

MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS
EDUCATIONAL INSTITUTION
BELARUSIAN STATE MEDICAL UNIVERSITY

**Контрольный
экземпляр**



APPROVED

by First Vice-Rector, Professor

I.N.Moroz

27.06.2023

Reg. # UD-01-27/2324/edu.

OTORHINOLARYNGOLOGY AND DENTISTRY

**Curriculum of educational institution
in the educational discipline for the specialty:**

1-79 01 01 «General Medicine»

Curriculum is based on the educational program «Otorhinolaryngology and Dentistry», approved 27.06.2023, registration # УД-01-27/2324/уч.; on the educational plan in the specialty 1-79 01 01 «General Medicine», approved 17.05.2023, registration # 7-07-0911-01/2324/mf.

COMPILERS:

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RECOMMENDED FOR APPROVAL:

by the Department of Ear, Throat, Nose Diseases of the educational institution «Belarusian State Medical University»
(protocol # 10 of 17.05.2023);

by the Department maxillofacial surgery of the educational institution «Belarusian State Medical University»
(protocol # 16 of 30.05.2023);

by the Scientific and Methodological Council of the educational institution «Belarusian State Medical University»
(protocol # 6 of 27.06.2023)

EXPLANATORY NOTE

«Otorhinolaryngology and Dentistry» is an academic discipline of the module «Surgical Module 2», containing systematized scientific knowledge about the etiology, pathogenesis, clinical course, methods of diagnosis, treatment, prevention of diseases of the ear, nose, paranasal sinuses, pharynx and larynx, and dental diseases.

The goal of the academic discipline «Otorhinolaryngology and Dentistry» is the formation of specialized competencies for constructing a clinical diagnosis and prevention of diseases of the ear, nose, paranasal sinuses, pharynx and larynx, and dental diseases.

The objectives of the academic discipline «Otorhinolaryngology and Dentistry» are to develop students' scientific knowledge about the anatomical and physiological characteristics of the maxillofacial region, the dentofacial system, and otorhinolaryngological organs; etiology, pathogenesis, clinical manifestations of dental and otorhinolaryngological diseases; skills and abilities required for:

- examinations of patients with otorhinolaryngological diseases;
- examinations of patients with dental diseases;
- interpretation of the results of laboratory and instrumental research methods;
- constructing a diagnosis;
- diagnosis, treatment, prevention of otorhinolaryngological diseases;
- diagnosis, treatment, prevention of dental diseases;
- providing emergency medical care for critical conditions in dentistry and maxillofacial surgery;

providing emergency medical care for critical conditions in otorhinolaryngology/

The knowledge, abilities and skills acquired in the study of the academic discipline «Otorhinolaryngology and Dentistry» are necessary for the successful study of the following disciplines: «Internal Medicine», «Surgical Diseases», «Oncology».

A student who has mastered the content of the educational material of the academic discipline must have the following specialized competence:

SC. Provide primary and specialized medical care for the most common otorhinolaryngological, dental, eye diseases and injuries, including urgent and life-threatening conditio

As a result of studying the academic discipline «Otorhinolaryngology and Dentistry», the student should

know:

- anatomical and physiological features of otorhinolaryngological organs;
- anatomical and physiological features of the maxillofacial region;
- age-related characteristics of the nose, ear, pharynx, larynx;
- etiology and pathogenesis of otorhinolaryngological diseases ;
- etiology and pathogenesis, clinical picture of diseases in the maxillofacial area and dental diseases;
- clinical picture of otorhinolaryngological diseases and their complications, algorithm for examining patients, methods of differential diagnosis ;
- modern methods of clinical, laboratory, instrumental examination of patients in otorhinolaryngology ;

diagnostic methods and principles of treatment of foreign bodies in the respiratory tract;

diagnostic methods and differential diagnosis of diseases of the maxillofacial region;

modern methods of diagnosis and treatment of benign and malignant neoplasms of the upper respiratory tract;

modern methods of diagnosis and treatment of diseases of the upper respiratory tract and ear, indications and contraindications for their use ;

modern methods of diagnosis, treatment and prevention of the most common diseases and damage to the organs of hearing, voice and speech;

modern methods of treating dental diseases and diseases in the maxillofacial area;

modern methods of rehabilitation of patients with diseases of the otorhinolaryngological organs;

be able to:

conduct a physical examination of patients with otorhinolaryngological diseases;
draw up an individual patient examination plan;

formulate a diagnosis ;

examine the function of nasal breathing, the olfactory function of the nose;

examine hearing acuity using whispered speech, auditory function using tuning forks;

read the hearing passport and audiogram;

examine vestibular function by rotating on a Barany chair ;

identify signs of disease and damage to otorhinolaryngological organs on radiographs ;

examine a patient with diseases of the maxillofacial area, including determining indications for additional diagnostic methods and interpreting the data obtained;

carry out differential diagnosis of diseases and injuries of the maxillofacial area;

provide medical care in case of emergency conditions in otorhinolaryngology;

prepare medical documentation;

determine indications for treatment of diseases of the maxillofacial region and oral cavity.

master:

methods of preparing instruments for diagnostic and therapeutic manipulations and procedures;

method of using a frontal reflector, otoscopy using an otoscope;

methods of performing pharyngoscopy, anterior and posterior rhinoscopy, examination of the vestibule of the nose;

technique of lubricating the mucous membrane of the pharynx and nose with medications, instilling drops into the nose;

technique for performing anterior nasal tamponade;

technique for removing foreign bodies from the anterior sections of the nasal cavity and oropharynx;

principles of care for patients with tracheostomy;

technique for performing conicotomy;

techniques for introducing turunda into the external auditory canal;
 technique for toileting the external auditory canal;
 methods of examining patients with diseases of the maxillofacial area;
 methods of performing emergency manipulations during inflammatory processes and injuries in the maxillofacial area;
 skills in providing emergency medical care for injuries, foreign bodies, nosebleeds, and acute otorhinolaryngological diseases.

Total number of hours for the study of the discipline is 134 academic hours. Classroom hours according to the types of studies: lectures - 16 hours (including 5 hours of supervised student independent work), practical classes - 72 hours, student independent work (self-study) - 46 hours.

Intermediate assessment is carried out according to the syllabus of the specialty in the form of graded credit (7 semester).

Form of higher education – full-time.

ALLOCATION OF ACADEMIC TIME ACCORDING TO SEMESTERS OF STUDY

Code, name of the specialty	semester	Number of academic hours						Form of intermediate assessment
		in total	in class	including			out-of-class self-studies	
				lectures (including supervised independent work)	supervised student independent work	practical classes		
1-79 01 01 «General Medicine»	6	46	30	6	2	24	16	-
	7	88	58	10	3	48	30	graded credit

THEMATIC PLAN

Section (topic) name	Number of class hours	
	lectures (including GIW)	practical lessons
1. Dentistry	6	24
1.1. Organization of dental care in the Republic of Belarus. Caries and its complications. Prevention of dental diseases	-	3
1.2. Odontogenic inflammatory diseases	2	3
1.3. Non-odontogenic inflammatory diseases	-	3
1.4. Injuries of soft tissue structures of maxillofacial area	-	3
1.5. Injuries of bones of the facial part of skull	2	3
1.6. Primary medical care and priority measures for inflammatory processes and injuries of maxillofacial area	-	3
1.7. Neoplasms of the maxillofacial area	2	3
1.8. Congenital anomalies and acquired defects and deformities of maxillofacial area	-	3
2. Otorhinolaryngology	10	48
2.1. Diseases of the nose and paranasal sinuses	2	10
2.2. Diseases of the pharynx. Tumours of the pharynx	2	5
2.3. Diseases of the ear	4	15
2.4. Diseases of the larynx	2	10
2.5. Rendering first aid in otorhinolaryngology	-	8
Total hours	16	72

CONTENT OF THE EDUCATIONAL MATERIAL

1. Dentistry

1.1. Organization of dental care in the Republic of Belarus. Caries and its complications. Prevention of dental diseases

Organization of dental care on an outpatient basis and maxillofacial surgery services in the Republic of Belarus. Regulatory documents regulating the provision of dental care. Regulatory documents regulating the provision of assistance in maxillofacial surgery.

Dental caries. Modern theories of the etiology and pathogenesis of dental caries. The role of microbial contamination of the oral cavity, enamel resistance and carbohydrate foods in the development of caries.

Classification of caries, clinical picture, diagnosis, principles of treatment.

Pulpitis: clinical manifestations, principles of treatment, provision of specialized medical care.

Apical periodontitis: clinical manifestations, principles of therapeutic and surgical treatment.

Principles of prevention of dental diseases. Prevention of dental caries and its complications. Prevention of odontogenic infection of the maxillofacial area and its complications.

Examination of patients with dental diseases of the maxillofacial area, collection of complaints and medical history, palpation of the maxillofacial area, physical examination, drawing up an examination plan, interpreting the results of laboratory and instrumental examination methods, formulating a diagnosis, drawing up a treatment plan. Preparation of medical documentation.

1.2. Odontogenic inflammatory diseases

Odontogenic inflammatory processes in the maxillofacial area: classification, ways of spreading infection.

Odontogenic periostitis: clinical picture, diagnosis, treatment methods.

Odontogenic osteomyelitis of the jaws: classification, clinical picture, diagnosis, treatment methods.

Odontogenic abscesses and phlegmons of the maxillofacial region: etiology, clinical picture, diagnosis, treatment.

Odontogenic lymphadenitis of the maxillofacial region and neck: etiology, clinical picture, diagnosis, principles of treatment.

Examination of patients with odontogenic inflammatory diseases of the maxillofacial area. Collection of complaints and anamnesis of odontogenic inflammatory diseases, palpation of the maxillofacial area for inflammatory diseases, physical examination, drawing up an examination plan, interpretation of the results of laboratory and instrumental examination methods, formulation of a diagnosis, drawing up a treatment plan for odontogenic inflammatory diseases. Preparation of medical documentation.

1.3. Non-odontogenic inflammatory diseases

Nonodontogenic osteomyelitis of the jaws: classification, clinical picture, diagnosis, treatment methods.

Boils and carbuncles of the face: clinical picture, diagnosis, principles of treatment.

Non-odontogenic lymphadenitis of the maxillofacial region and neck: etiology, clinical picture, diagnosis, differential diagnosis, principles of treatment.

Examination of patients with non-odontogenic inflammatory diseases of the maxillofacial area. Collection of complaints and anamnesis of non-odontogenic inflammatory diseases, palpation of the maxillofacial area for inflammatory diseases, physical examination, drawing up an examination plan, interpretation of the results of laboratory and instrumental examination methods, formulation of a diagnosis, drawing up a treatment plan for non-odontogenic inflammatory diseases. Preparation of medical documentation.

1.4. Injuries to soft tissue structures of the maxillofacial area

Classification of injuries to soft tissue structures of the maxillofacial region.

Principles of primary surgical treatment of wounds of the face and neck.

Bleeding in the maxillofacial area. Methods for stopping bleeding in the maxillofacial area.

Examination of patients with injuries of soft tissue structures of the maxillofacial area. Collection of complaints and medical history for injuries to soft tissue structures of the maxillofacial area, physical examination, drawing up an examination plan, interpretation of the results of laboratory and instrumental examination methods, formulation of a diagnosis, drawing up a treatment plan for injuries to soft tissue structures of the maxillofacial area. Preparation of medical documentation.

1.5. Injuries to the bones of the facial part of the skull

Classification of bone fractures of the facial skeleton.

Fractures of the lower jaw : classification, clinical picture, diagnosis, treatment, emergency medical care, types of temporary immobilization.

Fractures of the midface, upper jaw, zygomatic bone and zygomatic arch: classifications, clinical picture, diagnosis, treatment.

Combined injury: clinical picture, diagnosis, principles of treatment.

Combined injury: clinical picture, diagnosis, principles of treatment.

Examination of patients with injuries to the facial bones of the skull. Collection of complaints and anamnesis for injuries to the bones of the facial part of the skull, physical examination, drawing up an examination plan, interpretation of the results of laboratory and instrumental examination methods, formulating a diagnosis, drawing up a treatment plan for fractures of the bones of the facial part of the skull. Preparation of medical documentation.

1.6. Primary medical care and priority measures for inflammatory processes and injuries of the maxillofacial area

Classification of emergency conditions in the maxillofacial area during inflammatory processes and injuries of the maxillofacial area. Features of the provision of pre-medical care in emergency conditions in maxillofacial surgery and dentistry. Features of the provision of primary medical care in emergency conditions in maxillofacial surgery and dentistry. The procedure for referring patients for specialized medical care.

Examination of patients with inflammatory diseases and injuries of the maxillofacial area. Priority measures for inflammatory processes and injuries of the maxillofacial area. Preparation of medical documentation.

1.7. Neoplasms of the maxillofacial area

Classification of neoplasms of the maxillofacial region.

Benign neoplasms: classification, clinical picture, diagnosis, differential diagnosis, treatment.

Malignant neoplasms: clinical and morphological classification, clinical picture, diagnosis, differential diagnosis, treatment.

Examination of patients with neoplasms of the maxillofacial area. Collection of complaints and anamnesis for neoplasms of the maxillofacial area, physical examination, drawing up an examination plan, interpretation of the results of laboratory and instrumental examination methods, formulation of a diagnosis, drawing up a treatment plan for neoplasms of the maxillofacial area. Preparation of medical documentation. Medical observation and clinical examination of patients with neoplasms of the maxillofacial area.

1.8. Congenital anomalies and acquired defects and deformations of the maxillofacial area

Classification of congenital anomalies and acquired deformities of the maxillofacial region. Assessment of anthropometric data. Clinical picture of anomalies and deformations, diagnosis, differential diagnosis, development of a treatment plan, types of treatment, postoperative rehabilitation.

2. Otorhinolaryngology

2.1. Diseases of the nose and paranasal sinuses

Diseases of the external nose and nasal cavity.

Clinical anatomy and physiology of the nose and paranasal sinuses. Methods of investigation of the nose and paranasal sinuses: anterior, posterior rhinoscopy, endoscopic investigation of the nasal cavity and paranasal sinuses, X-ray imaging of the nasal bones and paranasal sinuses. Computed tomography of the paranasal sinuses.

Nasal furuncle: clinical findings, diagnostics, treatment, prophylaxis.

Eczema of the external nose: etiology, clinical findings, diagnostics, treatment.

Acute rhinitis: etiology, clinical findings, diagnostics, treatment.

Hematoma and abscess of the nasal septum: clinical findings, diagnostics, treatment.

Nasal septum deviation: etiology, symptomatology, indications for surgical treatment.

Congenital abnormalities of the external nose and nose cavity. Deformities of the external nose, rhinoplasty.

Chronic Rhinitis: classification, clinical findings, diagnostics, treatment.

Ozena: epidemiology, clinical findings, differential diagnosis, treatment.

Diseases of the paranasal sinuses.

The features of the clinical course of sinusitis in children and adult patients.

Acute maxillary sinusitis: etiology, clinical findings, diagnostics, treatment.

Acute ethmoiditis: etiology, clinical findings, diagnostics, treatment.

Acute frontitis: etiology, clinical findings, diagnostics, treatment.

Acute sphenoiditis: etiology, clinical findings, diagnostics, treatment.

Chronic maxillary sinusitis: etiology, clinical findings, diagnostics, treatment.

Chronic ethmoiditis: etiology, clinical findings, diagnostics, treatment.

Chronic frontitis: etiology, clinical findings, diagnostics, treatment.

Chronic sphenoiditis: etiology, clinical findings, diagnostics, treatment.

Indications for surgical treatment of the diseases of the paranasal sinuses. Orbital and intracranial complications of the diseases of the nose and paranasal sinuses. Classification of rhinogenic orbital complications according to B.V. Shevrygin.

Eyelid edema, orbital periostitis: etiology, clinical findings, diagnostics, treatment.

Subperiosteal abscess: etiology, clinical findings, diagnostics, treatment.

Periorbital cellulitis, orbital phlegmon: etiology, clinical findings, diagnostics, treatment.

Arachnoiditis, meningitis, brain abscess, thrombosis of the cavernous sinus: etiology, clinical findings, diagnostics, treatment.

Malignant and benign tumours: diagnostics and treatment methods.

Examination of patients with diseases of the nose and paranasal sinuses, complaints and anamnesis of the disease gathering, physical examination, drawing up of a examination plan, interpretation of the results of laboratory and instrumental examination methods, diagnosis formulation, drawing up of a treatment plan, substantiation of indications for surgical intervention. Registering medical record documents.

2.2 Diseases of the pharynx. Tumours of the pharynx

Clinical anatomy and physiology of the pharynx. Methods of investigation of the pharynx: pharyngoscopy, epipharyngoscopy, finger investigation of the nasopharynx.

Pharyngeal lymphatic (Waldeyer's) ring, its role in formation of local and general immunity in children.

Adenoid vegetation and the palatine tonsil hyperplasia in children: diagnostics, treatment methods.

Classification of acute and chronic tonsillitis according to I.B. Soldatov. Differential diagnosis of acute tonsillitis. Chronic nonspecific tonsillitis: classification, diagnostics, treatment tactics and complications. Complications of acute and chronic tonsillitis (paratonsillitis, parapharyngitis, neck phlegmon, mediastinitis, sepsis). Prophylactic medical examination and treatment of patients with chronic tonsillitis.

Acute pharyngitis: etiology, clinical findings, diagnostics, treatment and prophylaxis.

Chronic pharyngitis, pharyngomycosis: classification, etiology, clinical findings, diagnostics, treatment and prophylaxis. Sleep disorders in children and adults: diagnostics and treatment methods.

Benign tumors (lymphangioma, angiofibroma, papillomatosis): clinical findings, diagnostics, treatment. Neck cysts. Malignant tumors of the pharynx (cancer, lymphosarcoma): methods of early diagnostics, treatment principles.

Examination of patients with diseases of the pharynx, complaints and anamnesis of the disease gathering, physical examination, drawing up of an examination plan, interpretation of the results of laboratory and instrumental examination methods, diagnosis formulation, drawing up of a treatment plan, substantiation of indications for surgical intervention. Registering medical record documents.

2.3. Diseases of the ear

Clinical anatomy and physiology of the ear. Testing hearing without an audiometer: hearing threshold for whispered voice and conversational speech, tuning fork tests. Different types of audiometric testing. Features of Hearing Tests for Children. Brainstem Auditory Evoked Potentials (BAEPs), Otoacoustic emissions (OAE) testing, new-born hearing screening.

Methods of vestibular function testing: history taking, study of static and dynamic balance disorders, spontaneous nystagmus: testing, differential diagnosis with cerebellar nystagmus.

Otitis externa (bacterial, fungal otitis externa, eczema, furuncle of the external auditory meatus): etiology, clinical findings, diagnostics, treatment.

Foreign bodies of the external auditory canal. Characteristics of foreign bodies. Removal methods of foreign bodies.

Acute and chronic catarrhal otitis media in children and adult patients: etiology, pathogenesis, diagnostics, treatment and prophylaxis.

Acute purulent otitis media: clinical findings, diagnostics, treatment. Specific forms of inflammation of the middle ear (scarlatinal otitis, measles otitis, influenza otitis).

Fungal and bacterial ear infection: differential diagnosis.

Acute mastoiditis: penetration routes of the infection, indications for surgical treatment.

Otoantritis: etiology, clinical findings, diagnostics, treatment.

Paracentesis: principle of performing, its indications and complications.

Chronic diseases of the middle ear (mesotympanitis, epitympanitis, mesoepitympanitis): etiology, clinical findings, treatment. Indications for surgical treatment of chronic purulent otitis media. Principles of reconstructive and radical ear surgery, conservative treatment. Congenital malformations of the middle ear.

Labyrinthitis: etiology, clinical findings, treatment. Classification of labyrinthitis. Differential diagnosis of labyrinthitis. Meniere's disease, vestibular neuronitis: differential diagnosis.

Sensorineural hearing loss. Etiology, clinical findings, diagnostics, treatment. Rehabilitation of patients with sensorineural hearing loss. Cochlear implantation, surgical rehabilitation.

Otosclerosis: etiology, clinical findings, diagnostics, treatment.

Otogenic intracranial complications. Otogenic neuropathy of the facial nerve.

Thrombophlebitis of the sigmoid sinus: etiology, clinical findings, treatment.

Otogenic sepsis: etiology, clinical findings, diagnostics, treatment.

Meningitis (serous and purulent): pathogenesis, etiology, clinical findings, treatment.

Cerebral and cerebellar abscesses: etiology, clinical findings, diagnostics, treatment. Principles of ear surgery.

Examination of patients with diseases of the ear, complaints and anamnesis of the disease gathering, physical examination, drawing up of an examination plan, interpretation of the results of laboratory and instrumental examination methods, diagnosis formulation, drawing up of a treatment plan, substantiation of indications for surgical intervention. Registering medical record documents.

2.4. Diseases of the larynx

Larynx-applied anatomy and physiology. Indirect and direct laryngoscopy. Radiological and endoscopic methods of diagnostics of laryngeal, tracheal, bronchial and esophageal diseases. Acute laryngeal diseases. Acute laryngitis. Subglottic laryngitis in children. Acute laryngeal stenosis, surgical methods of treatment. Stages of laryngotracheal stenosis. Indications and mechanism of tracheostomy, conicotomy.

Chronic laryngitis: classification, clinical findings, diagnostics, treatment.

Chronic laryngeal stenosis: treatment methods.

Paresis and paralyzes of the larynx: etiology, clinical findings, diagnostics, treatment.

Specific diseases of the larynx (fungal laryngitis, scleroma, tuberculosis, syphilis): classification, clinical findings, differential diagnosis, treatment.

Tumor-like laryngeal diseases: vocal nodules, laryngeal cysts and polyps. Benign laryngeal tumors. Juvenile papillomatosis of the larynx in children and adults: etiology, clinical findings, diagnostics, treatment. Malignant tumors of the larynx (cancer, sarcoma), methods of early diagnostics, treatment concepts.

Examination of patients with diseases of the larynx, complaints and anamnesis of the disease gathering, physical examination, drawing up of an examination plan, interpretation of the results of laboratory and instrumental examination methods, diagnosis formulation, drawing up of a treatment plan, substantiation of indications for surgical intervention. Registering medical record documents.

2.5. Rendering first aid in otorhinolaryngology

Nasal bleedings. Estimation methods of blood loss. Causes of nasal bleedings, clinical findings, methods to stop nose bleeding.

Dislocated and non-dislocated nasal fractures, open and closed fractures of the nasal bone.

Foreign bodies of the ear, pharynx, larynx, tracheas, bronchial tree, esophagus. Methods of diagnostics and foreign bodies removal.

Examination of patients with injuries of otorhinolaryngological organs, complaints and anamnesis of the disease gathering, physical examination, drawing up of an examination plan, interpretation of the results of laboratory and instrumental examination methods, diagnosis formulation, drawing up of a treatment plan, substantiation of indications for surgical intervention. Registering medical record documents.

ACADEMIC DISCIPLINE CURRICULAR CHART

Section, theme number	The name of section, theme	Number of class hours				Self-studies	Form of knowledge control
		Lectures (including GIW)	GIW	Practical lessons			
5 semester							
1	Dentistry	6	2	24	16		
1.1.	Organization of dental care in the Republic of Belarus. Caries and its complications. Prevention of dental diseases	-	-	3	2	interview; tests; electronic tests; situational tasks solving	
1.2.	Odontogenic inflammatory diseases	-	-	3	2	interview; reports at practical classes; tests; assessment based on the case method; electronic tests; situational tasks solving	
1.2.	Odontogenic abscesses and phlegmons of the maxillofacial area. Complications of odontogenic processes in the maxillofacial area	2	0,5	-	-	interview	
1.3.	Non-odontogenic inflammatory diseases	-	-	3	2	interview; reports at practical classes; tests; assessment based on the case method; electronic tests; situational tasks solving	
1.4.	Injuries of soft tissue structures of maxillofacial area	-	-	3	2	interview; reports at practical classes; tests; assessment based on the case method; electronic tests; situational tasks solving	
1.5.	Injuries of bones of the facial part of skull	-	-	3	2	interview; reports at practical classes; tests; assessment based on the case method; electronic tests; situational tasks solving	
1.5.	Injuries of bones of the facial part of skull. Complications of injuries the bones of facial part of skull	2	0,5	-	-	interview	

1.6.	Primary medical care and priority measures for inflammatory processes and injuries of maxillofacial area	-	-	3	2	interview; reports at practical classes; tests; assessment based on the case method; electronic tests; situational tasks solving
1.7.	Neoplasms of maxillofacial area	-	-	3	2	interview; reports at practical classes; tests; assessment based on the case method; electronic tests; situational tasks solving
1.7.	Benign neoplasms of the maxillofacial area	2	1,0	-	-	interview
1.8.	Congenital anomalies and acquired defects and deformities of maxillofacial area	-	-	3	2	interview; reports at practical classes; tests; assessment based on the case method; electronic tests; situational tasks solving; control work
7 semester						
2.	Otorhinolaryngology	10	3	48	30	
2.1.	Diseases of the nose and paranasal sinuses	2	0,5	10	7	
	Diseases of the nose and paranasal sinuses. Orbital and intracranial complications of inflammatory diseases of the nose and paranasal sinuses	2	0,5	-	-	interview
	Diseases of the external nose and nose cavity. Methods of investigation, clinical anatomy and physiology of the nose and paranasal sinuses	-	-	5	3	interview; reports at practical classes; assessment based on a management game; tests; case-based assessment; electronic tests; situational tasks solving
	Diseases the paranasal sinuses. Orbital and intracranial complications of inflammatory diseases of the nose and paranasal sinuses. Rendering first aid	-	-	5	4	quiz; interview; reports at practical classes; assessment based on a management game; tests; case-based assessment; electronic tests; situational tasks solving
2.2.	Diseases of the pharynx. Tumours of the pharynx	2	0,5	5	8	
	Diseases of the pharynx. Tumours of the pharynx.	2	0,5	5	8	interview; reports (abstracts) at practical classes; assessment based on a management game; tests; case-based assessment; electronic tests; verification work; situational tasks solving

		4	1	15	6	
2.3. Diseases of the ear						
Physiology of the ear. Methods of hearing investigations and vestibular function tests. Acute and chronic diseases of the middle ear	2	0,5	-	-	-	interview
Diseases of the inner ear. Otogenic intracranial complications	2	0,5	-	-	-	interview
Clinical anatomy and physiology of the ear. Methods of hearing investigations and vestibular function tests. Features of hearing investigations in children. Diseases of the external ear	-	-	5	2	2	interview; reports at practical classes; assessment based on a management game; tests; case-based assessment; electronic tests; situational tasks solving
Acute and chronic diseases of the middle ear. Rendering first aid	-	-	5	2	2	interview; reports at practical classes; assessment based on a management game; tests; case-based assessment; electronic tests; quiz; situational tasks solving
Diseases of the inner ear. Otogenic complications. Rendering first aid	-	-	5	2	2	interview; reports at practical classes; assessment based on a management game; tests; case-based assessment; electronic tests; verification work; situational tasks solving
2.4 Diseases of the larynx	2	1	10	9		
Acute and chronic diseases of the larynx	2	1	-	-	-	interview
Larynx-applied anatomy and physiology. Methods of examination of the larynx. Acute diseases of the larynx. Acute laryngeal stenosis and its treatment	-	-	5	3	3	interview; reports at practical classes; assessment based on a management game; tests; case-based assessment; electronic tests; situational tasks solving
Chronic diseases of the larynx. Laryngeal tumours. Scleroma. Rendering first aid	-	-	5	3	3	interview; reports at practical classes; assessment based on a management game; tests; case-based assessment; electronic tests; quiz; situational tasks solving
2.5 Rendering first aid in otorhinolaryngology	-	-	5	1	1	assessment using electronic-mechanical and robotic simulators
Final lesson on the section «Otorhinolaryngology»	-	-	3	2	2	colloquium; quiz; verification work; assessment using electronic-mechanical and robotic simulators; graded credit
	16	5	72	46		

INFORMATIONAL AND METHODOLOGICAL PART

LITERATURE

Basic:

1. Oral and maxillofacial surgery : textbook/ Ed. by prof. V. Malanchuk/ part. 1. – 2nd ed., 2018. – 440 p.
2. Oral and maxillofacial surgery : textbook/ Ed. by prof. V. Malanchuk/ part. 2., – 2nd ed., 2018. – 440 p.
3. Corbridge, Rogan. Oxford handbook of ENT and head and neck surgery / Corbridge, Rogan, Steventon, Nicholas. - 3 ed. - Oxford : Oxford University Press, 2020. - 488 p. : ill. - Glossary of ANT terms and eponyms: p. 465-473. - Index: p. 475-488. - Оксфордский справочник по ЛОР и хирургии головы и шеи

Additional:

4. Затолока, П.А. Острый бактериальный синусит = Acute bacterial sinusitis : учеб.-метод. пособие / П. А. Затолока, К. Н. Устинович. – Минск : БГМУ, 2023. – 24 с.
5. European Position Paper on Rhinosinusitis and Nasal Polyps 2020 / Rhinology Supplement 29, 2020. - 464 p.
6. Clinical Practice Guideline: Nosebleed (Epistaxis) / Otolaryngology–Head and Neck Surgery, 2020, Vol. 162(1S) S1–S38.
7. Clinical Practice Guideline: Meniere’s Disease / Otolaryngology–Head and Neck Surgery, 2020, Vol. 162(2S) S1–S55.
8. Ear, Nose and Throat: The Official Handbook for Medical Students and Junior Doctors / A. Yao [et al.] – 2018. – 288 p.
9. European Position Paper on Rhinosinusitis and Nasal Polyps 2020 / W.J. Fokkens [et al.]. – Rhinology, 2020. – 464 p.
10. Clinical Practice Guideline: Nosebleed (Epistaxis) / D.E. Tunkel [et al] – Otolaryngol. Head Neck Surg. – 2020. – 38 p.
11. Clinical Practice Guideline: Tonsillectomy in Children (Update) / R.B. Mitchell [et al] – Otolaryngology–Head and Neck Surgery. – 2019. – 42 p.
12. Боярина, И. А. Вывихи и переломы зубов = Dislocations and fractures of teeth : учеб.-метод. пособие / И. А. Боярина, А. И. Николаева-Киселевич. – Минск : БГМУ, 2019. – 12 с.
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METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND PERFORMANCE OF STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE

Time for independent work can be used by students for:

- preparation for lectures and practical classes;
- preparation for a colloquium, differentiated credit in an academic discipline;
- solving situational tasks;
- performing research and creative tasks;
- preparation of thematic reports, abstracts, presentations;
- taking notes of educational literature;
- compilation of a review of scientific literature on a given subject;
- preparation of information and demonstration materials (stands, posters, graphs, tables, newspapers, etc.);
- making of mock-ups, laboratory and teaching aids;
- compilation of a thematic selection of literary sources, Internet sources;;
- preparation of tests by students for organizing mutual control

METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND PERFORMANCE OF SUPERVISED STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE

Main forms of supervised student independent work:

- writing and presentation of an abstract;
- giving a report;
- studying topics and problems that are not covered in lectures;
- taking notes from primary sources (sections of anthologies, collections of documents, monographs, textbooks);

computer testing;
 preparation of tests by students for the organization of mutual control;
 production of didactic materials;
 preparation and participation in active forms of learning.

Control of supervised student independent work is carried out in the form of:
 control work;

final lesson, colloquium in the form of an oral interview, written work, testing;
 discussions of abstracts;

uphold a learning task;

evaluation of an oral answer to a question, message, report or solution to a problem;

checking abstracts, written reports, reports, recipes;

checking notes from primary sources, monographs and articles

LIST OF AVAILABLE DIAGNOSTIC TOOLS

The following forms are used to diagnose competencies:

Oral form:

interview;

colloquium;

reports at practical classes;

situational tasks solving;

assessment based on a management game.

Written form:

tests;

quiz;

control work ;

case-based assessment.

Oral-written form:

graded credit;

Technical form:

electronic tests.

Simulation form:

assessment using electronic-mechanical and robotic simulators.

LIST OF AVAILABLE TEACHING METHODS

Traditional method (lecture, laboratory practicals);

Active (interactive) methods:

PBL (Problem-Based Learning);

TBL (Team-Based Learning);

CBL (Case-Based Learning);

RBL (Research-Based Learning).

LIST OF PRACTICAL SKILLS

1. Visual examination of the maxillofacial area.

2. Palpation of regional lymph nodes of the head and neck.
3. Palpation of the contour of the lower edge of the lower jaw.
4. Palpation determination of the contours of the orbital edges.
5. Registration of a referral for a cytological examination.
6. Preparation of a referral for histological examination.
7. Anthropometric measurements of the face using a ruler.
8. Otoscopy.
9. Anterior and posterior rhinoscopy.
10. Pharyngoscopy (epi-, meso-, hypopharyngoscopy).
11. Examination of auditory function (whispered speech and tuning forks).
12. Audiogram interpretation.
13. Examination of nasal breathing and olfactory function.
14. Investigation of spontaneous nystagmus.
15. Investigation of spontaneous vestibular symptoms.
16. Pressor test.
17. Palpation of the paranasal sinuses.
18. Palpation of the mastoid processes.
19. Evaluation of the results of rhinocytography.
20. Taking biological material from the nose, oropharynx, ear.
21. Stopping nosebleeds (anterior nasal tamponade).
22. Rinsing the external auditory canal.
23. Instillation of drops into the nose and ear.
24. Interpretation of radiographs, magnetic resonance imaging and computed tomography of the nose and paranasal sinuses.
25. Tracheostomy care.
26. Irrigation of the pharyngeal mucosa.

LIST OF EQUIPMENT USED

1. Nasal speculum, tongue depressor, ear speculum, laryngeal mirror, nasopharyngeal mirror.
2. Otoscope.
3. Medical records of an inpatient (outpatient).
4. Results of additional examination methods (laboratory, functional, radiation).
5. Simulation equipment.

LIST OF LECTURES

5 semester

1. Odontogenic abscesses and phlegmons of the maxillofacial area. Complications of odontogenic processes in the maxillofacial area.
2. Injuries of bones of the facial part of skull. Complications of injuries the bones of facial part of skull.
3. Benign neoplasms of the maxillofacial area.

7 semester

1. Diseases of the nose and paranasal sinuses. Orbital and intracranial complications of inflammatory diseases of the nose and paranasal sinuses.
2. Diseases of the pharynx. Tumors of the pharynx.
3. Physiology of the ear. Methods for studying hearing and vestibular apparatus. Acute and chronic diseases of the middle ear.
4. Diseases of the inner ear. Otogenic intracranial complications.
5. Acute and chronic diseases of the larynx.

LIST OF PRACTICAL SKILLS**5 semester**

1. Organization of dental care in the Republic of Belarus. Caries and its complications. Prevention of dental diseases.
2. Odontogenic inflammatory diseases.
3. Non-odontogenic inflammatory diseases.
4. Injuries of soft tissue structures of maxillofacial area.
5. Injuries of bones of the facial part of skull.
6. Primary medical care and priority measures for inflammatory processes and injuries of maxillofacial area.
7. Neoplasms of maxillofacial area.
8. Congenital anomalies and acquired defects and deformities of maxillofacial area.

7 semester

1. Diseases of the external nose and nasal cavity. Methods of investigation, clinical anatomy and physiology of the nose and paranasal sinuses.
2. Diseases of the paranasal sinuses. Orbital and intracranial complications of inflammatory diseases of the nose and paranasal sinuses. Rendering first aid.
3. Diseases of the pharynx. Tumors of the pharynx.
4. Clinical anatomy and physiology of the ear. Methods of examination of hearing and vestibular apparatus. Diseases of the external ear.
5. Acute and chronic diseases of the middle ear. Rendering first aid.
6. Diseases of the inner ear. Otogenic complications. Rendering first aid.
7. Clinical anatomy, physiology and methods of research of the larynx. Acute diseases of the larynx. Acute laryngeal stenosis, its treatment.
8. Chronic diseases of the larynx. Tumors of the larynx. Scleroma. Rendering first aid.
9. Rendering first aid in otorhinolaryngology.
10. Final lesson on the section «Otorhinolaryngology»

**APPROXIMATE THEMES OF ABSTRACTS ON THE SECTION
«OTORINOLARYNGOLOGY»**

1. Deviation of the nasal septum. Correction methods.

2. Epistaxis, methods of stopping.
3. Nasal furuncle. Diagnosis, treatment, complications.
4. Hematoma and abscess of the nasal septum, diagnosis, treatment methods.
5. Chronic rhinitis, causes of development, diagnosis, treatment methods.
6. Acute maxillary sinusitis, diagnosis, treatment.
7. Chronic maxillary sinusitis, diagnosis, treatment.
8. Rhinogenic orbital complications, diagnosis, treatment.
9. The role of the lymphoepithelial ring.
10. Hypertrophy of adenoid vegetations, treatment methods.
11. Acute pharyngitis, diagnosis, treatment.
12. Chronic pharyngitis, classification, diagnosis, treatment.
13. Differential diagnosis of tonsillitis.
14. Nonspecific tonsillitis.
15. Clinical examination of patients with chronic nonspecific tonsillitis.
16. Methods for hearing testing (subjective and objective).
17. Methods for studying the vestibular apparatus.
18. Otitis externa, diagnosis, treatment.
19. Hematoma of the pinna, diagnosis and treatment.
20. Chondroperichondritis, erysipelas of the auricle, differential diagnosis and treatment.
21. Acute suppurative otitis media, diagnosis, treatment.
22. Adhesive otitis media, treatment.
23. Chronic mesotympanic otitis media, diagnosis, treatment.
24. Chronic epitympanic otitis media, diagnosis, treatment.
25. Meniere's disease, diagnosis, treatment.
26. Otosclerosis, diagnosis, treatment.
27. Sensorineural hearing loss, diagnosis, treatment.
28. Labyrinthitis, diagnosis, treatment.
29. Neuroma of the 8th pair of cranial nerves.
30. Otogenic meningitis. Diagnosis, differential diagnosis, treatment.
31. Otogenic abscesses of the brain and cerebellum. Diagnosis, treatment.
32. Otogenic thrombosis of the sigmoid sinus. Otogenic sepsis. Diagnosis, treatment.
33. Acute laryngitis, diagnosis, treatment.
34. Laryngeal stenosis, treatment methods.
35. Foreign bodies of the larynx, treatment methods.
36. Foreign bodies of the trachea, treatment methods.
37. Chronic laryngitis, diagnosis, treatment.
38. Benign tumors of the larynx, diagnosis, treatment.
39. Malignant tumors of the larynx, diagnosis, treatment.
40. Scleroma, classification, diagnosis, treatment, differential diagnosis of scleroma and ozena.

**PROTOCOL OF THE CURRICULUM APPROVAL
BY OTHER DEPARTMENTS**

Title of the discipline requiring approval	Department	Amendments to the curriculum in the academic discipline	Decision of the department, which designed the curriculum (date, protocol #)
1. Oncology	Department of Oncology	There are no offered changes in the curriculum	protocol # 10 of 17.05.2023 protocol # 16 of 30.05.2023
2. Ophthalmology	Department of Eye Diseases	There are no offered changes in the curriculum	protocol # 10 of 17.05.2023 protocol # 16 of 30.05.2023

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Curriculum content, composition and the accompanying documents comply with the established requirements.

Dean of the Medical Faculty for International Students of the educational establishment «Belarusian State Medical University»

26.06.23

O.S.Ishutin

Methodologist of the educational institution «Belarusian State Medical University»

26.06.23

S.V.Zaturanova