to this area were used.

Results: The joint action of the Occupational Health Service and the person for occupational safety has a double effect: on the one hand, there is an occupational health team that performs all legally prescribed preventive examinations of workers, issues reports on work ability, advises in terms of improving worker health, protection from the impact of occupational harm, prevention of injuries at work, and on the other hand, there is a person for occupational safety whose role is to, with their knowledge of the conditions and requirements of the workplace, correctly and timely refer the worker to an appropriate preventive examination, as well as to influence with their expertise an employer to develop an awareness of the importance of such reviews.

Conclusion: Cooperation between the Occupational Health Service and the person for occupational safety is an essential prerequisite for the successful functioning of any work organization whose goal is to provide its employees with healthy working conditions and to preserve a physically and mentally healthy workforce that will bring profit and economic well-being to society.



Sindrom izgaranja na radnom mestu

Burnout Syndrome at the Workplace

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Apstrakt

Uvod: Sindrom izgaranja (eng. burnout syndrome - BOS) je složeno stanje mentalne, emocionalne i fizičke iscrpljenosti, a u osnovi je prouzrokovano dugotrajnim dejstvom stresa jakog intenziteta na radnom mestu. Iako je bilo pokušaja da se sindrom izgaranja klasifikuje kao vid depresivnog poremećaja (neke zemlje su to i učinile – Švedska i Holandija), većina autora se slaže da izgaranje na radnom mestu nije bolest sama po sebi, već specifično psihoemocionalno stanje u čijem prevazilaženju i rešavanju treba insistirati na interdisciplinarnom pristupu, baš zbog kompleksnosti nastalog problema koji zadire u sve sfere života osobe sa ispoljenim sindromom izgaranja.

Cilj rada: Identifikovati prisustvo sindroma izgaranja kod medicinskih sestara koje su zaposlenena odeljenjima hirurgije. Utvrditi zastupljenost pojedinačnih manifestacija sindroma izgaranja kod medicinskih sestara. Proceniti stepen zadovoljstva poslom kod medicinskih sestara koje su zaposlenena odeljenjima hirurgije. Utvrditi uticaj sindroma izgaranja na stepen zadovoljstva poslom kod medicinskih sestara.

Metodologija rada: Istraživanje je osmišljeno kao studija preseka kojom je obuhvaćena grupa od 20 ispitanika, što predstavlja približno jednu trećinu ukupnog broja medicinskih sestara i tehničara zaposlenih u OB Požarevac, na odeljenju Hirurgije, gde je sprovedeno istraživanje. Anketiranje je sprovedeno isključivo nadobrovoljnoj osnovi, a ispitanicima je u preambuli upitnika objašnjena svrha istraživanja i zagarantovana anonimnost i tajnost dobijenih podataka.

Rezultati: Sindrom izgaranja je prisutan kod najmanje 30% medicinskih sestara u posmatranom uzorku. Kod ispitanika u posmatranom uzorku su najzastupljenije emocionalne manifestacije sindroma izgaranja. Kod svih ispitanika sa manifestnim sindromom izgaranja evidentan je i nizak stepen opšteg zadovoljstva poslom. Prisustvo sindroma izgaranja je u negativnoj korelaciji sa stepenom zadovoljstva poslom kod svih ispitanika kod kojih je ovaj sindrom registrovan u posmatranom uzorku.

Zaključak: Kod ispitanika u posmatranom uzorku evidentno je postojanje značajne negativne korelacije između sindroma izgaranja i zadovoljstva poslom – viši stepen zahvaćenosti sindromom izgaranja je povezan sa niskim stepenom opšteg zadovoljstva poslom.

Abstract

Introduction: Burnout syndrome (BOS) is a complex state of mental, emotional, and physical exhaustion, and it is caused by the long-term effect of high-intensity stress at the workplace. Although there have been attempts to classify burnout syndrome as a type of depressive disorder (some countries have done so - Sweden and the Netherlands), most authors agree that burnout at the workplace is not a disease in itself, but a specific psycho-emotional condition that must be overcome and resolved. It is necessary to insist on an interdisciplinary approach, precisely because of the complexity of the problem that affects all spheres of life of a person with burnout syndrome.

The aim of the paper: To identify the presence of burnout syndrome in nurses who are employed in surgery departments. To determine the prevalence of individual manifestations of burnout syndrome in nurses. To assess the level of job satisfaction among nurses who are employed in surgery departments. To determine the impact of burnout syndrome on the degree of job satisfaction among nurses.

Paper methodology: The research was designed as a cross-sectional study that included a group of 20 respondents, which represents approximately one-third of the total number of nurses and technicians employed in the General Hospital Požarevac, in the Department of Surgery, where the research was conducted. The survey was conducted exclusively voluntarily, and the purpose of the research was explained to the respondents in the preamble of the questionnaire, and the anonymity and confidentiality of the data obtained was guaranteed.

Results: Burnout syndrome is present in at least 30% of nurses in the observed sample. Among the respondents in the observed sample, the most common emotional manifestations are the burnout syndrome. A low degree of general job satisfaction is also evident in all subjects with manifest burnout syndrome. The presence of burnout syndrome is negatively correlated with the degree of job satisfaction in all subjects in whom this syndrome was registered in the observed sample.

Conclusion: The existence of a significant negative correlation between burnout syndrome and job satisfaction is evident among the respondents in the observed sample - a higher degree of involvement with burnout syndrome is associated with a low degree of general job satisfaction.



Moždani udar – da li ga nekada previdimo? Stroke - Do We Sometimes Overlook It?

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Dom zdravlja "Sveti Đorđe", Topola

Healthcare Center "Sveti Đorđe", Topola

Apstrakt

Uvod: Akutni moždani udar (AIMU) se definiše kao naglo nastali fokalni ili globalni poremećaj moždane funkcije. To je bolest koju karakteriše nagli početak i brzi razvoj neuroloških simptoma.

Cilj rada: Ukazati da kod bolesnika sa akutno nastalim poremećajem ponašanja i bez vidljivih neuroloških ispada, treba da razmišljamo o mogućem šlogu.

Materijal i metodologija: Korišćeni su podaci iz lekarskog izveštaja i otpusne liste za prikaz slučaja pacijenta sa ishemičnim moždanim udarom.

Rezultati: Prikazan je slučaj muškarca starosti 66 godina, kod koga je iznenada nastupio poremećaj ponašanja i stanje psihomotornog nemira, praćeno konfuzijom i povremenom agresijom. Po dolasku, zatičemo pacijenta u kupatilu kako pali i gasi veš mašinu, a od supruge dobijamo podatak da se pre 3 sata probudio i počeo čudno da se ponaša (mokrio po kući). Pušač je, ne konzumira alkohol, zna za povišene vrednosti pritiska, ali ne uzima nikakvu terapiju. Uspostavljamo verbalnu komunikaciju, ali pacijent je konfuzan i uznemiren, pa iako tečno govori, povremeno ubacuje pogrešne reči koje nemaju nikakav smisao. Pokretan je, izvršava pojedine proste naredbe, ali nema uvid u sopstveno stanje, odbija našu pomoć, opire se pregledu, kao i odlasku u bolnicu. U najvišem interesu bolesnika pozvana je patrola policije da bi se sprovedo dovođenje pacijenta u zdravstvenu ustanovu.

Po dolasku policije, merimo TA 240/120 mm Hg i glikemiju 7 mmol/l. Za detaljniji pregled, pacijent je nesaradljiv. Kako su tegobe nastupile iznenada, a odbacili smo sumnju na mogućnost intoksikacije, pacijent je transportovan neurologu pod sumnjom na moždani udar, koji je dokazan nakon neuro-radiološke dijagnostike.

Diskusija: Dijagnoza AIMU postavlja se u što skorijem vremenskom roku od prvih tegoba (od 3 do maksimum 4 ili 5 sati), kako bi se što pre započela trombolitička terapija. Veliku grešku bismo učinili da smo automatski pretpostavili da se radi o psihičkom poremećaju, te tako izgubili dragoceno vreme.

Zaključak: Kod svakog pacijenta kod koga nastupi akutni poremećaj mentalnog funkcionisanja potrebno je razmišljati o mogućnosti organskog poremećaja koji leži u osnovi istog, te isključiti potencijalno vitalno ugrožavajuća stanja kao što su: hipoglikemija, moždani udar, subduralni hematoma, meningoencefalitis itd.

Abstract

Introduction: Acute stroke is defined as a sudden focal or global disorder of brain function. It is a disease characterized by sudden beginning and rapid development of neurological symptoms.

The aim of the paper: To indicate that in patients with an acute behavioral disorder and without visible neurological symptoms, we should consider a possible stroke.

Material and methodology: Data from the medical report and discharge list were used to describe the case of a patient with an ischemic stroke.

Results: The case of a 66-year-old man, who suddenly developed a behavioral disorder and a state of psychomotor restlessness, followed by confusion and occasional aggression, is presented. Upon arrival, we find the patient in the bathroom turning the washing machine on and off, and we get information from his wife that he woke up 3 hours ago and started behaving strangely (urinating around the house). He is a smoker, does not consume alcohol, and knows about elevated blood pressure values, but does not take any therapy. We establish verbal communication, but the patient is confused and agitated, so even though he speaks fluently, he occasionally throws in wrong words that do not make sense. He is moving with ease and carries out some simple commands, but has no insight into his condition, refuses our help, resists examination, and going to the hospital. In the patient's best interest, a police patrol was called to bring the patient to the health facility.

After the arrival of the police, we measure blood pressure 240/120 mm Hg and glycemia 7 mmol/l. For a more detailed examination, the patient is uncooperative. As the symptoms appeared suddenly, and we rejected the possibility of intoxication, the patient was transported to a neurologist under the suspicion of a stroke, which was proven after a neuroradiological diagnosis.

Discussion: The diagnosis of AIS is made as soon as possible after the first symptoms (from 3 to a maximum of 4 or 5 hours) so that thrombolytic therapy can be started as soon as possible. We would have made a big mistake if we had automatically assumed that it was a psychological disorder, thus wasting precious time.

Conclusion: In every patient who has an acute disorder of mental functioning, it is necessary to think about the possibility of an underlying organic disorder, and to rule out potentially life-threatening conditions such as hypoglycemia, stroke, subdural hematoma, meningoencephalitis, etc.



Prevenција intrahospitalnih infekcija i dezinfekcija

Prevention of Healthcare-Associated Infections and Disinfection

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Apstrakt

Hygieinos je grčka reč i znači zdravlje. Higijena, poznata i kao kontrola infekcija, naučna je disciplina koja je usko vezana sa promocijom i očuvanjem zdravlja ljudi i sprečavanjem bolesti. Dobila je ime prema Higiji (*Hygieia*, lat. *Hygia*), kćeri poznatog grčkog lekara Asklepija (*Eskulap*, *Aesculapius*), koju su mnogi antički umetnici prikazivali kao mladu ženu koja u ruci drži zmiju i posudu sa vodom, što je simbol zdravlja. Njeno ime se vezuje za čistoću i higijenu. Svrha bolničke higijene je zaštita bolesnika od dodatnih bolesti i istovremeno zaštita zdravstvenih radnika.

Infekcija predstavlja biološki proces koji podrazumeva ulazak mikroorganizama u organizam čoveka (kroz kožu i sluzokožu) i njihovo razmnožavanje u tkivima prema kojima pokazuju afinitet. Uročnici zaraznih bolesti su mikroorganizmi koji se mogu preneti na dva načina sa osobe na osobu: direktnim kontaktom bez zadržavanja u spoljašnjoj sredini i indirektnim kontaktom koji podrazumeva da mikroorganizmi provode izvesno vreme u spoljašnjoj sredini. Veliki svetski problem hospitalnih zdravstvenih ustanova su bolničke infekcije, kako u razvijenim, tako i u zemljama u razvoju. Izazivači su najčešće bakterije, gljivice i virusi.

Intrahospitalna infekcija definiše se kao bolest koja se javila nakon 48 sati boravka u bolnici, a nije postojala, niti je bila u fazi inkubacije u momentu prijema u bolnicu radi ispitivanja ili lečenja. Mora da ispunjava jedan od ovih uslova:

1. Da su se simptomi infekcije pojavili najranije trećeg dana tekuće hospitalizacije ili kasnije, ili su se simptomi infekcije javili na dan prijema, pri čemu je do prethodnog otpusta iz bolnice za akutne poremećaje zdravlja proteklo manje od 48 sati.
2. Da je pacijent hospitalizovan sa simptomima infekcije operativnog mesta (ili su se simptomi manifestovali prva 2 dana od početka hospitalizacije), ili je pacijent primljen sa antimikrobnom terapijom infekcije operativnog mesta, koja se ispoljila u roku od 30 dana od dana operacije, pod uslovom da pacijentu nije ugrađen implant, ili da pacijent ima duboku infekciju operativnog mesta, odnosno infekciju organa ili prostora koja se ispoljila u roku od 90 dana od dana operacije – pod uslovom da je pacijentu ugrađen implant.
3. Da je pacijent hospitalizovan sa simptomima infekcije izazvane bakterijom *Clostridium difficile*.
4. Ako je neko invanzivno medicinsko pomagalo (trahealni tubus, centralni ili periferni venski kateter, urinarni kateter) plasirano prvog ili drugog dana od prijema, a simptomi infekcije povezani sa pomagalom su se razvili prva 3 dana hospitalizacije.

Abstract

Hygieinos is a Greek word and it means health. Hygiene, also known as infection control, is a scientific discipline that is closely related to the promotion and preservation of human health and disease prevention. It was named after Hygieia (*Hygieia*, lat. *Hygia*), the daughter of the famous Greek physician Asclepius (*Aesculapius*, *Aesculapius*), who was depicted by many ancient artists as a young woman holding a snake and a bowl of water in her hand, which is a symbol of health. Her name is associated with cleanliness and hygiene. The purpose of hospital hygiene is to protect patients from additional diseases and at the same time to protect health workers.

Infection is a biological process that involves the entry of microorganisms into the human body (through the skin and mucous membranes) and their reproduction in the tissues to which they show affinity. The environment and indirect contact, which implies that microorganisms spend some time in the external environment. A major global problem of hospital health institutions is hospital infections, both in developed and developing countries. The most common causes are bacteria, fungi, and viruses.

An intrahospital infection is defined as a disease that occurred after 48 hours of hospital stay, and did not exist or was in the incubation phase at the time of admission to the hospital for examination or treatment. It must meet one of the following conditions:

1. That the symptoms of infection appeared on the third day of the current hospitalization at the earliest or later, or the symptoms of infection appeared on the day of admission, while less than 48 hours passed before the previous discharge from the hospital for acute health disorders.
2. If the patient was hospitalized with symptoms of an surgical site infection (or the symptoms manifested themselves in the first 2 days from the start of hospitalization), or the patient was admitted with antimicrobial therapy for a surgical site infection, which manifested itself within 30 days from the day of the operation, provided that the patient no implant was installed, or the patient has a deep infection of the surgical site, that is, an infection of an organ or space that manifested itself within 90 days from the day of the operation - provided that the patient had an implant installed.
3. That the patient is hospitalized with symptoms of an infection caused by the *Clostridium difficile* bacterium.
4. If an invasive medical device (tracheal tube, central or peripheral venous catheter, urinary catheter) was placed on the first or second day of admission, and symptoms of infection related to the device developed during the first 3 days of hospitalization.



Stopa bolničkih infekcija u našoj zemlji je u okviru svetskog proseka i javlja se kod 5–10% hospitalizovanih pacijenata. Učestalost i tipovi intrahospitalnih infekcija zavise od mnogo faktora kao što su: profil bolnice, imunsko stanje obolelog, bolnička higijena, obučenost osoblja, usvojena ili neusvojena doktrina primene antibiotika u preventivne ili kurativne svrhe. Najčešći izazivači su: *Escherichia coli*, koagulaza negativne stafilokoke i *Staphylococcus aureus*, *Enterococcus*, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Enterobacter* i *Clostridium*. *Staphylococcus aureus* je jedan od najuobičajenih patogena koji uzrokuje infekcije kože i mekih tkiva.

Glavni način prenosa MPCA infekcije u bolnicama je sa jednog na drugog bolesnika preko ruku zdravstvenih radnika. Kao posledica dugotrajne primene antibiotika dolazi do pojave rezistentnih uzročnika infekcije.

Redosled najčešćih intrahospitalnih infekcija:

- infekcije urinarnih puteva (30 – 40% svih hospitalizovanih pacijenata)
- infekcije disajnih puteva (15 – 20%)
- infekcije operativnih rana (15 – 20%)
- infekcije opekotina
- infekcije kože i potkožnog tkiva

Prevenција bolničke infekcije podrazumeva higijenu ruku, sterilizaciju i antisepsu (dezinfekcija). Dezinficijensi se koriste za dezinfekciju površina, materijala i instrumenata. Antiseptici se koriste za dezinfekciju rana, kože i sluzokože. Antiseptici koji se najčešće koriste u zdravstvenim uslovima su: vodonik-peroksid, jod i jodni preparati, oktenisept, alkoholi i borna kiselina. Antiseptici deluju tako da sprečavaju rast i razvoj mikroorganizama, to jest, oni su bakteriostatici. Ako se radi o većim koncentracijama, tada ih nazivamo dezinficijensi. Oni ubijaju mikroorganizme i oni su baktericidna sredstva. Upotreba dezinfekcionih sredstava nije bezazlena, ukoliko se ne koriste adekvatno. Zbog toga je važno pratiti uputstva za upotrebu i pridržavati ih se kao i svih propisanih procedura u zdravstvenoj ustanovi i van nje.

The rate of nosocomial infections in our country is within the world average and occurs in 5-10% of hospitalized patients. The frequency and types of intrahospital infections depend on many factors such as the profile of the hospital, the immune status of the patient, hospital hygiene, staff training, and adopted or unadopted doctrine of the use of antibiotics for preventive or curative purposes. The most common pathogens are *Escherichia coli*, coagulase-negative staphylococcus and *Staphylococcus aureus*, *Enterococcus*, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Enterobacter*, and *Clostridium*. *Staphylococcus aureus* is one of the most common pathogens that cause skin and soft tissue infections.

The main way of transmission of MPCA infection in hospitals is from one patient to another through the hands of health workers. As a result of long-term use of antibiotics, resistant pathogens appear.

The order of the most common healthcare-associated infections:

- urinary tract infections (30-40% of all hospitalized patients)
- respiratory tract infections (15 – 20%)
- surgical wound infections (15-20%)
- burn infections
- infections of the skin and subcutaneous tissue

Prevention of the infection includes hand hygiene, sterilization, and antiseptics (disinfection). Disinfectants are used to disinfect surfaces, materials, and instruments. Antiseptics are used to disinfect wounds, skin, and mucous membranes. Antiseptics that are most often used in health conditions are hydrogen peroxide, iodine and iodine preparations, octenisept, alcohols, and boric acid. Antiseptics work by preventing the growth and development of microorganisms, that is, they are bacteriostatic. If it is a matter of higher concentrations, then we call them disinfectants. They kill microorganisms and they are bactericidal agents. The use of disinfectants is not harmless, if they are not used adequately. That is why it is important to follow the instructions for use and adhere to them as well as all prescribed procedures in and outside the health facility.



Hiperbarična komora – put do čistog kiseonika i zdravlja Hyperbaric Chamber – the Way to Pure Oxygen and Health

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Abstract

Uvod: Hiperbarična komora uzima kiseonik iz okruženja i pretvara ga u koncentrovani kiseonik. Vazduh u komori konstantno protiče (ulazi novi, izlazi stari) tako da nema ustajalog vazduha. Ova terapija se danas smatra jednom od najkvalitetnijih prirodnih terapija sa odmah vidljivim rezultatima i to ne samo trenutnim, već i trajnim. Koristi se kao osnovni ili dodatni tretman u svim slučajevima kada je došlo do deficita u transportu kiseonika. Kiseonik u uslovima povišenog pritiska u hiperbaričnoj komori omogućava da pluća prikupljaju i do tri puta više kiseonika nego disanje pri normalnom pritisku. Na taj način se stimuliše lučenje faktora rasta i matičnih ćelija, koje doprinose lečenju i uspostavljanju normalnih biohemijskih i energetskih procesa u organizmu.

Indikacije: Hiperbarična terapija kiseonikom koristi se u tretmanu različitih medicinskih stanja i različite grane medicine je koriste na različite načine. Koristi se u slučaju sledećih stanja:

Akutna trovanja ugljen-monoksidom, ugljen-dioksidom, cijanidima, bojnim otrovima, šećerna bolest sa komplikacijama (dijabetično stopalo i gangrena), dijabetične ostale polineuropatije, subakutna i hronična arterijska insuficijencija, ugroženi graftovi (vaskularne i infektivne etiologije), infekcije kože i kostiju koje uzrokuju odumiranje tkiva, radijacijsko oštećenje tkiva, opekotine i smrztotine, septična nekroza kosti, moždani udar, povrede mozga i kičmene moždine, migrenozne glavobolje, multipla skleroza, teške anemije i masivni gubitak krvi, gasna embolija.

- Apsolutne kontraindikacije: netretirani pneumotoraks
- Relativne kontraindikacije: infekcije gornjih disajnih puteva, emfizem pluća, asimptomatične plućne lezije vidljive radiološkim metodama, epilepsija, teži oblici hipertenzivne bolesti, febrilna stanja, trudnoća, klaustrofobija.

Priprema za hiperbaričnu terapiju kiseonikom podrazumeva određena uputstva, pa svaka ustanova treba prilagoditi svoja uputstva. Ulaskom u hiperbaričnu komoru ne smeju se unositi sledeći predmeti: satovi, predmeti koji rade na baterije, mobilni telefoni, slušni aparati, knjige, papirne maramice, lična dokumenta, olovke. Nosi se isključivo pamučna odeća, čista, bez parfema i isparljivih eteričnih ulja, bez šminke na bilo kom delu tela, a pogotovu na rukama, glavi, vratu. Mora postojati detaljno objašnjenje o postupku rada koje se prenosi pacijentu. Kako pritisak u komori bude rastao, osećaj se mora objasniti (stisnuti nos, zatvoriti usta dok se uši ne adaptiraju i pritisak ne izjednači).

Rezultati: Kod određenih stanja, hiperbarična terapija koristi se posebno od drugih vidova terapije, kao kod dekompresijske bolesti gasne embolije i teških trovanja ugljen-monoksidom, dok se kod ostalih stanja ona koristi kao sa drugim vidovima terapije, u zavisnosti od individualnih potreba.

Apstrakt

Introduction: A hyperbaric chamber takes oxygen from the environment and turns it into concentrated oxygen. The air in the chamber constantly flows (new in, old out) so there is no stale air. Today, this therapy is considered one of the highest quality natural therapies with immediately visible results, not only immediate but also permanent. It is used as a basic or additional treatment in all cases with a deficit in oxygen transport. Oxygen under conditions of increased pressure in the hyperbaric chamber allows the lungs to collect up to three times more oxygen than breathing at normal pressure. In this way, the secretion of growth factors and stem cells is stimulated, which contributes to healing and the establishment of normal biochemical and energetic processes in the body.

Indications: Hyperbaric oxygen therapy is used in the treatment of various medical conditions and different branches of medicine use it in different ways. It is used in the case of the following conditions:

Acute poisoning with carbon monoxide, carbon dioxide, cyanides, war poisons, diabetes with complications (diabetic foot and gangrene), diabetic other polyneuropathies, subacute and chronic arterial insufficiency, compromised grafts (vascular and infectious etiologies), skin and bone infections that cause tissue death, radiation tissue damage, burns and frostbite, septic bone necrosis, stroke, brain and spinal cord injuries, migraine headaches, multiple sclerosis, severe anemia and massive blood loss, gas embolism.

- Absolute contraindications: untreated pneumothorax
- Relative contraindications: upper respiratory tract infections, lung emphysema, asymptomatic lung lesions visible by radiological methods, epilepsy, severe forms of hypertensive disease, febrile conditions, pregnancy, claustrophobia.

Preparation for hyperbaric oxygen therapy involves certain instructions, so each institution should adapt its instructions. The following items may not be brought into the hyperbaric chamber: watches, battery-operated items, mobile phones, hearing aids, books, tissues, personal documents, and pens. Only cotton clothes are worn, clean, without perfume and volatile essential oils, and make-up on any part of the body, especially on the hands, head, and neck. There must be a detailed explanation of the work procedure that is conveyed to the patient. As the pressure in the chamber increases, the sensation must be explained (pinch the nose, and close the mouth until the ears adapt and the pressure equalizes).

Results: In certain conditions, hyperbaric therapy is used separately from other types of therapy, such as decompression sickness, gas embolism, and severe carbon monoxide poisoning, while in other conditions it is used as with other types of therapy, depending on individual needs.



Rezultati terapije se počinju javljati nakon određenog broja terapija i oni zavise od prirode medicinskog stanja zbog čega se terapija primenjivala. Tako su, na primer, kod trovanja ugljenmonoksidom, rezultati terapije postignuti već nakon tri terapije, dok se kod hroničnih rana koje ne zarastaju adekvatni rezultati postižu nakon 20–40 terapija.

The results of the therapy begin to appear after a certain number of therapies and they depend on the nature of the medical condition for which the therapy was applied. Thus, for example, in the case of carbon monoxide poisoning, the results of the therapy were achieved already after three therapies, while in the case of chronic wounds that do not heal adequate results are achieved after 20-40 therapies.



Menopauza, detoksikacija i mikronutricija – trijada u zdravlju žena

Menopause, Detoxification and Micronutrition – the Triad in Women's Health

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Apstrakt

Trajni prestanak menstruacije usled prirodnog gubitka folikularne funkcije jajnika je prirodna menopauza. Javlja se između 40. i 60. godine života. Srednja starost je 48,8 godina, na osnovu sveobuhvatne metaanalize 46 kliničkih studija, sprovedenih u 24 zemlje i predstavlja ne samo marker reproduktivnog starenja, ali i pokazatelj zdravlja i zdravstvenih rizika. Raniji ulazak u menopauzu je povećan sa smanjenim rizikom od raka dojke i raka jajnika, ali i sa povećanim rizikom od ateroskleroze, osteoporozе, moždanog udara i kardiovaskularne bolesti. Posle 65. godine kardiovaskularne bolesti češće su kod žena nego kod muškaraca istih godina.

Faze u životu žene pre, u toku i posle menopauze su: premenopauza, perimenopauza, menopauza i postmenopauza. Rane posledice nedostatka estrogena su: suva koža i kosa, psihički problemi i vazomotorni simptomi, srednjoročne: genitourinarni problemi, osteopenija i pad kognitivnih funkcija, a kasne: disbalans u lipidnom profilu, osteoporozа, osteoartritis i demencija. Najozbiljnije su kardiovaskularni problemi i smanjenje gustine kostiju (50% verovatnoće da će doći do preloma).

Opravdana je suplementacija vitaminima B grupe, vitaminom D, C, fitoestrogenima, cimigugom, žalfijom, melatoninom, ekstraktom korena valerijane, suvim ekstraktom cvetova hmelja i lista matičnjaka, herbom kantariona, kalcijumom, vitaminom K2, magnezijumom, cinkom, selenom, koenzimom Q10. Po principima mikronutricije, neophodno je uključiti mešavinu hladnoceđenih ulja repice i masline u određenom odnosu svakodnevno u ishrani i pridržavati se principa francuske mediteranske ishrane. Neophodno je usmeriti se na tretman detoksikacije dva puta u toku godine. Dokazana je nadmoć prvenstveno zeolita, pa brašna rogača i gline u apsorpciji toksina i teških metala iz organizma.

Kombinacijom dokazanih i medicinski opravdanih postulata zapadne medicine sa stavovima komplementarnih grana medicine, umerenošću u svim segmentima življenja i pozitivnom orijentacijom, žene mogu puno uraditi na prevenciji bolesti i održati zdravlje.

Abstract

The permanent ending of the menstrual period due to the natural loss of ovarian follicular function is natural menopause. It occurs between the age of 40 and 60. The median age is 48.8 years, based on a comprehensive meta-analysis of 46 clinical studies, conducted in 24 countries, and is not only a marker of reproductive aging but also an indicator of health and health risks. Early menopause is associated with a reduced risk of breast and ovarian cancer, but also with an increased risk of atherosclerosis, osteoporosis, stroke, and cardiovascular disease. After the age of 65, cardiovascular diseases are more common in women than in men of the same age.

The stages in a woman's life before, during, and after menopause are premenopause, perimenopause, menopause, and postmenopause. The early consequences of estrogen deficiency are dry skin and hair, psychological problems, vasomotor symptoms, medium-term - genitourinary problems, osteopenia, decline in cognitive functions, late - imbalance in the lipid profile, osteoporosis, osteoarthritis, and dementia. The most serious are cardiovascular problems and a decrease in bone density (50% probability of fracture).

Supplementation with group B vitamins, vitamin D, C, phytoestrogens, cymiguga, sage, melatonin, valerian root extract, dry extract of hop flowers and lemon balm leaves, St. John's wort, calcium, vitamin K2, magnesium, zinc, selenium, coenzyme Q10 is justified. principles of micro nutrition, it is necessary to include a mixture of cold-pressed rapeseed oil and olive oil in a certain ratio every day in the diet and adhere to the principles of the French Mediterranean diet. It is necessary to focus on detoxification treatment twice a year. Primarily, the supremacy of zeolite, then carob flour and clay in absorbing toxins and heavy metals from the body has been proven.

By combining the proven and medically justified postulates of Western medicine with the attitudes of complementary branches of medicine, moderation in all segments of life and a positive orientation, women can do a lot to prevent disease and maintain their health





Osteoporoza u menopauzi

Osteoporosis in Menopause

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Apstrakt

Menopauza označava poslednju menstruaciju u životu jedne žene, ali se kao termin koristi u cilju opisivanja čitavog perioda u životu žene u kome provede 1/3 svoga života. Promene koje menopauzu prate odnose se na neuroendokrini sistem, imuni sistem, kardiovaskularni i koštani sistem. Jedine vrste za koje je poznato da doživljavaju menopauzu su: ljudi, gorile, kitovi ubice i kitovi piloti kratkih peraja.

Preduslov za očuvanje zdravlja u ovom periodu je održavanje integriteta organizma, prava i racionalna suplementacija, redovni preventivni pregledi i fizička aktivnost, uz dijetetski režim ishrane.

Faktori koji utiču na godine u kojima će doći do menopauze su: starost, hemioterapija, zračenje karlice, pušenje i starost u kojoj je majka ušla u menopauzu. Nedostatak estrogena uslovljava povećanu opasnost od vazomotornih simptoma, estetskih problema, demencije, ali je gubitak mineralne gustine kostiju, pored kardiovaskularnih bolesti najopasnija posledica menopauze.

Osteoporoza je povezana sa ranim gubitkom estrogena kod žena i sve žene koje su ušle u menopauzu pre 45. godine su u povećanom rizikom od osteoporoze. Mala telesna masa, fizička neaktivnost, nedovoljan unos kalcijuma i vitamina D, određeni lekovi, posebno kortikosteroidi, dovode do dodatnog gubitka koštane mase. Svaki prelom koji se na malu traumu dogodi znači i dijagnostiku osteoporoze. Pacijentkinje sa dijagnostikovanom osteopenijom i visokim rizikom za pojavu preloma podvrgavaju se terapiji.

Prevenција osteoporoze podrazumeva adekvatan unos proteina, kalcijuma, vitamina D i fizičku aktivnost. Osteoporoza se leči bifosfonatima, biološkim lekovima i lekovima sličnim hormonu parašititaste žlezde.

Abstract

Menopause means the last menstrual period in a woman's life, but as a term, it is used to describe the entire period in a woman's life in which she spends 1/3 of her life. The changes that accompany menopause refer to the neuroendocrine system, the immune system, the cardiovascular and bone systems. The only species known to experience menopause are humans, gorillas, killer whales, and pilot whales.

The prerequisite for preserving health in this period is maintaining the integrity of the organism, proper and rational supplementation, regular preventive examinations, and physical activity, along with a dietary regime.

Factors that affect the age at which menopause will occur are age, chemotherapy, radiation of the pelvis, smoking, and the age at which the mother entered menopause. Lack of estrogen leads to an increased risk of vasomotor symptoms, aesthetic problems, and dementia, but the loss of mineral density bones, in addition to cardiovascular diseases, is the most dangerous consequence of menopause.

Osteoporosis is associated with the early loss of estrogen in women and all women who enter menopause before the age of 45 are at increased risk of osteoporosis. Low body weight, physical inactivity, insufficient intake of calcium and vitamin D, and certain medications, especially corticosteroids, lead to additional bone loss. Every fracture that occurs due to minor trauma means a diagnosis of osteoporosis. Patients with diagnosed osteopenia and a high risk of fracture undergo therapy.

Prevention of osteoporosis involves an adequate intake of protein, calcium, vitamin D, and physical activity. Osteoporosis is treated with bisphosphonates, biologics, and parathyroid hormone-like drugs.



Patronažna sestra – prijatelj cele porodice

A Visiting Nurse - Friend of the Whole Family

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Apstrakt

Uvod: Patronažna služba jedna je od osnovnih službi Doma zdravlja, ustanove koja obavlja zdravstvenu delatnost na primarnom nivou zdravstvene zaštite u Republici Srbiji. Usluge polivalentne patronažne službe propisane su Pravilnikom o nomenklaturi zdravstvenih usluga na primarnom nivou zdravstvene zaštite. Pravilnikom sadržaju i obimu prava na zdravstvenu zaštitu iz obaveznog zdravstvenog osiguranja, koji se usvaja svake godine, definisane su populacione grupe kod kojih se očekuje realizacija usluga ove službe.

Polivalentna patronažna sestra je jedini zdravstveni radnik koji ima mogućnost da sagleda porodicu u celini, a posebno zdravu, koja se u najvećem broju slučajeva, veoma lako zapostavi.

Cilj rada: Ukazati na značaj patronažne sestre da prilikom posete sagleda porodicu kao celinu, uoči promene u porodici, proceni potrebe i postavi ciljeve, pripremi i realizuje plan aktivnosti i evaluiira postignute rezultate.

Metod rada: Informacije prikupljene iz medicinske literature.

Rezultati rada: Rad patronažne sestre najviše je usmeren na porodicu kroz kućne posete. Izbor metode patronažne sestre zasniva se na identifikovanim zdravstvenim problemima, potrebama i interesima porodice, vodeći računa o uzrastu, polu, obrazovanju, socijalnom statusu, navikama, običajima, mentalitetu, kulturi i tradiciji.

Zaključak: Patronažna sestra je zdravstveni vaspitač za sve članove porodice i zajednice, kao i veza između porodice i zdravstvene ustanove. Ona je promoter zdravlja i očekuje se da radi efikasno i efektivno, pogotovu kada su u pitanju faktori rizika koji mogu da dovedu do narušavanja zdravlja.

Abstract

Introduction: Visiting-nurse service is one of the basic services of the Health Center, an institution that performs health care at the primary level of health care in the Republic of Serbia. The services of the polyvalent visiting-nurse service are prescribed by the Rulebook on the nomenclature of health services at the primary level of health care. The content and scope of the right to health care from mandatory health insurance, which is adopted every year, defines the population groups that are expected to be provided with the services of this service.

A polyvalent visiting nurse is the only healthcare worker who can look at the family as a whole, especially the healthy one, which in most cases is very easily neglected.

Aims of the paper: Point out the importance of the visiting nurse to look at the family as a whole during the visit, observe changes in the family, assess needs and set goals, prepare and implement an activity plan, and evaluate the achieved results.

Method of the paper: Information collected from medical literature.

Results: The work of the visiting nurse is mostly focused on the family through home visits. The choice of the visiting nurse's method is based on the identified health problems, needs, and interests of the family, taking into account age, gender, education, social status, habits, customs, mentality, culture, and tradition.

Conclusion: The visiting nurse is a health educator for all members of the family and community, as well as a link between the family and the health institution. She is a health promoter and is expected to work efficiently and effectively, especially when it comes to risk factors that can lead to health impairment.



Lečenje pacijenata sa prelomom kuka i značaj zdravstvenih radnika u njihovom lečenju

Treatment of Patients with Hip Fractures and the Importance of Healthcare Workers in their Treatment

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Apstrakt

Osnovne indikacije za primarnu artroplastiku kuka su degenerativna osteoartritoza kuka, prelomi vrata butne kosti, oštećenje kuka usled razvojnog poremećaja kuka i oštećenje kuka u sklopu reumatoidnog artritisa. Broj primarnih artroplastičnih procedura na kukovima je sve veći, sa tendencijom stalnog porasta. Savremeni materijali i dizajni endoproteza koji se unapređuju iz godine u godinu dozvoljavaju bezbolan i pun obim pokreta u kuku uz dugi vek proteze.

Bolesnici sa prelomom vrata butne kosti kuka zauzimaju veliki deo posteljnog fonda ortopedskih i rehabilitacionih ustanova. Visok procenat smrtnosti nakon ovih preloma objašnjava se prisutnim pratećim komorbiditetom (bolesti kardio-vaskularnog, pulmonalnog i endokrinog sistema). Operativno lečenje preloma vrata butne kosti ugradnjom endoproteze kuka predstavlja metodu izbora uvek kad je to moguće i treba se izvesti što pre od povrede nakon adekvatne preoperativne pripreme.

Različiti tipovi endoproteza kuka za prelome vrata butne kosti (totalne, subtotalne i parcijalne) omogućavaju vrlo ranu vertikalizaciju pacijenata uz dozvoljeni oslonac na operisanu nogu. Ovo izuzetno pogoduje pacijentima, jer se vrlo rano može započeti sa rehabilitacijom.

Savremene hirurške tehnike, kvalitetne endoproteze kuka, adekvatna zdravstvena nega i rana rehabilitacija imaju za cilj da smanje postoperativni morbiditet i mortalite i da pacijente osposobe za normalan i kvalitetan život.

Pri prijemu pacijenta sa prelomom kuka, sestra ima važnu ulogu da pripremi pacijenta, upozna ga sa operativnim zahvatom i daljim tokom lečenja, kao i postoperativnom lečenju. Značaj medicinske sestre kod preloma gornjeg okrajka butne kosti se, takođe, ogleda u blagovremenoj prevenciji mogućih nastanaka komplikacija i poboljšanju kvaliteta lečenja pacijenta.

Pravilno sprovedena preoperativna nega je uslov za dobru realizaciju operativnog zahvata.

U ranom postoperativnom toku neophodno je obratiti pažnju na pojavu ranih postoperativnih komplikacija kao što su:

1. infekcija operativne rane koja može biti površna ili duboka infekcija – osteomijelitis
2. tromboza dubokih vena ekstremiteta i karlice sa posledičnom tromboembolijom pluća
3. dekubitalne rane u predelu krsta i pete
4. hipostatska pneumonija

Abstract

The main indications for primary hip arthroplasty are degenerative hip osteoarthritis, femoral neck fractures, hip damage due to developmental hip disorder, and hip damage in rheumatoid arthritis. The number of primary hip arthroplasty procedures is increasing, with a tendency of constant growth. Modern materials and designs of endoprostheses that are improved every year allow painless and full range of motion in the hip with a long life of the prosthesis.

Patients with fractures of the neck of the femur and hip occupy a large part of the bed fund of orthopedic and rehabilitation institutions. The high percentage of mortality after these fractures is explained by the accompanying comorbidity (diseases of the cardiovascular, pulmonary, and endocrine systems). Operative treatment of a femoral neck fracture by installing a hip endoprosthesis is the method of choice whenever possible and should be performed as soon as possible after the injury after adequate preoperative preparation.

Various types of hip endoprostheses for femoral neck fractures (total, subtotal, and partial) enable very early verticalization of patients with permitted support on the operated leg. This is extremely beneficial for patients because rehabilitation can be started very early.

Modern surgical techniques, high-quality hip endoprostheses, adequate health care, and early rehabilitation aim to reduce postoperative morbidity and mortality and enable patients to live a normal and quality life.

When receiving a patient with a hip fracture, the nurse has an important role to prepare the patient, and familiarize him with the surgical procedure and further treatment, as well as postoperative treatment. The importance of the nurse in case of a fracture of the upper part of the femur is also reflected in the timely prevention of possible complications and improvement of the quality of the patient's treatment.

Correctly implemented preoperative care is a condition for a good implementation of the operation.

In the early postoperative course, it is necessary to pay attention to the occurrence of early postoperative complications such as:

1. infection of the operative wound, which can be a superficial or deep infection - osteomyelitis
2. thrombosis of the deep veins of the extremities and pelvis with consequent pulmonary thromboembolism
3. decubitus wounds in the region of the sacrum and heel



5. urinarne infekcije sa urosepsom
6. luksacija proteze zgloba kuka.

U cilju prevencije infekcije uloga medicinske sestre sastoji se u redovnom previjanju sterilnim materijalom, pod svim uslovima antiseptice, i pravovremenoj upotrebi antibiotika. U prevenciji dekubitalnih rana neophodno je rano aktiviranje pacijenata. U slučajevima kada to nije moguće, neophodna je dobra nega pacijenata koja podrazumeva masažu pacijenta, redovno okretanje (na 2h), suhu posteljenu, dobro zategnute čaršave bez nabora i primenu antidekubitalnih dušeka. Zbog vezanosti pacijenta za postelju dolazi do formiranja tromba koji pri aktiviranju pacijenta može da izazove tromboemboliju pluća sa letalnim završetkom. Rana postoperativna rehabilitacija i što ranije aktiviranje u postelji predstavljaju ključ prevencije ove komplikacije.

Pravilna nega pacijenata u postoperativnom toku veoma je bitna u cilju prevencije mehaničkih komplikacija u vidu:

1. luksacije endoproteze zgloba kuka
2. dezintegracije osteosintetskog materijala
3. migracije komponenti ednoproteze
4. loma osteosintetskog materijala

Postoperativni rezultati nam pokazuju da je zdravstvena nega usmerena ka sprečavanju i umanjivanju postoperativnih komplikacija, kao i što skorijem oporavku i izlečenju bolesnika.

4. hypostatic pneumonia
5. urinary infections with urosepsis
6. hip joint prosthesis luxation.

In order to prevent infection, the nurse's role consists of regular dressing with sterile material, under all conditions of antiseptics, and timely use of antibiotics. In the prevention of decubitus wounds, early activation of patients is essential. In cases where this is not possible, good patient care is necessary, which includes massaging the patient, regular turning (every 2 hours), dry, well-tightened sheets without creases, and the use of anti-decubitus mattresses. Because the patient is tied to the bed, a thrombus is formed, which, when activated by the patient, can cause pulmonary thromboembolism with a fatal outcome. Early postoperative rehabilitation and early activation in bed are the key to preventing this complication.

Proper care of patients in the postoperative course is very important in order to prevent mechanical complications in the form of:

1. luxation of the hip joint endoprosthesis
2. disintegration of osteosynthetic material
3. migration of single-prosthesis components
4. fractures of the osteosynthetic material

Postoperative results show us that health care is aimed at preventing and reducing postoperative complications, as well as the earliest possible recovery and healing of the patient.



Perioperativno transfuziološko zbrinjavanje pacijenata sa hematološkim oboljenjima

Perioperative Transfusion Care of Patients with Hematological Diseases

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Apstrakt

Preoperativna priprema svakog pacijenta treba da obuhvati ispitivanje kompletne krvne slike i koagulacijska testiranja, kako bi se blagovremeno otkrili primarni ili sekundarni hematološki poremećaji koji mogu biti uzrok brojnih peri- ili postoperativnih komplikacija.

Anemija je najčešći preoperativni poremećaj kod hirurških pacijenata, a terapijski pristup zavisi od vrste i stepena anemije, kao i vrste i težine hirurške intervencije. Koncentraciju hemoglobina treba određivati najduže u roku od 28 dana pre planirane hirurške intervencije, kako bi se eventualno korigovala postojeća anemija primenom preparata gvožđa, vitamina B12, folne kiseline ili eritropoetina, umesto transfuzije koncentrata eritrocita. Ciljani preoperativni hemoglobin bi trebalo da bude u skladu sa preporukama SZO (za žene >12 g/dL, za muškarce > 13 g/dL).

Kod pacijenata sa eritrocitozom preporučuje se smanjenje ukupnog volumena eritrocita venepunkcijom, uzimajući u obzir stepen perioperativnog krvarenja. Trombocitopenije zahtevaju preoperativnu korekciju broja trombocita, a u slučajevima masivnog krvarenja indikovana je transfuzija koncentrata trombocita. Postoje striktno određeni kriterijumi minimalnog broja trombocita za određene vrste hirurških intervencija ili izvođenje određenih invazivnih procedura.

Perioperativno praćenje sistema koagulacije obuhvata standardna i point-of-care koagulacijska testiranja, koja omogućavaju direktno uvođenje rezultata testiranja u transfuzijske algoritme i racionalno vođenje terapije. Poseban terapijski pristup u perioperativnom periodu zahtevaju pacijenti sa urođenim poremećajima koagulacije (hemofilija A, hemofilija B, von Willebrandova bolest), zavisno od stepena koagulacijskog poremećaja i vrste hirurške intervencije. Najdramatičniji sekundarni koagulacijski poremećaj je diseminovana intravaskularna koagulacija (DIK), gde je neophodna brza dijagnoza i hitna i intenzivna terapija.

Abstract

The preoperative preparation of each patient should include a complete blood count and coagulation tests, in order to timely detect primary or secondary hematological disorders that may be the cause of numerous peri- or postoperative complications.

Anemia is the most common preoperative disorder in surgical patients, and the therapeutic approach depends on the type and degree of anemia, as well as the type and severity of the surgical intervention. Hemoglobin concentration should be determined no later than 28 days before the planned surgical intervention, in order to possibly correct existing anemia by using iron preparations, vitamin B12, folic acid, or erythropoietin, instead of erythrocyte concentrate transfusion. The target preoperative hemoglobin level should be in accordance with WHO recommendations (for women >12 g/dL, for men >13 g/dL).

In patients with erythrocytosis, it is recommended to reduce the total volume of erythrocytes by venipuncture, taking into account the degree of perioperative bleeding. Thrombocytopenia requires preoperative correction of platelet count, and in cases of massive bleeding, platelet concentrate transfusion is indicated. There are strictly defined criteria for the minimum number of platelets for certain types of surgical interventions or the performance of certain invasive procedures.

Perioperative monitoring of the coagulation system includes standard and point-of-care coagulation tests, which enable the direct introduction of test results into transfusion algorithms and rational management of therapy. Patients with congenital coagulation disorders (hemophilia A, hemophilia B, von Willebrand's disease) require a special therapeutic approach in the perioperative period, depending on the degree of coagulation disorder and the type of surgical intervention. The most dramatic secondary coagulation disorder is disseminated intravascular coagulation (DIC), where rapid diagnosis and urgent and intensive therapy are necessary.



Perspektive medicinskih sestara i zdravstvenih tehničara u Republici Srbiji

Perspectives of Nurses and Health Technicians in the Republic of Serbia

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Apstrakt

Otkada postoji čovek, postoji i potreba da se on leči i neguje kada je bolestan. Mnogobrojna ratovanja i epidemije zahtevale su brigu, negu i lečenje bolesnih i ranjenih. Prvi tragovi o medicini potiču još iz Vavilona, a njen dalji razvoj i specifičnosti teku kroz razne kulture i civilizacije, tako da nam je danas poznato da se medicina razvijala još u staroj Indiji i Kini, u antičkoj Grčkoj i u starom Rimu. Drugim hatišerifom Visoke porte iz 1830. godine Srbiji je dato pravo unutrašnje uprave, što je obuhvatilo i pravo osnivanja bolnica.

Osnivanje medicinskih škola prvi put se pominje 1835. godine u aktu Osobite dužnosti Popečiteljstva unutreni dela, koji je donet na osnovu Sretenjskog ustava od 3. februara (po starom kalendaru) iste godine. Dužnosti Popečiteljstva su propisane na sledeći način: paziti na zdravlje naroda, podići toga radi i izdržavati kako u zemlji, tako i po granicama nužna tome zavedenija i bolnice, da se toga ne bi kuga ili druge prilepčive bolesti u zemlju uvukle. Spisati uredbu, kako će se mrtvaci pregledati, i povraćati u život polumrtvi, gde li će se pravi umrli zakopavati, i kakvi grobovi za njih da se grade. Zavesti škole za hirurge i babice, marvene lekare i apotekare. Starati se, da se podignu opštepolzna zdanija za pomoći bolnim.

Preteča zvaničnom obrazovanju medicinskih sestara bili su kursevi koje je 1876. godine organizovao Glavni odbor Srpskog društva Crvenog krsta. Odbor im je uputio javni poziv za praktični kurs sa teorijskim predavanjima kojima su rukovodili lekari, članovi Glavnog odbora Srpskog društva Crvenog krsta. Ovaj kurs je završilo 109 bolničara i bolničarki i svi su raspoređeni po bolnicama u Srbiji.

Obrazovanje medicinskih sestara danas je u okviru strukovnih i akademskih studija. Svi programi osnovnih studija su šestosemestralni. Nakon osnovnih, sestrama su na raspoložanju i master studije sestrinstva, kako strukovni master, tako i akademski. Još uvek ne postoje doktorske studije sestrinstva, ali sve strukovne asocijacije i strukovna udruženja rade na inicijativi da se krene i sa najvišim stepenom studiranja kod medicinskih sestara.

Abstract

Ever since a human has existed, there has been a need to treat and care for them when they are sick. Numerous wars and epidemics required the care, nursing, and treatment of the sick and wounded. The first traces of medicine come from Babylon, and its further development and specifics flow through various cultures and civilizations so that today we know that medicine was developed in ancient India and China, in ancient Greece, and in ancient Rome. From 1830, Serbia has had the right of internal administration, which included the right to establish hospitals.

The establishment of medical schools was mentioned for the first time in 1835 in the act of the "Osobite dužnosti Popečiteljstva unutreni dela", the act, which was adopted on the basis of the Constitution of Sretenje dated February 3 (according to the old calendar) of the same year. These duties are prescribed as follows: to look after the health of the people, for this purpose, to build and support both in the country and on the borders the necessary hospitals so that the plague or other contagious diseases do not creep into the country. Write a decree, about how the dead will be examined, and the half-dead will be brought back to life, where the real dead will be buried, and what kind of graves will be built for them. Establish schools for surgeons and midwives, medical doctors and pharmacists. To make sure that public buildings are constructed to help the sick.

The forerunner to the official education of nurses were the courses organized by the Main Board of the Serbian Red Cross Society in 1876. The board issued a public invitation to them for a practical course with theoretical lectures led by doctors, and members of the Main Board of the Serbian Red Cross Society. This course was completed by 109 male and female paramedics, all of whom were assigned to hospitals in Serbia.

Nursing education today is within vocational and academic studies. All undergraduate programs are six-semester. After the basic ones, nurses are also offered master's degrees in nursing, both vocational and academic. There are still no doctoral studies in nursing, but all professional associations and professional associations are working on the initiative to start with the highest degree of study in nursing.



Šum na srcu – srčana mana ili ne? Heart Muzzle - A Heart Defect or Not?

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Apstrakt

Šum na srcu je prilično česta pojava u pedijatrijskoj praksi, obično bezopasna. Međutim, kod roditelja budi strah da njihovo dete ima bolesno srce, odnosno neku srčanu manu. Da li šum na srcu znači i da dete ima srčanu manu? Na sreću, odgovor je ne. Strah roditelja vezan za postojanje šuma na srcu u odsustvu znakova oboljenja tog organa, u najvećem broju slučajeva je bezrazložan. Iza šuma na srcu ne mora da stoji srčano oboljenje, kao što ni uz srčano oboljenje ne mora da postoji šum na srcu.

Šum na srcu ima više od 50 odsto zdrave dece, na terenu zdravog srca – on se naziva *funkcionalni* ili *fiziološki* šum (u narodu poznat i kao *šum zdravog srca* tj. *razvojni šum*). Prvi put obično se otkrije tokom infekcije (bilo kog porekla) praćene povišenom temperaturom. Pojedina nesrčana oboljenja mogu biti potencirajući faktor u nastanku bezazlenih šumova – povišena telesna temperatura, malokrvnost, pojačan rad štitne žlezde.

Iskusan pedijatar je sposoban da napravi razliku između fiziološkog i organskog šuma na srcu na osnovu njihovih zvučnih karakteristika, te se najčešće ne saopštava odmah roditeljima da njihovo dete ima šum. Obično sačekava da prođe infekcija, pa uporedi kvalitet i jačinu šuma, a bi se u potpunosti isključilo postojanje srčane mane (najčešće urođene), potrebno je da se roditelji upute dečjem kardiologu. Taj pregled nije hitan, naročito ukoliko dete nema nikakvih tegoba. Ovo se posebno odnosi na decu uzrasta preko dve godine. Po pravilu se sve teške urođene srčane mane ispoljavaju u prvim danima ili mesecima života.

Pregled dečjeg kardiologa podrazumeva da se, osim kliničkog pregleda, detetu uradi EKG i ultrazvučni pregled srca (EHO srca) da bi kardiološki pregled bio kompletan. Neinvasivnost, visoka specifičnost i senzitivnost ove tehnike čini je ehokardiogram neizostavnim dijagnostičkim alatom. Ukoliko se nakon njega potvrdi da se radi o funkcionalnom šumu, odnosno da je srce deteta potpuno zdravo, ispitivanje je završeno.

Kako se ovakvi šumovi često otkrivaju pri sportskim pregledima neminovno se nameće pitanje da li to dete može da nastavi da se bavi sportom? Ukoliko je dečji kardiolog isključio postojanje srčane mane, dete je sposobno za normalne životne aktivnosti, uključujući i najteže fizičke napore. Odnosno, može da se aktivno bavi sportom bez ikakvih problema, čak i ako se čuje šum.

Majka priroda je našla način da jedan broj mana sam od sebe nestane, spontano se razreši.

Leći se urođena srčana mana, a ne šum na srcu. Prema tome odgovor na pitanje: «Da li ima razloga za strah i paniku?», bio bi ne, jer šum na srcu kod dece najčešće nije znak bolesnog srca, niti zahteva hitan odlazak kod lekara. Ali zahteva bar minimalno ispitivanje, koje sprovodi dečji kardiolog. Prema tome, nema mesta panici, šum na srcu nije oboljenje, već klinički znak i čak

Abstract

A heart murmur is a fairly common occurrence in pediatric practice, usually harmless. However, parents fear that their child has a sick heart, that is, a heart defect. Does a heart murmur also mean that child has a heart defect? Fortunately, the answer is no. The fear of parents related to the existence of heart murmurs in the absence of signs of diseases of that organ is, in most cases, unfounded. A heart murmur does not have to be a heart disease, just as a heart disease does not have to have a heart murmur.

More than 50 percent of healthy children have a heart murmur, in the field of a healthy heart - it is called a functional or physiological murmur (popularly known as a healthy heart murmur, i. e. a developmental murmur). It is usually detected for the first time during an infection (of any origin) accompanied by a fever. Certain non-cardiac diseases can be a potentiating factor in the occurrence of harmless murmurs - elevated body temperature, anemia, and increased work of the thyroid gland.

An experienced pediatrician can distinguish between physiological and organic heart murmurs based on their sound characteristics, and parents are usually not immediately informed that their child has a murmur. Usually, they wait for the infection to pass, then compare the quality and volume of the sounds. To completely rule out the existence of a heart defect (most often congenital), it is necessary to refer the parents to a pediatric cardiologist. This examination is not urgent, especially if the child has no complaints. This especially applies to children over the age of two. As a rule, all congenital heart defects manifest in the first days or months of life.

An examination by a pediatric cardiologist implies that, in addition to a clinical examination, the child will undergo an ECG and an ultrasound examination of the heart (EHO of the heart) for the cardiological examination to be complete. The non-invasiveness, high specificity, and sensitivity of this technique make the echocardiogram an indispensable diagnostic tool. If it is confirmed after that it is a functional murmur, that is, that the child's heart is completely healthy, the examination is over.

As such noises are often detected during sports examinations, the question inevitably arises whether the child can continue to play sports. If the child's cardiologist has excluded the existence of a heart defect, the child is capable of normal life activities, including the most difficult physical efforts. He can actively engage in sports without any problems, even if a noise is heard.

Mother nature has found a way for several defects to disappear by themselves, and resolve spontaneously.

A congenital heart defect is treated, not a heart murmur. Therefore, the answer to the question: "Is there a reason for fear and panic?", would be no, because a heart murmur in children is usually not a sign of a sick heart, nor does it require an urgent visit to the doc-

30 do 70 % dece u nekom periodu odrastanja ima šum na srcu, koji spada u grupu funkcionalnih šumova. Verovatnoća da je dete koje ima šum na srcu bolesno, vrlo je mala. Važno je saznanje da je fiziološki tkz. razvojni šum proizvod normalnog, zdravog srca. Najveći broj fizioloških šumova nestaje do puberteta.

tor. However, it requires at least a minimal examination, which is carried out by a pediatric cardiologist. So, there is no need to panic, a heart murmur is not a disease, but a clinical sign, and even 30 to 70% of children have a heart murmur during their growing up, which belongs to the group of functional murmurs. The probability that a child with a heart murmur is sick is very small. It is important to know that the physiological so-called developmental murmur is produced by a normal, healthy heart. The largest number of physiological noises disappear by puberty.