



Univerza v Mariboru



MEDICINSKA FAKULTETA

UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION

Predmet:	Otorinolaringologija
Subject Title:	Otorhinolaryngology

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Splošna medicina General medicine - EMŠP		4	8

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	klin. vaje clin work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
20	25		30		75	5

Nosilec predmeta / Lecturer:

Doc. dr. Bogdan Čizmarevič
Doc. dr. Janez Rebol (sonosilec)

Jeziki /

Predavanja / Lecture:

Slovenski/slovene

Languages:

Vaje / Tutorial:

Slovenski/slovene

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Prerequisites:

Vsebina:

Content (Syllabus outline):

Uho (razvoj in kratek pregled anatomije, temelji fiziologije, slušnega in ravnotežnega aparata), bolezni uhlja (razvojne nepravilnosti, mehanične in termične poškodbe, vnetja, benigni in maligni tumorji), zunanega sluhovoda (razvojne nepravilnosti, tujki, vnetja, benigni in maligni tumorji), srednjega ušesa (razvojne nepravilnosti, poškodbe, vnetja in njihovi zapleti, otoskleroza, pareza in paraliza obraznega živca, benigni in maligni tumorji), notranjega ušesa (razvojne nepravilnosti, poškodbe, vnetja, Menierova bolezen in sindromi, starostna naglušnost, tumorji, gluhost, rehabilitacija naglušnih).

Nos in obnosne votline: pregled razvoja in anatomije, temelji fiziologije, bolezni nosu in obnosnih votlin (prirojene nepravilnosti, poškodbe, tujki, krvavitve nosu, vnetja in njihovi zapleti, motnje voja, benigni in maligni tumorji).

Žrelo in požiralnik: pregled razvoja in anatomije, temelji fiziologije, bolezni žrela in požiralnika (prirojene nepravilnosti, poškodbe, tujki, vnetja in njihovi zapleti, parestezije žrela, divertikli, benigni in maligni tumorji).

Grlo in sapnik: pregled razvoja in anatomije, temelji fiziologije, bolezni grla in sapnika (prirojene nepravilnosti, poškodbe in njihove posledice, tujki, vnetja, otekline grla, zamejene hiperplastične spremembe na laringalni sluznici, prekanceroze grla,

Ear: (development and anatomy, principles of physiology of hearing and equilibrium), diseases of the auricle (congenital abnormalities, mechanical and thermal injuries, inflammation, benign and malignant tumours), external ear canal (congenital abnormalities, foreign bodies, injuries, inflammation, benign and malignant tumours), middle ear (congenital abnormalities, injuries, inflammation and complications, otosclerosis, paresis and paralysis of the facial nerve benign and malignant tumours), inner ear (congenital abnormalities, injuries, inflammation, Meniere's disease and syndromes, presbycusis, tumours, deafness, rehabilitation of deaf patients).

Nose and paranasal sinuses: development and anatomy, principles of physiology, diseases of the nose and paranasal sinuses (congenital abnormalities, injuries, foreign bodies, epistaxis, inflammation and complications, smell disorders, benign and malignant tumours).

Pharynx and oesophagus: development and anatomy, principles of physiology, diseases of the pharynx and oesophagus (congenital abnormalities, injuries, foreign bodies, inflammation and complications, paresthesias, diverticles, benign and malignant tumours).

Larynx and trachea: development and anatomy, principles of physiology, diseases of the larynx and

tumorji grla in sapnika, pareze in paralize laringalnih živcev).

Vrat: anatomija, bolezni bezgavk (vnetja, maligni tumorji), prirojene ciste in fistule na vratu.

Slinavke: anatomija in fiziologija, bolezni slinavk (vnetja, sialolitiza, sialoadenoze, benigni in maligni tumorji).

Motnje glasu in govora: fonacijske motnje, artikulacijske motnje, motnje govornega ritma, subsimbolične motnje, simbolične motnje, govor duševno zaostalih, ezofagalni glas in govor.

Otorinolaringološke preiskave in posegi: otoskopija, sprednja rinoskopija, orofaringoskopija, indirektna in direktna laringoskopija, mikrolaringoskopija, zadajšnja rinoskopija, slušne preiskave, preiskave ravnotežnega aparata, renthenske preiskave; **posegi:** izpiranje zunanjega sluhovoda, prepričevanje ušesne troblje, paracenteza, odstarnjevanje tujka iz zunanjega sluhovoda in iz nosu, ustavitev krvavitve iz nosu, izpiranje nosu, punkcija čeljustne votline, incizija peritonzilarnega abscesa, treheotomija in konikotomija, orotrahealna intubacija, nega traheostome.

trachea (congenital abnormalities, injuries, foreign bodies, inflammation and complications, hyperplastic changes of laryngeal mucosa, precanceroses, benign and malignant tumours paresis and paralysis of the vocal cords).

Neck: anatomy, lymph node diseases (inflammation, malignant tumours), congenital cysts and neck fistulas.

Salivary glands: anatomy and physiology, salivary gland diseases (inflammation, sialolithiasis, sialoadenosis, benign and malignant tumours).

Speech and voice disorders: fonation disorders, articulation disorders, speech rhythm disorders, subsymbolic disorders, symbolic disorders, speech of mentally impaired, oesophageal voice and speech.

Investigations and procedures in otorhinolaryngology: otoscopy, anterior rhinoscopy, oropharyngoscopy, indirect and direct laryngoscopy, microlaryngoscopy, posterior rhinoscopy, audiology investigations, vestibular investigations, roentgen investigations; procedures: cerumen removal, eustachian tube ventilation, myringotomy, foreign body removal from the ear canal and nose, treatment of epistaxis, maxillary sinus puncture, quinsy incision, tracheotomy, conicotomy, orotracheal intubation, tracheostomy care.

Temeljni literatura in viri / Textbooks:

- Lee KJ. Essential Otolaryngology (8e). Mc Graw Hill 2003.
- Probst, Grevers, Iro. Basic otorhinolaryngology: a step-by-step learning guide. Thieme 2005.

Priporočeni učbeniki:

- Vinko Kambic, Otorinolaringologija, Ljubljana, Mladinska knjiga, 1984.
- Becker and al. Ear, Nose and Throat Diseases, Thieme Stuttgart 1993.

Cilji:

Otorinolaringologija seznanja bodočega zdravnika s patofiziologijo, kliničnimi znamenji, diagnostiko, zdravljenjem in preprečevanjem bolezni ušes, nosu, žrela in grla. Študenta usposobi za oceno bolezni in določitev, kdaj bo kot zdravnik splošne medicine zdravil bolnika sam in kdaj ga bo poslal k specialistu. V sklopu teoretičnega, predvsem pa praktičnega dela, se študent nauči temeljnih otorinolaringoloških preiskav in enostavnejših oziroma nujnih posegov.

Predvideni študijski rezultati:

Znanje in razumevanje:

Poznavanje in zdravljenje pomembnejših otorinolaringoloških bolezni.

Prenesljive/ključne spretnosti in drugi atributi:

Otorinolaringološka preiskava, osnovni posegi v ORL.

Metode poučevanja in učenja:

Objectives:

Students get acquainted with pathophysiology, clinical signs, investigations, treatment and prevention of ENT diseases. They should be able to assess the disease and decide when to treat the patient by themselves or send him to specialist.

During theoretical and especially practical work student learns about fundamental ENT investigations and simple respectively urgent procedures.

Intended learning outcomes:

Knowledge and understanding

Knowledge and treatment of important ENT diseases.

Transferable/Key Skills and other attributes:

ENT investigation, basic procedures in ENT

Learning and teaching methods:

Vaje se izvajajo z učenjem preiskave na študentih in preiskovanjem bolnikov.
Seminarji- pod vodstvom mentorjev se predstavijo izbrane teme.
Predavanja s strani predavateljev.

ENT investigation is learnt on student colleagues and later practiced on patients.
Seminar- special themes are presented under mentorship.
Lectures by lecturers.

Načini ocenjevanja:

Delež (v %) /
Weight (in %)

Assessment:

Način (pisni izpit, ustno izpraševanje, naloge, projekt)		Type (examination, oral, coursework, project):
- opravljen ustni izpit iz ORL - (preiskave) - Pisni izpit	50 % 50 %	- oral examination about ENT investigation - written exam

Reference nosilca / Lecturer's references:**BOGDAN ČIZMAREVIČ**

ČIZMAREVIČ, Bogdan, LANIŠNIK, Boštjan, DINEVSKI, Dejan. Cervical lymph node metastasis of squamous cell carcinoma from unknown primary tumor. Collegium antropologicum, ISSN 0350-6134, 2012, vol. 36, suppl. 2, str. 27-32, ilustr. [http://www.collantropol.hr/_doc/Coll.Antropol.36\(2012\)Suppl.2:%2027%E2%80%9332.pdf](http://www.collantropol.hr/_doc/Coll.Antropol.36(2012)Suppl.2:%2027%E2%80%9332.pdf). [COBISS.SI-ID 4586303], [JCR, SNIP, WoS do 15. 3. 2013: št. citatov (TC): 0, čistih citatov (CI): 0, normirano št. čistih citatov (NC): 0]

LANIŠNIK, Boštjan, ČIZMAREVIČ, Bogdan. Necrotizing fasciitis of the head and neck: 34 cases of a single institution experience. European archives of oto-rhino-laryngology, ISSN 0937-4477, Mar. 2010, vol. 267, no. 3, str. 415-421, doi: 10.1007/s00405-009-1007-7. [COBISS.SI-ID 3394111], [JCR, SNIP, WoS do 14. 2. 2013: št. citatov (TC): 3, čistih citatov (CI): 3, normirano št. čistih citatov (NC): 3, Scopus do 5. 11. 2013: št. citatov (TC): 13, čistih citatov (CI): 13, normirano št. čistih citatov (NC): 11]

KRAVOS, Alenka, ŽUPEVC, Avgust, ČIZMAREVIČ, Bogdan, HOČEVAR-BOLTEŽAR, Irena. The role of allergy in the etiology of Reinke's edema on vocal folds. Wiener klinische Wochenschrift. Supplementum, ISSN 0300-5178, 2010, vol. 122, suppl. 2, str. 44-48, doi: 10.1007/s00508-010-1349-6. [COBISS.SI-ID 3668287], [JCR, WoS do 17. 1. 2013: št. citatov (TC): 1, čistih citatov (CI): 1, normirano št. čistih citatov (NC): 0, Scopus do 1. 8. 2012: št. citatov (TC): 2, čistih citatov (CI): 2, normirano št. čistih citatov (NC): 1]

ČIZMAREVIČ, Bogdan, LANIŠNIK, Boštjan, DEBEVC, David, LEVART, Primož. Accurate histopathological determination of the status of the neck with the serial cuts and immunohistochemical staining of the sentinel node. V: 5th International symposium on sentinel node biopsy in head and neck cancer, Amsterdam, 2012 : [24 & 25 May 2012]. [Amsterdam: s. n., 2012], str. 34. [COBISS.SI-ID 4299583]

ČIZMAREVIČ, Bogdan, PUKLAVEC, Ludvik, LANIŠNIK, Boštjan, KAVALAR, Rajko, LEVART, Primož. Sentinel lymph node detection in the surgical treatment of oral cavity and oropharyngeal carcinomas. V: PRGOMET, Drago (ur.), et al. Minimally invasive and endoscopic head and neck surgery : manual, (University textbook, Manualia Universitatis studiorum Zagabiensis), (Medicinska biblioteka). Zagreb: Naklada Ljevak, cop. 2010, str. 57-62. [COBISS.SI-ID 3809343]

JANEZ REBOL:

REBOL, Janez, NAHTIGAL, Maja. Argon laser stapedotomy = Stapedotomija z argonskim laserjem. Acta medico-biotechnica, ISSN 1855-5640, 2011, vol. 4, [no.] 2, str. 18-23, ilustr. http://www.actamedbio.mf.uni-mb.si/pdf/02%207id_amb_%2050_11.pdf. [COBISS.SI-ID 4161087]

REBOL, Janez, MILOJKOVIČ, Vojin. Označitev proksimalnega krna obraznega živca za odloženo rekonstrukcijo živca po odstranitvi vestibularnega švanoma = Marking of the proximal facial nerve stump for delayed repair after vestibular schwannoma removal. Acta medico-biotechnica, ISSN 1855-5640, 2010, vol. 3, no. 1, str. 56-60. [COBISS.SI-ID 512084536]

REBOL, Janez, NAHTIGAL, Maja. Conductive hearing loss - otosclerosis, genetics. V: KOUNTAKIS, Stilianos E. (ur.).

Encyclopedia of otolaryngology, head and neck surgery. Berlin; Heidelberg: Springer, cop. 2013.
http://link.springer.com/content/pdf/10.1007%2F978-3-642-23499-6_820.pdf. [COBISS.SI-ID 4746815]

REBOL, Janez. Otosclerosis. V: KOUNTAKIS, Stilianos E. (ur.). Encyclopedia of otolaryngology, head and neck surgery. Berlin; Heidelberg: Springer, cop. 2013, ilustr. http://link.springer.com/content/pdf/10.1007%2F978-3-642-23499-6_702.pdf. [COBISS.SI-ID 4746559]

REBOL, Janez. Atlas otoskopije. Maribor: Fakulteta za zdravstvene vede, 2011. 88 str., ilustr. ISBN 978-961-6254-46-5.
[COBISS.SI-ID 67048961]