

Study program: Integrated Academic Studies in Medicine
Course title: Otorhinolaryngology
Teacher: Zoran S. Komazec, Slobodan N. Savović, Slobodanka N. Lemajić- Komazec, Maja M. Buljčik-Čupić, Ljiljana D. Jovančević, Danijela M. Dragičević
Course status: compulsory
ECTS Credits: 3
Condition: -
<p>Course aim</p> <p>Making students understand etiopathogenesis, clinical features, introducing them into diagnostic procedures and therapies in otorhinolaryngological ailments and the ailments of the head and neck.</p>
<p>Expected outcome of the course:</p> <p>Unsupervised performance of otorhinolaryngological clinical examination, diagnosing and doing the procedure in ENT. Making diagnoses on the basis of radiological and functional findings by themselves. Consulting, advising and controlling ENT patients. Training on medical manikins: injuries, stopping nose bleeding, ear rinsing, conicotomy, endotracheal intubation, nasogastric sonde placing. Casuistics.</p>
<p>Course description</p> <p><i>Theoretical education</i></p> <p>1. Anatomy and physiology of the ear. Diagnostics of otological diseases. 2. Injuries of the ear. Foreign bodies of the external hearing canal and cerumen. 3. Acute inflammation of the outer and middle ear. 4. Chronic inflammation of the middle ear. 5. Otogenic complications. 6. Inner ear disease. Benign and malignant tumors of the outer, middle and inner ear. 7. Audiology. Vestibulology. 8. Anatomy and physiology of the nose and paranasal cavities. Congenital and acquired malformations of the nose. 9. Foreign body in the nose. Injuries of the nose. Bleeding from the nose. Inflammation of the skin of the nose. 10. Facial injuries. 11. Acute and chronic inflammation of nasal mucosa. Allergic rhinitis. Nasal polyps. 12. Acute and chronic inflammation of the paranasal cavities. Complications associated with paranasal cavity inflammations. 13. Rare diseases of the nose and paranasal cavities. Tumors of the nose and paranasal cavities. 14. Anatomy and Physiology of oral cavity and pharynx. Reticulo-endothelial function of muscle. Hypertrophy of the lymphatic ring. Tonsillar problem. Taste disorders. 15. Congenital anomalies of the oral cavity and pharynx. Injuries of oral cavity and pharynx. Inflammatory diseases of the oral cavity. Autoimmune diseases of the oral cavity. 16. Acute and chronic inflammation of pharyngeal mucosa. Pharyngeal abscesses. 17. Diseases of the tongue. Tumors of oral cavity. Tongue tumors. 18. Neurogenic and non-infectious pharyngeal diseases. 19. Tumors of the epipharynx and mesopharynx. 20. Anatomy and physiology of the larynx. Diagnostic methods in laryngology and phoniatics. Symptoms of larynx diseases and voice and speech disorders. Congenital malformations of the larynx. 21. Laryngeal edema. Laryngeal paralysis. Laryngeal trauma. 22. Acute and chronic inflammatory processes of the larynx. 23. Benign tumors of the larynx. Pseudo tumors of the larynx. 24. Malignant tumors of the larynx and hypopharynx. 25. Basics of phoniatics. 26. Foreign bodies of the laryngotracheal tree. Stenosis of the larynx and trachea. Coniotomy and tracheotomy. 27. Esophageal motility disorders. Dysphagia. Esophageal diverticulum. Injuries and foreign bodies of the esophagus. Esophageal tumors. 28. Congenital cysts and fistula in the neck. Lymphadenitis. Neck abscesses. Neck trauma. 29. Neck lymph node metastases. Tumors of thyroid gland. 30. Anatomy and Physiology of salivary glands. Acute and chronic inflammatory processes of salivary glands. Benign and malignant tumors of the salivary glands.</p> <p><i>Practical education</i></p> <p>1. Introduction to practical otorhinolaryngology classes. Anamnesis. 2. Working place (head mirror, light source, the position of patients, optical aids, directoscop, microscope). 3. Examination of the nose. 4. Examination of the mouth and oropharynx. 5. Examination of the ear. 6. Examination of the larynx and the neck. 7. Interventions in rhinology (extraction of foreign bodies of the nose, method of evacuation of secretions from the nose and sinuses according to Protz, Aerosol therapy of rhinosinusitis, application of nose drops). X-ray of the nose and paranasal cavities- the interpretation of the results. 8. Stopping the nose bleedong. 9. Rhinomanometry, allergy testing of patients. Patients with injuries of the nose and sinuses, reposition of nasal bones. Displaying patients with frontoethmoidal injuries. Patients with sinusogenic complications. 10. Functional endonasal sinus surgery and surgery of paranasal cavities. Patients with benign and malignant tumors of the nose and sinuses. 11. Interventions in the oral cavity and pharynx, extraction of foreign bodies. Interventions in the oral cavity and throat, incision of the peritoneal abscess. 12. Patients with acute and chronic tonsilitis. Patients with phlegmon and neck abscess. 13. Patients with pharyngeal tumors, biopsy of the tumor in oral cavity and pharynx. Diagnostic procedures and principles of surgical treatment of patients with throat tumors. 14.</p>

Patients with facial injuries, X-ray diagnosis of parapharyngeal space tumors. Patients with salivary gland tumors. Post-operative care of patients after surgery in the region of oral cavity and maxilla. 15. Diagnosing throat diseases, clinical diagnostics, ultrasound, X-ray diagnosis. Patients with cervical metastases. Neck dissection. 16. Rinsing foreign bodies and cerumena from external ear canal. Local therapy of ear surpuration. Management of outer and middle ear injuries, incision of othematoma, setting the sterile strips. Paracentesis. 17. X-Ray diagnostics of otological diseases, interpretation of basic X-ray scans. Politzer methods. 18. Quantitative and qualitative methods for hearing evaluation. Evaluation of hearing through whispering and loud speech. Tuning fork tests (Weber, Rinne, Schwabach, Gele). Tonal audiometry, types of hearing impairments, types of audiograms. 19. Impedancemetry, Tympanometry and typical curves, stapedius reflex. 20. Examination of vestibular apparatus, orthostatic and dynamostatic tests, caloric test (Dix Hallpike), electronystagmography. 21. Directoscopy of the larynx, laringomicroscopy. Diagnostics of laryngeal and hypopharyngeal tumors. X-ray diagnosis of the diseases of the larynx and hypopharynx. Ultrasound diagnostics of the neck. Biopsy of laryngeal and hypopharyngeal tumors. 22. Treatment of acute inflammation of the larynx, inhalation therapy. 23. Treatment of acute laryngeal edema in children and adults, subglottic laryngitis, Quinke laryngeal edema. 24. Endoscopic surgery of laryngeal tumors and pseudotumors. 25. Surgical therapy of tumors of the larynx, post-operative care of patients after laryngectomy, nasogastric probe, tracheostoma, rehabilitation of swallowing. 26. Videostroboscopy, dysphonia treatment. Speech of patients underwent laryngoectomy, laryngophone, esophageal voice and speech, vocal prosthesis. 27. Foreign bodies in the airways, diagnosis and therapy. 28. Tracheostomy, demonstration of surgical intervention, postoperative care of patients underwent tracheotomy, replacement of cannula. 29. Foreign bodies of the esophagus, diagnosis and extraction. 30. Corrosive injuries of the oral cavity, pharynx and esophagus, first aid in corrosive injuries, diagnosis and treatment of corrosive injuries, therapy of late complication of corrosive injuries of the esophagus.

Literature

1. Probst R, Grebers G, Iro H. Basic Otorhinolaryngology. Thieme, 2006.

Number of active classes	Theoretical classes: 30	Practical classes: 30
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Teaching methods

Theoretical lectures, seminars, practical

Student activity assessment (maximally 100 points)

Pre-exam activities	points	Final exam	points
Lectures	10	Written	20
Practices	20	Oral	50
Colloquium			
Essay			