Стом-21ИН

Federal State Budget Educational Institution of Higher Education "North-Ossetian State Medical Academy" of Ministry of Health of the Russian Federation

Department of Otorhinolaryngology and Ophthalmology

GUIDELINES FOR INDEPENDENT (EXTRACURRICULAR) WORK in otorhinolaryngology

of the main professional educational program of higher education - the specialist's program 31.05.03 Dentistry, approved as of "24" May 2023.

Vadikavkaz 2023

These guidelines are designed for extracurricular independent work of 4th year students (8th semester) of the Faculty of Medicine.

FSBEI HE NOSMA of the Ministry of Health of Russia in otorhinolaryngology

Compilers:

Head of the Department of Otorhinolaryngology with Ophthalmology, FSBEI HE NOSMA of the Ministry of Health of Russia

Associate Professor, Doctor of Medical Sciences E.T. Gappoeva,
Assistant Professor, Dept. of Otorhinolaryngology with Ophthalmology, FSBEI HE NOSMA
of the Ministry of Health of Russia
Candidate of Medical Sciences V. P. Kudzieva

Reviewers:

Head of the Department of Pharmacology and Clinical Pharmacology Doctor of Medicine, Professor L.Z. Bolieva

Professor of the Department of Internal Medicine , Doctor of Medical Sciences, Professor A.S. Tsogoev

Lesson 1

Topic: Methodology and technique of endoscopic examination of ENT organs.

Examination questions:

- 1. General principles of examination of otorhinolaryngological patients.
- 2. Organization of the otorhinolaryngologist's workplace.

The student should know:

- **1.** General provisions, sequence of methods of investigation of ENT organs
- 2.Normal condition when performing investigation of ENT-organs

Features of pediatric otorhinolaryngology

References:

Nosulya E. V. Propaedeutics in otorhinolaryngology. - Medical Information Agency. - 2009 Γ. -P.5-32 2)Palchun V.T., Magamedov M.M., Luchikhin L.A. Otorhinolaryngology textbook. - 2007. P.7-77 3)Lectures of the department where the student studies

The student should be able to:

- 1. Use a frontal reflector
- 2. Perform external examination of ENT organs
- 3. Perform anterior and posterior rhinoscopy, pharyngoscopy, indirect laryngoscopy, otoscopy

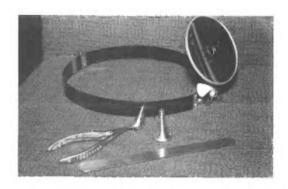
References:

- 1)Luchikhin L.A. Otorhinolaryngology. Textbook. Approved by MoE RF. GEOTAR Media. 2016. 584 p.
- 2) Luchikhin L.A. Examination of the otorhinolaryngological patient. GEOTAR-Media. 2014 Γ. 256 p.
- 3)Palchun V.T. Diseases of the ear, throat and nose. Textbook for students of secondary vocational education institutions studying in the specialty 060101.51 "Medicine" in the discipline "Diseases of the ear, throat and nose". GEOTAR-Media. 2016. 315 p.

Self-study assignments:

1.	The room for the examination of ENT organs should be
2.	During the examination, the patient is of the doctor, and the light source is
3.	The sequence of examination of ENT organs is as follows:
4.	Rhinoscopy can be
	Examination of the upper part of the pharynx and the back of the nose is called
6.	The following instruments should be used to inspect the upper pharynx
7.	The middle section of the pharynx is examined with
8.	The lower part of the pharynx and larynx (indirect laryngoscopy) is examined with
9.	Phonation is the pronunciation of the following vowels
10	Otoscopy is performed with the following instrument, while the examination begins with the ear.
11	.In order to see the loose part of the tympanic membrane, the patient's head must be
12	.On palpation of the cartilage of the larynx it is normally determined

Pic.1. The position of the frontal mirror on the doctor's head.



Pic. 2. Name the instruments depicted in the photo

Lesson 2

Topic: Clinical anatomy, physiology and research methods of the auditory analyzer.

Examination questions:

- 1. The structure of the outer, middle ear, the anatomy of the cochlea
- 2.Physiology of the ear.
- 3. Methods of ear research

The student should know:	References:
1. Clinical anatomy of the external	1)Palchun V.T. Diseases of the ear,
ear	throat and nose. Textbook for students
2. Middle ear cavity system, walls,	of secondary vocational education,
contents of the tympanic cavity	studying in the specialty 060101.51
3. Topography of the facial nerve.	"Medicine" in the discipline "Diseases
Types of structure of the mastoid	of the ear, throat and nose GEOTAR-
process. Structure of the auditory tube	Media 2016 315 p.
4. Blood supply and innervation of	2)Palchun V. T., Luchikhin L.A.,
external and middle ear	Magomedov M.M. Guidelines for
5. Structure of the cochlea and its	practical otorhinolaryngology MIA
receptor apparatus	2011 565 p.
6. Physiology of the ear: sound	3)Stratieva O.V. Clinical anatomy of the
conduction and sound perception	ear SPb: SpetsLit 2004 256 p.
7. Methods of ear examination	-Boboshko M.Y. The auditory tube
	SPb: SpetsLit 2003 353 p.
	4)Lectures of the department where the
	student studies
The student should be able to:	References:
1. Conduct an examination of the	
external ear	

1)Palchun V. T., Luchikhin L.A., 2. Carry out otoscopy, characterize the condition of the tympanic membrane Magomedov M.M. Guide to Practical (light reflex, identification points) Otorhinolaryngology. - MIA. - 2011. -3. Determine, with testing, the patency 565 p. of the auditory tube and eardrum motility 4.Interpret the X-ray of the temporal bones, according to Schüller, Meyer, Stenvers Determine and characterize the 5. auditory passport (whispering, speaking, air and bone conduction determinations, Rinne, Federici, Jelle, Weber tests) Interpret the main types of audiograms, tympanograms.

Self-study assignments:

1.	The outer ear consists of	
2.	The boundary between the outer ear and the middle ear is	
3.	The untensioned part of the tympanic membrane lacks a layer of	
4.	The tympanic membrane has 5 identifying pointsquadrants	_ and 4
5.	The middle ear consists of the following communicating air cavities	
6.	The tympanic cavity has 6 wallsand three	floors
7.	The tympanic cavity contains 3 auditory ossicles and 2 muscles	
8.	The mastoid begins to form at the age ofand is completed by old and has the following types of structure	y years
9.	The bony labyrinth consists of	
10	.The peripheral receptor of the auditory analyzercells	consists of
11	. Diffraction is	
12	.Echo is	

13.Reverberation is			
14.Interference is			
15.Resonance is			
16. The auditory potential threshold is characterized by			
17. Intensity and loudness of sound is			
18. The strength of sound is measured in, the frequency in			
			
Tests 1. THE EAR LABYRINTH IS LOCATED IN THE			
1) mastoid process 2) scales of the temporal hore			
2) scales of the temporal bone 2) temporal bone pyramid 4) gygamatic process			
3) temporal bone pyramid 4) zygomatic process2. AUDITORY PATHWAY OF THE SOUND ANALYZER			
1) Reissner's membrane of the cochlea			
2) Corti's organ			
3) Tympanic membrane and auditory ossicles			
3. SOUND CONDUCTING PART OF THE AUDITORY ANALYZER			
1) eardrum and auditory ossicles			
2) external auditory pathway			
3) Corti's organ			
4) endolymph			
4. ISTHMUS IN THE EXTERNAL AUDITORY CANAL IS IN			
1) bony region			
2) membranous-cartilaginous region			
3) tip of the membranous-cartilaginous part to the bony part.			
5. THE COCHLEAR AQUEDUCT OPENS INTO THE FOSSA			
1) anterior			
2) posterior			
3) middle			
6. THE SIGMOID SINUS IS LOCATED IN THE FOSSA			
1)anterior			
2)middle			

- 2 \	1200	terior

7. BERNARD'S CANALS ARE ON THE WALL OF THE EXTERNAL AUDITORY CANAL

- 1) lower
- 2) upper
- 3) anterior
- 4) posterior

8.THE FIRST NEURON OF THE AUDITORY ANALYZER IS LOCATED IN

- 1) tympanic cavity
- 2) cochlea
- 3) internal auditory canal
- 4) medulla oblongata

9. HEARING TESTING BY SPEECH.

- 1) tympanometry
- 2) tonal audiometry
- 3) acumetry
- 4) impedance meter

10. IN EARLY CHILDHOOD THE EXTERNAL AUDITORY CANAL IS REPRESENTED BY

- 1) spinous-cartilaginous
- 2) bony
- 3) the membranous-cartilaginous part and the bony part

11. LOWER WALL OF TYMPANIC CAVITY IS BORDERED BY

- 1) temporomandibular joint
- 2) sigmoid sinus
- 3) bulb of jugular vein
- 4) internal carotid artery

12. NORMALLY A HUMAN BEING PERCEIVES WHISPERED SPEECH AT A DISTANCE OF

- 1) 4m
- 2) 6m
- 3) 10m
- 4) 20m

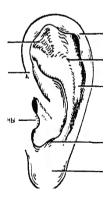
13. RINNE'S TEST IS NEGATIVE WITH

- 1) diseases of the sound-perceiving section of the sound analyzer
- 2) diseases of the sound-conducting section of the sound analyzer

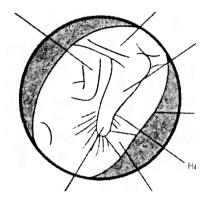
- 3) in the normal condition
- 14. THE DRUM CAVITY IS CONNECTED WITH THE HEARING TUBE BY
- 1) nasopharynx
- 2) nasal cavity
- 3) snail
- 4) antrum
- 15. THE STRETCHED PART OF THE DRUM BOARD CONSISTS OF_____ LAYERS
- 1)2
- 2)3
- 3)4
- 4) 5

Keys to the test **«Clinical anatomy and physiology of ear»**

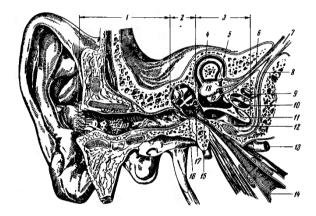
№	Answer	№	Answer
1	3	9	3
2	3	10	1
3	3	11	4
4	3	12	2
5	2	13	2
6	3	14	1
7	1	15	2
8	2		



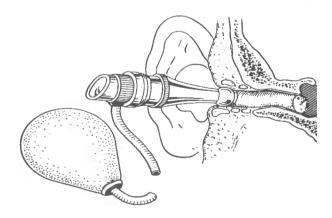
Pic. 10. Indicate the main structures of the ear auricle



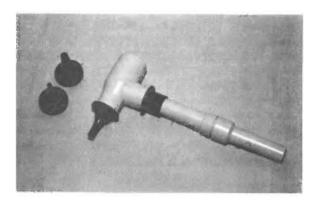
Pic.11. Indicate the parts, quadrants and identification points of the tympanic membrane.



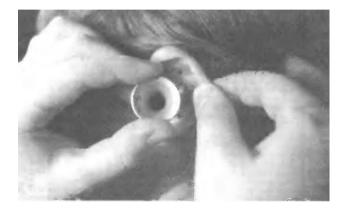
Pic. 12. What formations are indicated on the vertical section of the ear.



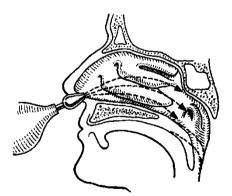
Pic.3. What is the name of the examination method and with what tool is it performed?



Pic. 4. Name the instrument



Pic.5. What method of examination is indicated in the picture, how the auricle is retracted in children and adults.



Pic.6. What instrument is used and how is this method of examination performed?



Pic.7. What conductivity is tested in the picture and what is the name of the instrument.

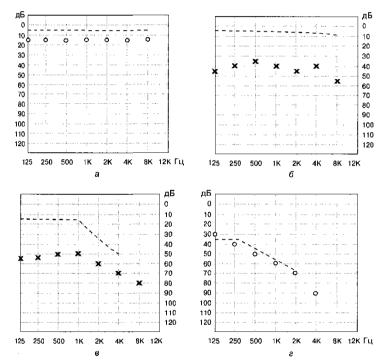


Fig. 8. Name the examination method, what is the dB, Hz. What types of conductivity are seen in this examination.

<u>Lesson 3</u> <u>Topic: Clinical anatomy, physiology and research methods of the vestibular analyzer.</u>

Examination questions:

- 1. Anatomy of the vestibular ampullae, ampullae of the semicircular canals
- 2. Vestibular analyzer, connections of nuclei with different formations of CNS and peripheral nervous system
- 3.Methods of examination of the vestibular analyzer

The student should know:	References:
1. Clinical anatomy of the vestibule,	
ampullae of the semicircular canals,	

structure of the receptor apparatus of the sacs

- 2. Nuclei of the vestibular analyzer and their connections with other parts of the CNS
- 3. Adequate stimuli of ampullary apparatus and otolith apparatus
- 4. Basic regularities of nystagmus (Ewald and Voyacek's laws).
- 5. Methods of examination of vestibular function

1)Altman Ya. A., Tavartkiladze G.A. Guide to Audiology. - Moscow:

DMKPress, 2003. - 360 p.

- 2)Luchikhin L.A. Otorhinolaryngology. Textbook. Approved by the MoE RF.
- -GEOTAR Media. 2016 г. 584 р.
- 3) Luchikhin L.A. Examination of the otorhinolaryngological patient. GEOTAR-Media. 2014. 256p

The student should be able to:

- **1**. Define and characterize spontaneous nystagmus
- 2. Perform index tests (finger-nose, finger-finger, Vodak-Fisher test)
- 3. Examine stability in Romberg pose, and perform straight and flank gait
- 4. Perform rotational, caloric, and pressor tests

References:

- 1)Palchun V.T. Diseases of the ear, throat and nose. Textbook for students of secondary vocational education, studying 060101.51 "Medicine" for the discipline "Diseases of the ear, throat and nose. GEOTAR-Media. 2016. 315 p.
- 2)Luchikhin L.A. Examination of an otorhinolaryngological patient. GEOTAR-Media. 2014 . P. 248- 326 3)Alexeeva N.S. Vertigo. Otoneurological aspects.- MedPress-Inform. 2014. -184 p.

Assignments for independent work:

1.The following pockets are located in the vestibule	•
1. The anterior portion of the vestibule communicates with the cochlea through	ugh
2. The semicircular canals, they are arranged in planes 3. Endolymph differs from perilymph in the composition of potassium and s	odium ions:
4. The otolith membrane is represented by	
5. Vestibular –spinal connections provide	_connection
6. Vestiblar-oculomotor connections provide	

7. Vestibulo-vegetative connections provide

8. Vestibular-cerebellar ways

9. Vestibular –cortical connections

10.Adequate stimuli for ampullary receptors are

and for the otolithic apparatus

12. Spontaneous vestibular symptoms include

13. Adiadochokensis is

14.The advantage of the caloric test is

15.Objective methods of assessing static balance are

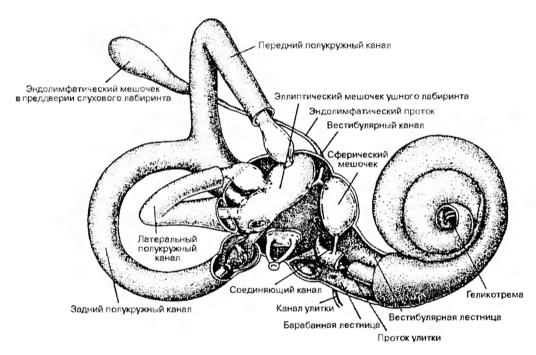


Fig.14. Which structures of the inner ear are shown in the figure.

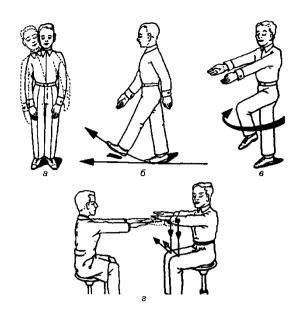


Fig. 9. Specify the vestibular tests.

Tests

1IN THE VOYACEK TEST, WE OBSERVE____ DEGREES OF TORSO DEVIATION

- 1) two
- 2) three
- 3) four
- 4) five
- 2. ADEQUATE STIMULUS OF THE RECEPTORS OF SEMICIRCULAR CANALS IS
- 1) angular acceleration
- 2) straight-line acceleration
- 3. acceleration of gravity
- 3. ADEQUATE STIMULUS OF OTOLITH APPARATUS IS
- 1) straight-line acceleration, acceleration of gravity
- 2) angular acceleration, straight-line acceleration
- 3) gravity acceleration, angular acceleration
- 4) straight-line acceleration, angular acceleration
- 4. THE INNER EAR CONSISTS OF
- 1) tympanic cavity, vestibule, and semicircular canals
- 2) vestibule, cochlea, internal auditory canal
- 3) vestibule, semicircular canals, cochlea
- 4) tympanic cavity, vestibule, internal auditory canal

5.THE FIRST NEURON OF THE VESTIBULAR APPARATUS IS LOCATED IN

- 1) tympanic cavity
- 2) cochlea
- 3)vestibule
- 4) internal auditory canal

6.DURING THE ROTATION TEST IN BARANY ROTATIONAL CHAIR THE PATIENT'S HEAD IS TILTED TO THE

- 1) left side
- 2) right side
- 3) 30 degrees forward
- 4) 30 degrees backward

7.DIRECTION OF NYSTAGMUS IS DETERMINED BY THE DIRECTION OF

- 1) slow component of nystagmus at very abstraction of eyes
- 2) fast component of nystagmus at the most distant part of the eyes
- 3) slow component of nystagmus when looking straight ahead
- 4) fast component of nystagmus when looking straight ahead

8.DEGREE IS REGISTERED WHEN THE EYEBALLS ARE MOVED TOWARD

- 1) slow component
- 2) fast component
- 3) when looking straight ahead
- 4) is not registered

9. WHEN PERFORMING THE OTOLITH TEST, THE PATIENT IS BENT OVER

- 1) right side
- 2) left side
- 3) 45 degrees forward
- 4) 90 degrees forward

10. WHAT DEGREE OF NYSTAGMUS IS DETERMINED BY LOOKING TOWARD THE SLOW COMPONENT

- 1) first
- 2) second
- 3) third

11.DIRECTION OF NYSTAGMUS DURING CALORIC TEST WITH COLD WATER

1) upwards

- 2) in the opposite side
- 3) in the same direction
- 4) rotatory

12. EXAMINATION METHODS OF FUNCTION OF SEMICIRCULAR CANALS

- 1) otolith test
- 2) rotary test
- 3) test on four-pointed Hillov's swing
- 4. electrocochleometry

13. EXAMINATION OF OTOLITH APPARATUS FUNCTION IS PERFORMED USING

- 1) two-pole swing
- 2) four-pin swing
- 3) rotation test
- 4) caloric test

14.THE SECOND EWALD'S LAW STATES

- 1) the direction of endolymph motion corresponds to the direction of the slow nystagmus component
- 2) direction of endolymph motion corresponds to the direction of the fast component of nystagmus
- 3) rotation of the body to the right excites the left labyrinth
- 4) rotation of the body to the left excites the right labyrinth

15. NUMBER OF DEGREES OF NYSTAGMUS

- 1) I
- 2) II
- 3) III
- 4) IV

Keys: «Clinical anatomy and physiology of the vestibular apparatus»

No	Answer	$N_{\underline{0}}$	Answer
1	2	10	3
2	1	11	2
3	1	12	2
4	3	13	2
5	4	14	1

6	3	15	3
7	2		
8	2		
9	4		

Lesson 4.

<u>Topic:</u> Clinical anatomy, physiology and research methods of the nose, paranasal sinuses and pharynx.

Examination Questions.

- 1.Clinical anatomy of the external nose, nasal cavity.
- 2.Blood supply, innervation, lymphatic ways of external nose, nasal cavity.
- 3.Olfactory analyzer
- 4. Anatomy, topography of paranasal sinuses.
- 5. Physiology, methods of investigation of the nose and paranasal sinuses.

The student should know:

- 1. Bony and cartilaginous bases of the external nose, blood supply, innervation of the external nose.
- 2. Walls of the nasal cavity, nasal passages.
- 3.Features of the structure of the nasal cavity in young children. The role of nasal breathing in the physical development of the body and in the formation of the dental system in children.
- 4. Structure of the paranasal sinuses.
- 5. Functions of the nose.
- 6.Methods of investigation of the nose and paranasal sinuses.

References:

- 1) Palchun V. T., Magamedov M.M., Luchikhin L.A. Otorhinolaryngology textbook. - Moscow ed. GEOTAR-Media. - 2011. - 656 p.
- 2) Lectures of the department where the student studies

The student should be able to:

- 1.Perform examination, palpation of the external nose.
- 2.Perform anterior, posterior rhinoscopy, characterize normal rhinoscopic picture
- 3.Determine nasal respiratory function, olfactometric kit
- 4.Interpret radiographs in naso-frontal, naso-subchinoscopic projections. Characterize CT scans.

References:

1)Piskunov G.Z., Piskunov S. Z. Clinical rhinology. - MOSCOW: MIA. - 2013. – P. 27-98
2)Lectures of the department where the student studies

Assignments for independent work.

1.The upper respiratory tract consists of
2.The cartilaginous part of the nasal septum is represented by
3. The bony base of the external nose consists of
4. The angular vein communicates with the
5.The motor innervation of the external nose is carried out, and the sensitive innervation
6.In the lower wall of the nasal cavity passes
7. The medial wall of the nasal cavity, which consists of
8.The growth area is located in the
9.Upper wall of the nasal cavity
10. The lateral wall of the nasal cavity includes the following formations
11. In the middle nasal passage open the sinuses, in the upper, in the lower
12. The osteomeatal complex
13. The Kisselbach zone is located
14. Where is the junction of the maxillary sinus with the middle nasal passage?
15. The posterior wall of the frontal sinus horders the

- 16. The following formations border the lateral wall of the sphenoid sinus_____
- 17. The labyrinthine labyrinth is divided into 3 types of cells_____
- 18.Basic physiological functions of the nose are_____
- 19. Mucociliary clearance_____

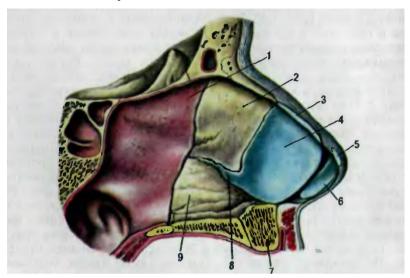


Fig.15. Indicate the formation in the picture

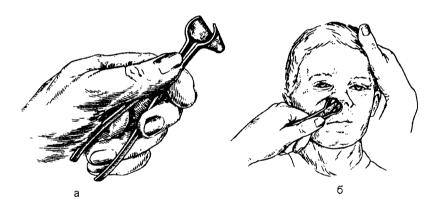


Fig.16. Name the instrument and the nose examination method

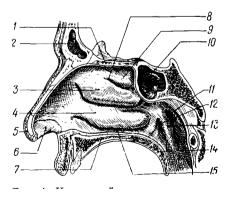


Fig. 17. Indicate what formations are depicted in the picture according to their localization.

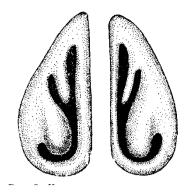


Fig.18. Which nasal shells are visible on this method of examination.

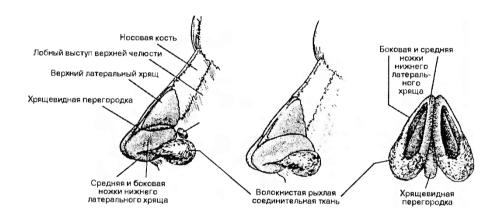


Fig. 19. Specify the cartilage and bones that make up the external nose.

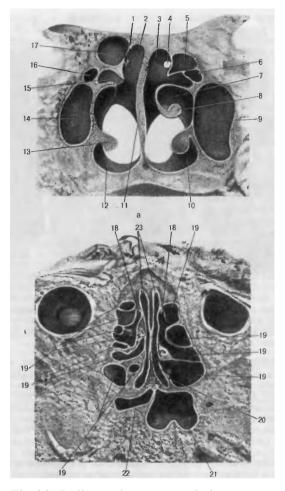


Fig.20. Indicate the paranasal sinuses.

Tests

1.THE NASAL SEPTUM IS FORMED BY

- 1) triangular cartilage, labyrinth, cusp
- 2) palatine bone, cusp, quadrangular cartilage
- 3) Perpendicular plate of the lamina, cusp, quadrangular cartilage, nasal scallop of the maxilla
- 4) nasal bone, quadrangular cartilage, crossover
- 2. THE NASOLACRIMAL CANAL OPENS INTO THE _____NASAL PASSAGE
- 1) upper
- 2) middle
- 3) lower
 - 4) common
- 3. THE MAXILLARY SINUS OPENS INTO THE_____NASAL PASSAGE
- 1) upper
- 2) middle
- 3) inferior

4) general
4. THE FRONTAL SINUS OPENS INTO THENASAL PASSAGE
1)upper
2)middle
3) inferior
4) common
5.ETHMOIDAL LABYRINTH BORDERS ON THECRANIAL FOSSA
1) anterior
2) middle
3) posterior
6. THE ANTERIOR CELLS OF THE ETHMOIDAL LABYRINTH OPEN INTO THENASAI
PASSAGE
1)upper
2)middle
3) inferior
4) common
7. THE MIDDLE CELLS OF THE LABYRINTH OPEN INTO THE NASAL PASSAGE
1)upper
2)middle
3) inferior
4) common
8. THE POSTERIOR CELLS OF THE LABYRINTH OPEN INTO THENASAL PASSAGE
1)upper
2)middle
3)lower
4)general
9.THE SPHENOID SINUS OPENS INTO THENASAL PASSAGE
1)upper
2)middle
3)lower
4)common
10. CAVERNOUS SINUS IS LOCATED
1) in the anterior cranial fossa

3) posterior cranial fossa 4. below the base of the skull 11. EXTERNAL NASAL MUSCLES ARE INNERVATED BY NERVE 1) first branch of the trigeminal nerve 2) second branch of the trigeminal nerve 3) third branch of the trigeminal nerve 4) facial 12. EXTERNAL NASAL SKIN IS INNERVATED BY NERVES 1) first and second branches of the trigeminal nerve 2) facial nerve and the first branch of the trigeminal nerve 3) second and third branches of the trigeminal nerve 4) facial nerve and second branch of the trigeminal nerve 13.THE THICKEST WALL OF THE FRONTAL SINUS IS_____ 1) inferior 2) posterior 3) anterior 4) medial 14. THE INTERNAL WALL OF THE MAXILLARY SINUS IS THINNEST AT THE LEVEL OF THE NASAL PASSAGE 1) inferior 2) middle 3) upper 15.OLFACTORY ZONE IN THE NASAL CAVITY IS LOCATED IN THE AREA OF NASAL PASSAGE 1) lower 2) middle 3) upper 4) lower common Keys: «Clinical anatomy of the nose and sinuses»

2) middle cranial fossa

№	Answer	<u>No</u>	Answer
1	3	8	1
2	3	9	1

3	2	10	2
4	2	11	4
5	1	12	1
6	2	13	1
7	2	14	2
		15	3

Test Questions

- 1.Clinical anatomy, blood supply, innervation of the pharynx
- 2. lymphoadenoid pharyngeal ring.
- 3. Physiology and research methods of the pharynx.

The student should know:

- 1. Walls, divisions, layers of the pharynx.
- 2. Paratonsillar, parapharyngeal tissue, pharyngeal space.
- 3.Structure of lymphoadenoid ring of Walder-Pyrogov (palatine, pharyngeal, tubal, lingual tonsils).

References:

1)Luchikhin L.A. Otorhinolaryngology. Textbook. - Ministry of Education of the Russian Federation. -GEOTAR- Media. - 2016 - 584 p.

- 4. Vessels and nerves of pharynx, its functions.
- 5.Research methods of pharynx.

The student should be able to.

- 1.Perform examination of regional lymph nodes.
- 2.Perform oroscopy, epi-, meso-, hypopharyngoscopy, finger examination of nasopharynx.
- 2)Ovchinnikov Yu. M., Gamov V. II. Diseases of the nose, throat and ear. M.: Medicine. 2003 320 p.
 3) Palchun V. T., Luchikhin L. A. History of the disease in ENT-hospital / Methodical recommendations. M:

Medicine. - 2004 - 32 p.

Assignment for independent work.

1 The pharynx has four walls and three divisions
2.The nasopharynx containstonsils.
3. The pharynx is limited by
4. Between the anterior and posterior pharynxes are
5.At the back of the pharynx there are clusters of
6. The muscles of the soft palate are
7. The paratonsillar tissue is located between the
8. The parapharyngeal tissue is limited by on the front, by
on the inner side, by on the posterior side, by on the lateral side
9. The blood supply of the pharynx is from
10. The anterior and posterior pharyngeal venous plexuses are located in, blood from them is collected in
11.The act of swallowing has the following phases
12.Rhinolalia clause occurs under the following conditions
13. Hyponasal speech occurs with
14.The method of examination of the nasopharynx is called,
of oropharynx, of larynopharynx
15. The test to determine the contents of the tonsil lacunae is called
16.Vallecules are
17Prevents food from entering the pharynx

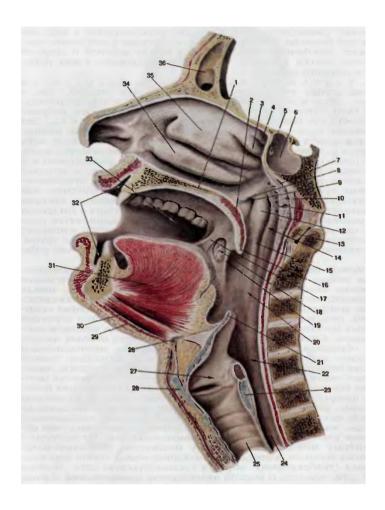
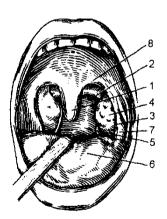


Fig.21. What formations are depicted in the picture according to their location?

Fig.22. Structures and formations indicated during pharyngoscopy.



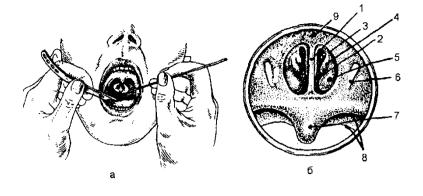


Fig.23. Name the method of examination and nasopharyngeal formations in it.



Fig. 24. What is the name of this examination and for which pathology is it performed?

Tests.

2) 3
3) 4
4) 5
2.THE MIDDLE PART OF THE GLOTTIS (OROPHARYNX) CORRESPONDS TO THE CERVICAL
VERTEBRA
1) 2
2) 3
3) 4
4) 5
3.THE MAJOR ARTERY LOCATED NEAR THE LOWER POLE OF THE PALATINE TONSIL
1) external carotid
2) internal carotid
3) common carotid
4) thyroid
4. THE LATERAL OCULOPHARYNGEAL SPACE BORDERS ON THE
1) Upper contrictor of pharynx
2) middle constrictor of pharynx
3) Pharyngeal muscle
4) medial pterygoid muscle
5.MUSCLE OF THE PHARYNX, NARROWING THE LUMEN OF THE PHARYNGEAL ORIFICE
OF THE AUDITORY TUBE
1) Raising the palatine curtain
2) exerting palatine curtain
3) palatotongue
4) palatopharyngeal
6.IMPAIRMENT OF TASTE IN THE POSTERIOR $1/3$ OF THE TONGUE IS DUE TO NERVE
DAMAGE
1) facial
2) trigeminal
3) lingual-pharyngeal nerve
4) vagus nerve
7.TASTE DISORDER IN THE ANTERIOR 2/3 OF THE TONGUE IS CAUSED BY NERVE
DAMAGE

- 1) facial 2) trigeminal 3) lingual-pharyngeal nerve 4) vagus nerve 8.BLOOD SUPPLY OF PALATINE TONSILS IS PROVIDED FROM 1) external and internal carotid arteries 2) external carotid artery 3) internal carotid artery 4) facial artery 9.PHARYNX CORRESPONDS TO CERVICAL VERTEBRAE 1) I-III 2) I-IV 3) I-V 4) I-VI 10. THE BOUNDARY BETWEEN THE NASOPHARYNX AND OROPHARYNX IS 1) Horizontal plane across the tongue surface 2) Upper pole of palatine tonsils 3) horizontal plane across the hard palate 4) margin of the soft palate 11.NUMBER OF TONSILS LOCATED IN THE NASOPHARYNX 1) One 2) two 3) Three 4) four 12.THE BOUNDARY BETWEEN OROPHARYNX AND LARYNGEOPHARYNX IS THE LEVEL OF 1) root of tongue and epiglottis 2) lower edge of soft palate 3) lower pole of palatine tonsils
- 4) floor of oral cavity
 13.MOTOR INNERVATION OF PHARYNX IS CARRIED OUT BY NERVE
- 1) retrograde
- 2) lingually-pharyngeal and sublingual
- 3) Reciprocating and lingual-pharyngeal nerves

4) Sublingual and recurrent

14. SENSORY INNERVATION OF THE PHARYNX IS CARRIED OUT BY NERVES

- 1) second branch of the trigeminal nerve, vagus nerve and hyoid nerve
- 2) second branch of the trigeminal nerve, vagus nerve and lingual pharyngeal nerve
- 3) first and second branches of the trigeminal nerve, vagus nerve
- 4) first and second branches of the trigeminal nerve and lingualpharyngeal nerve

15. NUMBER OF TONSILS LOCATED IN PHARYNX

- 1) six
- 2) five
- 3) four
- 4) three

Keys:

No	Answer	$N_{\underline{0}}$	Answer	$N_{\underline{0}}$	Answer
1	2	6	3	11	3
2	2	7	1	12	1
3	2	8	2	13	3
4	4	9	4	14	2
5	1	10	3	15	1

Lesson 5

Topic: Clinical anatomy, physiology of the larynx, trachea, bronchi and esophagus. Examination questions:

- 1. Clinical anatomy of larynx, physiology, methods of examination of larynx.
- 2.Structure of trachea, bronchi and esophagus.
- 3. Research methods of larynx, trachea, bronchi and esophagus.

The student should know:

- 1. Cartilage, joints, ligaments and muscles of the larynx and their functions.
- 2.Structural features of the laryngeal mucosa.
- 3.Blood supply and innervation, laryngeal lymphatic system.
- 4. Functions of the larynx.
- 5.Age-related anatomical and physiological features of the larynx, tracheobronchial tree and esophagus.
- 6.Structure of the esophagus.
- 7.Examination methods of larynx, trachea, bronchi and esophagus

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The student should be able to:

- 1. Conduct an external examination and palpation of the cartilage of the larynx, regional lymph nodes.
- 2. Perform indirect laryngoscopy (hypopharyngoscopy) and characterize the norms for this type of research.
- 3. Perform esophagostomy, tracheobronchoscopy.

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	1 4 1
Assignment for independ	
paired	and provides
2. The pterygoid joint is formedthe x	and provides
3. The paracranial joint is formed the v	ocai iolas
and provides	the vocal folds
4. Ligaments of the larynx.1.	the vocal folds.
2	
3	
4	
5	
6	
7	
8	
5.External muscles:I group1	
2	
II group 1	
2	
3	
4	
6. The upper laryngeal artery is a branch of the	,
which branches off from the	
7. The inferior laryngeal artery is a branch of the	
which branches off from	
8. The upper laryngeal nerve is a branch from the va	
9. The inferior laryngeal nerves are extensions of the	
10. How are the right and left recurrent nerves locate	
esophagus? right	and left

11. The multilayer squamous epithelium is present in	n the following formations of the
larynx	
12. The trachea is bordered at the back by	, to the right of it is
, to the left	of it is
13. The esophagus has three parts	
, the thoracic part is	_ the abdominal part is
14. The wall of esophagus has the following layers	
15. The first constriction of the esophagus is	
16.The second constriction is formed by	
17.The third constriction	
18.Basic functions of the larynx	
19.Upper resonator is formed	
20.Lower resonator is formed	
21. The characteristics of sound include	
22. Voice change, or mutation, occurs between the a	
In boys the voice changes from to	, and in girls from
to	
Tests.	
 THE INTERNAL MUSCLES OF THE LARYNX ARE DIVIDATION narrowing the glottis, widening the glottis, tightening the glotted tightening vocal folds, narrowing vocal slited widening and narrowing vocal folds tightening, widening the vocal folds, raising the larynx ESOPHAGUS HAS ANATOMICAL CONSTRICTIONS one two three four THE CONICAL LIGAMENT IS LOCATED BETWEEN thyroid cartilage and hyoid bone reticular cartilage and trachea thyroid cartilage and rhizoid cartilage thyroid cartilage and epiglottis THE MAIN FUNCTIONS OF THE LARYNX ARE 	
I) respiratory, vocal-forming, protective	
2) voice-forming, reflexive	
3) reflexive, protective	
4) respiratory, vocal-forming	

5. INTERNAL BRANCHES OF THE UPPER LARYNGEAL NERVES ENTER THE LARYNX THROUGH

- 1) thyroperitoneal ligament
- 2) hyoid membrane
- 3) thyroid cartilage
- 4) metacarpal cartilage
- 6. TENSION OF VOCAL FOLDS IS CHANGED BY MUSCLE
- 1) posterior parscapularis muscle
- 2) lateral parotid scapular muscle
- 3) thyrotocherpulopaloid muscle
- 4) pterygoid
 - 7. THE GAP BETWEEN THE THYROID AND METATARSAL CARTILAGES IS CLOSED BY
 - I) thyropharyngeal membrane
 - 2) ligament of the thyrohypopharynx
 - 3) conic ligament
 - 8. ORIGIN OF ESOPHAGUS CORRESPONDS TO PROJECTION
 - 1) hyoid bone
 - 2) superior edge of thyroid cartilage
 - 3) lower edge of thyroid cartilage
 - 4) lower edge of the metatarsal cartilage
 - 9. TRACHEAL BIFURCATION IS LOCATED AT THE LEVEL OF THE THORACIC VERTEBRAE
 - 1)111-1V
 - 2) 1V-V
 - 3) V-VI
 - 4) VI-VII
 - 10. IN CHILDREN THE LOOSE SUBMUCOSAL LAYER IS DEVELOPED IN THE LARYNGEAL FLOOR
 - 1) upper
 - 2) middle
 - 3) lower
 - 4) upper and middle
- 11.THE INTERNAL MUSCLE OF THE LARYNX
- 1) hypopharyngeal
- 2) stylopharyngeal

- 3) thyropharyngeal
- 4) sternocleidomastoid

12. UPPER LARYNGEAL ARTERY IS A BRANCH OF

- 1) internal carotid artery
- 2) superior thyroid artery
- 3) subclavian artery
- 4) thyrocervical trunk

13. LOWER LARYNGEAL ARTERY IS A BRANCH OF THE ARTERY

- 1) internal carotid
- 2) external carotid
- 3) inferior thyroid
- 4) subclavian

14. LARYNX INNERVATION IS CARRIED OUT BY THE NERVE

- 1) trigeminal
- 2) lingual-pharyngeal
- 3) vagus
- 4) hyoid

15. THE BORDERS OF THE ESOPHAGUS CORRESPOND TO THE VERTEBRAE

- 1) CV-TIX
- 2) CVI-TXI
- 3) TI-TX
- 4) TII-TVIII

Keys

№	Answer	№	Answer
1	1	10	3
2	3	11	3
3	3	12	2
4	1	13	3
5	2	14	3
6	4	15	2
7	3		
8	4		
9	2		

Lesson 6

Topic: Acute diseases of the outer, middle ear.

Examination questions:

- 1. Give a definition for a furuncle of the external auditory canal, spilled inflammation of the skin of the external auditory canal.
- 2. What stages does acute purulent inflammation of the middle ear go through in its development?
- 3. What are the features of acute otitis media in childhood and with infectious diseases?
- 4. What types of fungi cause otomycosis?
- 5. What are the stages in the development of mastoiditis?
- 6. How are foreign bodies of the ear classified?

Objectives:

The student should know:

- 1.Basic clinical symptoms of external and middle ear, their complications, peculiarities of acute purulent otitis media with infectious diseases in childhood, principles of conservative treatment, indications for paracentesis
- 2. Clinical manifestations, diagnosis, basic principles of treatment of mastoiditis.
- 3. Classification of varieties of congenital ear anomalies and ear foreign bodies.

References:

- 1.Ovchinnikov Yu.M., Gamov V.P. Diseases of the nose, throat and ear.
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The student should be able to:

- 1.Identify forms of otitis externa (furuncle, spilled inflammation)
- 2.Identify the causative agent of otomycosis in the discharge from the ear canal.
- 3. Correctly perform irrigation of the wax plug, using a Janet syringe.
- 4.Determine the stages of acute suppurative otitis media during otoscopy according to changes in the tympanic membrane.

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stacked radiographs.	ear M.: Medicine 2003 - 320 p.
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	throat and nose. Textbook for
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	education, studying in the specialty
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	throat and nose GEOTAR-Media.
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Assignment for independent work.

1. A furuncle of the external auditory canal is	
2. Spilt inflammation of the skin of the external auditory canal affects its sections	
3. To diagnose otomycosis the following methods of examination are used	
4. A contraindication for earwax washing is	
5. Stages of acute purulent otitis media are	
6. Gradinigo triad	
7. The indication for an anthrotomy is	

Tests

- 1. EXTERNAL DIFFUSE OTITIS MEDIA IN ADULTS IS CHARACTERIZED BY
- 1) pain when pressing on the condyle
- 2) pain when percussing the mastoid process
- 3) dizziness

- 4) nystagmus
- 2. FURUNCLES IN THE EXTERNAL AUDITORY CANAL ARE CAUSED BY
- 1) trauma to the skin of the external auditory canal
- 2) mastoiditis
- 3) catarrhal otitis media
- 4) temporomandibular joint dysfunction
- 3.IN OTOMICTUS CAUSED BY FUNGUS ASPERGILLUS NIGER THE COLOR OF THE

DISCHARGE WILL BE

- 1) black-brown
- 2) yellowish
- 3) greenish
- 4) white-gray
- 4.THE MAIN SYMPTOM OF AN OCCLUSION OF THE EAR CANAL WITH A WAX PLUG
- 1) sharp pain in the ear
- 2) nystagmus
- 3) hyperacusis
- 4) unilateral deafness
- 5. TO REMOVE WAX PLUGS THE WATER TEMPERATURE SHOULD BE
- 1)27° C
- 2)30°C
- 3)37° C
- 4)42° C
- 6. WHEN REMOVING THE WAX PLUG FROM THE EAR THE WATER JET FROM THE SYRINGE

IS DIRECTED ALONG THE WALLS OF

- 1) lower posterior
- 2) upper posterior
- 3) anterolateral
- 4) antero-posterior
- 7. IN ORDER TO SOFTEN A WAX PLUG IN THE EAR THE FOLLOWING IS PLACED
- 1) distilled water
- 2) 3% boric alcohol solution
- 3) sodoglycerine drops
- 4) hydrocortisone suspension

8. PATIENTS WITH ACUTE OTITIS MEDIA HAVE HEARING LOSS 1) perceptive 2) mixed 3) conductive 9.PARACENTESIS OF THE TYMPANIC MEMBRANE IS PERFORMED IN THE QUADRANT 1) anterior-upper 2) anterior-lower 3) posterior-upper 4) posterior-lower 10. MOST COMMON WAY OF PENETRATION OF INFECTION INTO THE MIDDLE EAR 1) through auditory tube 2) through external ear canal in case of tympanic membrane trauma 3) hematogenous route 4) lymphogenic way 11. NARROWING OF EXTERNAL AUDITORY CANAL IS SEEN IN 1) otosclerosis 2) chronic middle otitis media 3) acute otitis media 4) otitis externa 12. ACUTE PURULENT MIDDLE OTITIS MEDIA COMPLICATED BY MASTOIDITIS IS ACCOMPANIED BY 1) paracentesis of tympanic membrane 2) anthrotomy 3) atticotomy 4) anthromastoidotomy 13. HEARING LOSS IS NOTED IN THE PRESENCE OF A WAX PLUG IN THE EXTERNAL **AUDITORY CANAL** 1) perceptive 2) mixed 3) conductive 14. DIAGNOSTIC SIGN OF ACUTE OTITIS MEDIA

1) hyperemia of tympanic membrane

2) scarring of tympanic membrane

- 3) shortening of malleolus handle and light cone
- 4) granulation in the lumen of the external auditory canal

Keys:

№	Answer	№	Answer
1	1	8	3
2	1	9	4
3	1	10	1
4	4	11	4
5	3	12	4
6	2	13	3
7	3	14	1

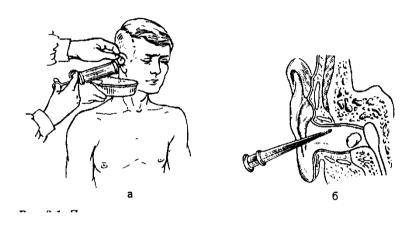


Fig.26. Which manipulation is performed in the figure, with which instrument, for which disease? What is the direction of the water jet and why? Specify contraindications for this examination.

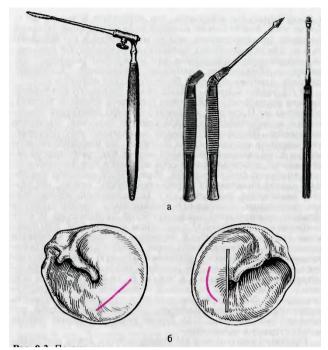


Fig. 27. What is the name of the instrument, for which disease is it used, in which quadrant of the eardrum is the incision made.

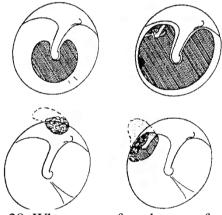


Fig. 28. What types of eardrum perforations are shown in the picture?

<u>Lesson 7</u> **Topic: Chronic ear diseases. Otogenic intracranial complications**

Examination Questions

- 1. How is chronic middle ear inflammation classified and how does it proceed?
- 2. Name benign and malignant tumors of the ear, ear injuries.
- 3. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, basic principles of treatment of acute and chronic tubotitis, sensorineural hearing loss, otosclerosis, Meniere's disease.
- 4. Labyrinthitis, its characteristic, clinic, diagnosis, principles of therapy.
- 5. Name the causative agent of meningitis, as well as ear diseases that can lead to meningitis, routes of infection
- 6. Give the definition, etiology, pathogenesis, what clinical manifestations occur in brain

abscess, cerebellar, sinustrombosis and otogenic sepsis.

Objectives

The student should know:

- 1. Forms, course, clinical manifestations of chronic otitis media, as well as complications caused by these forms.
- 2. Etiology, pathogenetic aspects, clinical picture, diagnosis, principles of treatment of acute and chronic catarrh of the middle ear, sensorineural hearing loss, otosclerosis, Meniere's disease
- 3. Classification of ear tumors, trauma, diagnosis, therapy of these diseases.
- 4. Forms, pathomorphology, classification of labyrinthitis, ways of penetration into the inner ear.
- 5. Etiology, pathogenesis, clinic, symptoms, diagnosis, treatment of meningitis, brain abscess, cerebellum, sinustrombosis, otogenic sepsis.

The student should be able to:

- 1. Distinguish forms of meso-, epitympanitis.
- 2.Perform otoscopy
- 3.Perform chambertonal tests, decipher the auditory passport, give interpretation of audiograms, radiographs according to Schuller, Meyer, Stenvers.
- 4.Determine spontaneous labyrinth nystagmus, fistulous symptom.
- 5.Perform Vodak-Fisher, finger-nose, finger-finger tests.
- 6.Identify Kernig's, Brudzinski's (upper, lower), Bechterew's symptoms.
- 7. Carry out a spinal puncture.

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1) Lopatin A.S., Alexandrova I.A., Varvianskaya A.V. Rational pharmacotherapy of ear, throat and nose diseases. A guide for practicing doctors.-LitTerra.-2013. p. 210-228 2) Luchikhin L.A.

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4)Palchun V.T., Magamedov M.M.,
Luchikhin L.A. Otorhinolaryngology
textbook.2007 468-645 p

Questions for independent work

Questions for independent work	
1.Name the main forms of chronic inflammation of the middle ear	
2. Give the definition and classification of ear tumors, ear injuries	_
3. State the stages, degrees, course of sensorineural hearing loss, otosclerosis, Mendisease	iere's
4. In which part of the tympanic membrane is the perforation located during ? mesotympanitis	
epitympanitis	
5. Tumor-like growths in the ear are	
6. Benign ear tumors include	
7. Otoscopy in tubo-otitis is characterized by the following changes to the eardrum	n
8. For practical purposes, sensorineural hearing loss is divided into	
9. The following degrees of hearing loss are defined according to the levels of thre for perceiving speech frequencies	esholds
10. Meniere's disease is characterized by the classic triad	
11. The various surgical treatments for Meniere's disease are divided into the follo groups	wing
12. The following forms of otosclerosis are distinguished according to the nature of lesion of the auditory and sound-conducting apparatus	of the

13. The following types of surgery for otosclerosis are known	
14. An indication for hearing aids is	
15. Depending on the nature of the pathogenic process, the following abyrinthitis are distinguished	ig forms of
by spread level	-
by pathomorphological signs	
16. Noise in the ear in labyrinthitis	
is amplified by	
17 Differential diagnosis of labyrinthitis is made with the following of	diseases
18. Meningeal (otogenic) symptoms include	
19. Indication for lumbar puncture is	
20. Otogenic meningitis is differentiated from	
21. Griesinger's symptom is	,
it appears with sigmoid sinus thrombosis.	
22. Whiting's symptom is -	•
<u>Tests</u>	
1. TREATMENT OF PATIENTS WITH CHRONIC EXUDATIVE OTITIS MEDIA IN	CLUDES
1) general ear surgery	
2) mastoidotomy	
3) myringotomy	
4) stapedectomy	
2. GENERAL BAND EAR SURGERY IS INDICATED FOR	
1) adhesive otitis media	
2) otosclerosis	
3) exudative otitis media	
4) chronic purulent-destructive epithympanitis	
3. CHARACTERISTIC OTOSCOPIC SIGN OF CHRONIC PURULENT OTIT	IS MEDIA IS

- 1) scars on the tympanic membrane
- 2) lime deposit on the tympanic membrane
- 3) perforation of the eardrum
- 4) dull color of eardrum
- 4. OTOSCLEROSIS IS MORE COMMON IN
- 1) girls
- 2) boys
- 3) men
- 4) women

5.THE PATHOGENESIS OF OTOSCLEROSIS IS BASED ON

- 1) osteodystrophic process
- 2) decrease of intralabyrinthine pressure
- 3) increase in intralabyrinthine pressure and edema (hydrops) of the labyrinth
- 4) scarring process in tympanic cavity.

6. OTOSCOPIC SIGN OF OTOSCLEROSIS IS

- 1) thickening of the tympanic membrane
- 2) normal appearance or thinning of the tympanic membrane
- 3) perforation of tympanic membrane in stretched part
- 4) Scars and petrificates on tympanic membrane

7. SURGICAL TREATMENT OF PATIENTS WITH OTOSCLEROSIS IS

- 1) tympanoplasty
- 2) anthromastoidotomy
- 3) stapedoplasty
- 4) aticoanthrotomy

8. IN OTOSCLEROSIS THE PRIMARY OTOSCLEROTIC FOCUS IS LOCALIZED IN THE

AREA OF

- 1) oval window
- 2) round window
- 3) tympanic membrane
- 4) tympanic orifice of ear canal
- 9. TIMPANAL FORM OF OTOSCLEROSIS THICKNESSES
- 1) perceptual
- 2) mixed

- 3) conductive
- 4) scalar

10.IN A PATIENT WITH A LESION OF THE SOUND-ACCEPTING PART OF THE SOUND ANALYZER IN THE RIGHT EAR THE SOUND IN THE WEBER EXPERIMENT WILL BE DIRECTED

- 1) to the right
- 2) to the left
- 3) to both sides
- 4) in the center of the head
- 11. WHEN PERFORMING THRESHOLD TONAL AUDIOMETRY IN A PATIENT WITH A LESION OF THE SOUND-PRODUCING PART OF THE SOUND ANALYZER WE OBSERVE
- 1) decrease in airborne sound conduction
- 2) decrease of bone and air conduction
- 3) decrease of bone sound conduction
- 4) islets of sound
- 12. PETROSITIS IS CHARACTERIZED BY
- 1) paresis or paralysis of facial nerve
- 2) trigemipitis
- 3) bilateral hearing loss
- 4) pain during chewing
- 13. PERMANENT SYMPTOM OF CHRONIC OTITIS MEDIA
- 1) increase in body temperature
- 2) ear pain
- 3) perforation of tympanic membrane
- 4) flank gait disturbance
- 14.PATHOGENETIC BASIS OF THE MENIERE'S DISEASE IS CONSIDERED TO BE
- 1) hydrops of labyrinth
- 2) presence of cholesteatoma in tympanic cavity
- 3)labyrinthitis
- 4)arterial hypertension
- 15.CHOLESTEATOMA IS CHARACTERISTIC OF

I)otosclerosis

2)adhesive otitis media

- 3) chronic purulent mesotympanitis
- 4) chronic purulent epithympanitis

16.IN EXACERBATION OF CHRONIC PURULENT MESOTYMPANITIS THERE IS

- 1) swelling of soft tissues in the occipital region
- 2) intensification of pus discharge from ear
- 3) nystagmus
- 4) neck stiffness

17.MASTOIDITIS IS A COMPLICATION OF

- 1) acute purulent otitis media
- 2) chronic mesotympanitis
- 3) tubootitis
- 4) adhesive otitis media

18.SIGN OF EPITYMPANITIS IS

- 1) perforation in the non-tensioned part of tympanic membrane
- 2) perforation in the stretched part of the tympanic membrane
- 3) intact eardrum
- 4) central perforation

19.MEDICATION USED DURING AN ATTACK IN MENIERE'S DISEASE

- 1) 2.4% eufillin solution 10 ml into a vein
- 2) 0.1% solution of atropine sulfate 1 ml under the skin
- 3) 50% analgin solution 2 ml into the muscle
- 4) 5% ascorbic acid solution 2 ml in a vein

20. TO TREAT PATIENTS WITH MENIERE'S DISEASE THE FOLLOWING SURGERIES ARE

PERFORMED

- 1) stapedoplasty
- 2) stapedectomy
- 3) endolymphatic sac drainage
- 4) atromastoidotomy

Keys:

No	Answer	№	Answer
1	3	15	4
2	4	16	2
3	3	17	1

4	4	18	1
5	1	19	2
6	2	20	3
7	3		
8	1		
9	3		
10	2		
11	1		
12	2		
13	3		
14	1		

1. THE MOST FREQUENT WAY OF SPREADING INFECTION INTO THE CRANIAL CAVITY FROM THE MIDDLE AND INNER EAR IS

- 1) contact
- 2) lymphogenic
- 3) hematogenous
- 4) 4. labyrinthine
- 2. IN CHRONIC PURULENT MIDDLE OTITIS COMPLICATED BY MENINGITIS A SURGERY IS
 - 1) extended radical ear surgery
 - 2) mastoidotomy
 - 3) endoaural atticochegrotomy
 - 4) anthromastoidotomy

3.TO DIAGNOSE CHRONIC PURULENT MEDIA OTITIS COMPLICATED BY MENINGITIS, THE FOLLOWING SURGERIES ARE PERFORMED

- 1) otoscopy, otoneurological examination
- 2) otoscopy, cranial CT scan, blood analysis
- 3) otoscopy, cranial X-ray, spinal tap, otoneurological examination
- 4) otoscopy, blood test, medical history
- 4.SYMPTOM OF OTOGENIC PURULENT MENINGITIS IS

1) ptosis
2)diplopia
3)nystagmus
4) positive symptoms of Kernig, Brudzinski, stiffness of occipital muscles
5.OTOGENIC INTRACRANIAL COMPLICATIONS INCLUDE
1) petrositis
2) sinus thrombosis
3)zygomatica
4) Bezold's mastoiditis
6.SYMPTOM CHARACTERISTIC OF OTOGENIC CEREBELLAR ABSCESS IS
1) adiadochokinesis
2) hyperacusis
3) amnesic aphasia
4) posture of the patient in "doggy-legged" posture
7. ACUTE PURULENT MIDDLE OTITIS MEDIA COMPLICATED BY MASTOIDITIS AND
SUBPERIOSTEAL ABSCESSES IS CHARACTERISED BY
1) paracentesis of tympanic membrane
2) anthromastoidotomy
3) atticotomy
4) anthrotomy
8. SYMPTOM OF FORCED POSITION OF THE HEAD IS CHARACTERISTIC FOR THE DISEASE
1) subdural abscess
2) sinus thrombosis
3) otogenic abscess of cerebellum
4) extradural abscess
9. FEVER IN SINUS THROMBOSIS
1) febrile
2)normal
3) subfebrile
4) hectic
10. A SUBDURAL ABSCESS IS AN ACCUMULATION OF PUS
1) between dura mater and bone
2) deep in the brain substance

- 3) between dura mater and spider dura mater
- 4) in cerebellum

11. IN OTOGENIC INTRACRANIAL COMPLICATIONS THE FOLLOWING SURGERIES ARE

PERFORMED

- 1) extended radical ear surgery
- 2) atticotomy
- 3) tympanoplasty
- 4) anthrotomy

12. BRADYCARDIA IS NOTED IN DISEASES OF

- 1) cerebral abscess
- 2) sinus thrombosis
- 3) otogenic meningitis
- 4) otogenic sepsis

13. TREATMENT TACTICS OF PATIENTS WITH SUBDURAL ABSCESS IS

- 1)mastoidotomy
- 2)antibacterial, symptomatic, detoxification therapy
- 3) extended radical ear surgery
- 4) extended radical ear surgery with obligatory abscess opening, antibacterial, symptomatic and detoxication therapy

14. HEADACHE IN CEREBELLAR ABSCESS IS MOST FREQUENTLY LOCATED IN

- 1) frontal area
- 2) occipital area with possible irradiation along posterior surface of neck
- 3) parietal region
- 4) temporal region

15. IN CASE OF ABSCESS OF LEFT TEMPORAL LOBE IN RIGHT-HANDED PEOPLE THE MOST FREQUENTLY REVEALED SYMPTOM IS

- 1)agraphia
- 2) alexia
- 3) amnesic aphasia
- 4) motor aphasia

16. ADIADOCHOKINESIS IS A SPECIFIC SYMPTOM OF LESION IN

- 1) temporal lobe of the brain
- 2) cerebellum
- 3) frontal lobe

- 4) labyrinth
- 17. AMNESTIC APHASIA IS OBSERVED IN
- 1) frontal lobe abscess
- 2) cerebellar abscess
- 3) meningitis
- 4) abscess in temporal lobe of brain
- 18. SPINAL TAP IS DONE IN THE SPINAL REGION
- 1) cervical
- 2) thoracic
- 3) lumbar
- 19. THERE ARE FOLLOWING STAGES IN THE CLINICAL PICTURE OF OTOGENIC CEREBRAL ABSCESS
- 1)one
- 2) two
- 3) three
- 4) four
- 20. HEMIANOPSIA IS OBSERVED IN
- 1) abscess in frontal lobe of brain
- 2) abscess in temporal lobe of brain
- 3) cerebellar abscess
- 4) leptomeningitis

$N_{\underline{0}}$	Answer	$N_{\underline{0}}$	Answer
1	1	11	1
2	1	12	1
3	3	13	4
4	4	14	2
<u>4</u> 5	2	15	3
6	1	16	2
7	2	17	4
8	3	18	3
9	4	19	4
10	3	20	2



Fig.29. Which external ear disease can you see in the picture?

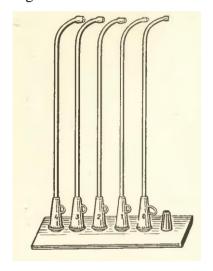


Fig.30. What are the names of the instruments and what are they used for?

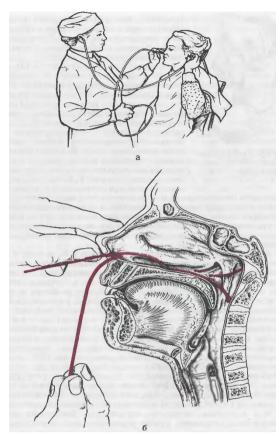


Fig. 13. What is the name of the method and what instrument is it performed with?

Facial nerve Tympanic cavity Cerebral membrane Internal acoustic meatus Labyrinth

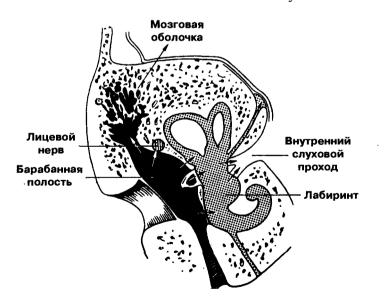


Fig.31. Name 5 main ways of infection spread during otitis media

Lesson 8 Topic: Diseases of the nose and paranasal sinuses.

Review questions:

- 1. Define how a deviated nasal septum, nasal furuncle are clinically manifested
- 2. How are acute and chronic rhinitis, acute and chronic sinusitis classified, how do they occur
- 3. Rhinogenic complications: what diseases of the sinuses lead to them, clinic, diagnosis, treatment
- 4. Causes, measures to stop nasal bleeding
- 5. Tumors of the nose and sinuses, trauma, fractures of the nasal bones, foreign bodies classification, clinical manifestations, diagnosis, treatment
- 6. Hematoma and abscess of nasal septum

1. Terrible complications of a nasal furuncle are

Objectives

The student should know: References: Basic clinical symptoms of diseases of the nose 1) Palchun V.T., Magamedov M.M., and paranasal sinuses, their complications, Luchikhin L.A. Otorhinolaryngology principles of conservative treatment and textbook.-2007.- 468-645 p. indications, as well as contraindications to 2)Piskunov G.Z., Piskunov S. Z. Clinical surgical intervention rhinology.-M.: IIA, 2006. - 282-407 p. 2)Lectures of the department where the student studies The student should be able to: References: 1. Perform anterior and posterior rhinoscopy 1) Palchun V.T., Magamedov M.M., 2. Perform pre-hospital, medical interventions Luchikhin L.A. Otorhinolaryngology textbook.-2007.- 468-645 p. to stop nasal bleeding 3.Insert medicated turundas into the nasal 2) Piskunov G.Z., Piskunov S. Z. Clinical passages rhinology.-M.: IIA, 2006. - 282-407 p. 4. Evaluate the R-grams of the paranasal sinuses in case of pathology

Assignments for independent work:

• 1		
• 2		
• 4		
There are three	e types of nasal septal deformities	

2.	Septal hematoma is caused by
3.	Depending on the causes of bleeding a distinction is made between
4.	How many degrees of bleeding are there and what is the volume of blood loss for them
5.	The main manipulations in the pre-hospital phase of stopping nasal bleeding include
6.	The main measures to stop nasal bleeding in the hospital are
7.	Acute rhinitis has three stages
8.	Acute rhinitis can lead to the following complications
9.	What is the name of the test to distinguish catarrhal rhinitis from hypertrophic rhinitis and how is it performed?
10	The main type of treatment for chronic hypertrophic rhinitis is
11	.What is the main localization of bleeding from the nasal cavity
12	.In neuro-vegetative form of vasomotor rhinitis anterior rhinoscopy is characterized by
13	.Allergic rhinitis is characterized by a triad of signs
14	.The main causative agents of sinusitis are

1SYMPTOM IN CHRONIC POLYPOSIS ETHMOIDITIS IS

- 1) thinning of nasal mucosa
- 2) mucous nasal discharge
- 3) nasal discharge with a putrid odour
- 4) recurrent nasal bleeding
- 2. RHINOSCOPIC PICTURE OF ACUTE NONSPECIFIC RHINITIS IS CHARACTERIZED BY
- 1) nasal mucous membrane hyperemia
- 2) enanthemas in the mucous membrane
- 3) thinning of nasal cavity mucous membrane
- 4) papillary hyperplasia of nasal mucosa

3. IN PURULENT SPHENOIDITIS NASAL DISCHARGE IS DETERMINED RHINOSCOPICALLY

- 1)average
- 2) inferior
- 3) upper
- 4) general
- 4. THE PRESENCE OF BLUISH AND WHITE SPOTS ON THE MUCOUS MEMBRANE OF THE NASAL SINUSES IS CHARACTERISTIC OF RHINITIS
- 1) chronic vasomotor
- 2) chronic hypertrophic
- 3) chronic atrophic
- 4) acute non-specific
- 5. X-RAY SIGN OF CATARRHAL MAXILLARY SINUSITIS IS
- 1) parietal darkening of maxillary sinus
- 2) non-homogeneous reduction of maxillary sinus transparency
- 3) homogeneous intensive reduction of maxillary sinus transparency
- 4) globular shadow in projection of maxillary sinus
- 6.NASAL FURUNCLE DEVELOPMENT IS PREDISPOSED TO
- 1) leukemia
- 2)thyrotoxicosis
- 3) diabetes mellitus
- 7. MAXILLARY SINUSITIS IS MORE COMMONLY
- 1) odontogenic
- 2) rhinogenic
- 3) traumatic
- 4) orbitogenic

8.RHINOGENIC MAXILLARY SINUSITIS IS DIFFERENTIATED FROM ACUTE PURULENT PERIOSTITIS

OF THE UPPER JAW BY

- 1) the nature of pain sensations
- 2) the presence of changes in the alveolar process tissue
- 3) data of dental percussion
- 4) changes in the white blood cells
- 9. PUNCTURE OF MAXILLARY SINUS IS CARRIED OUT THROUGH
- 1) superior nasal passage
- 2) middle nasal passage
- 3) inferior nasal passage
- 4) anterior sinus wall

10. ACUTE RHINORREA HAS STAGES 1) one 2) two 3) three 4) four 11. SYMPTOM CHARACTERISTIC OF SEPTAL DEVIATION IS 1) difficulty in nasal breathing 2) putrid odor 3) rhinorrhea 4) anosmia 12. SYMPTOM OF OZENA IS 1) wide nasal passages 2) polyposis hyperplasia of nasal mucosa 3) recurrent nasal bleeding 4) hypertrophy of nasal cavities 13. TREATMENT METHOD OF CHRONIC HYPERTROPHIC RHINITIS IS 1) submucosal vasotomy 2) galvanocaust 3) submucosal conchotomy 4)intranasal blocks 14. ANOSMIA IS OBSERVED IN 1) simple atrophic rhinitis 2) vasomotor rhinitis 3) ozena 4) hypertrophic rhinitis 15. LEFLER'S BACILLUS IS FOUND IN 1) venereal disease 2) diphtheria 3)scleroma 4) syphilis 16. FOUL-SMELLING RHINORREA IS OBSERVED IN 1) hypertrophic rhinitis 2) simple trophic rhinitis 3) vasomotor rhinitis 4) ozena

17. INDICATION FOR RADICAL SURGERY ON THE MAXILLARY SINUS IS

1) sanation of chronic inflammation nidus

- 2) cyst removal
- 3) foreign body removal

18. TREPANOPUNCTURE IS PERFORMED IN CASE OF DISEASE

- 1) maxillary sinus
- 2) cells of the labyrinthine cortex
- 3) frontal sinus
- 4) sphenoid sinus

19. NASAL FURUNCLE LEADS TO SINUS THROMBOSIS

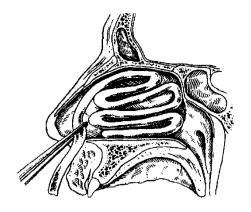
- 1) cavernous
- 2) sigmoid
- 3) transversal
- 4) longitudinal

20. TREPANOPUNCTURE OF FRONTAL SINUS IS MADE THROUGH THE WALL

- 1) inferior
- 2) medial
- 3) anterior
- 4) lateral

Keys:

№	Answer	№	Answer
1	2	12	1
2	1	13	3
3	3	14	3
4	1	15	2
5	1	16	4
6	4	17	1
7	2	18	3
8	2	19	1
9	3	20	3
10	3		
11	1		



a.

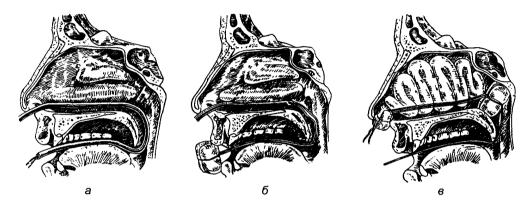


Fig.35. b. Specify methods of stopping nasal bleeding.

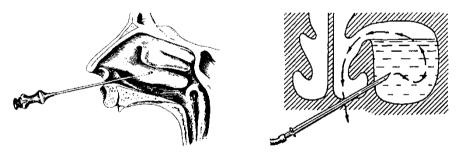


Fig.36. What is the name of the procedure and what is its technique?

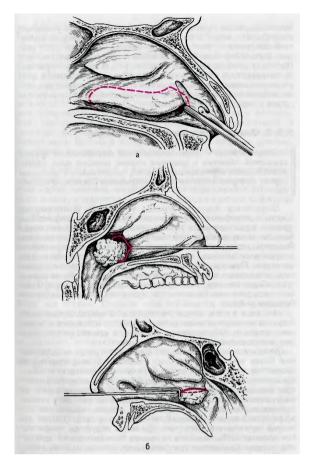


Fig.37. Specify the main methods of surgical treatment of hypertrophic rhinitis.

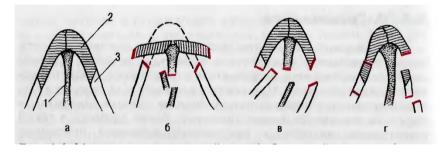


Fig.38. What nasal bone fracture patterns do you see in the picture?

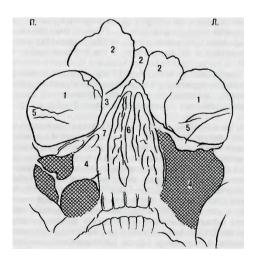


Fig.39. What diagnosis can you suggest based on the radiograph of the LP?

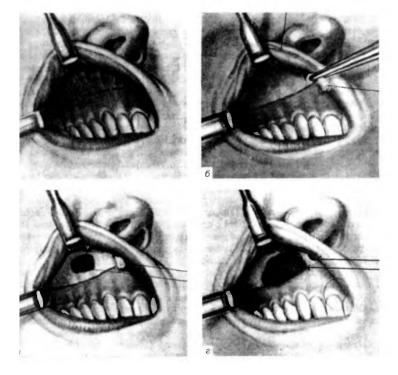


Fig. 40. What is the name of the operation and in what disease is it performed?

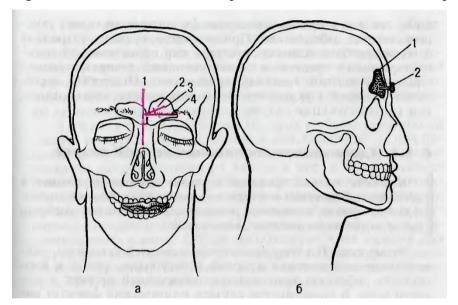


Fig.41. Name the indications and technique for performing the operation in the picture

<u>Lesson 9</u> <u>Topic: Diseases of the pharynx</u>

Examination questions:

- 1. Definition, etiology, pathogenesis, clinical manifestations, diagnosis, principles of treatment of acute and chronic pharyngitis, pharyngitis and candidomycosis.
- 2. Tonsillitis classification of tonsillitis, pharyngeal diphtheria (pathogen, clinic, diagnosis, treatment). Paratonsillitis. Paratonsillar and glossopharyngeal abscesses.
- 3. Classification of tonsillitis by Soldatov, hypertrophy of the palatine and pharyngeal tonsils (adenoids). Chronic tonsillitis.
- 4. Classification of tumors, injuries, burns, and foreign bodies of the pharynx, pharyngeal bleeding.

Objectives.

The student should know:

1. Classification of tonsillitis, basic clinical symptoms of acute and chronic tonsillitis, its complications and related diseases, principles of conservative treatment, prevention and dispensary, clinical manifestations of pharyngocandidomycosis, paratonsillar abscess, adenoids, pharyngeal tumors.

References:

- 1) Palchun V.T., Magamedov M.M., Luchikhin L.A. Otorhinolaryngology textbook.-2007,-250-324p.
 2) Berbom Hans, Kaschke Oliver,
- 2)Berbom Hans, Kaschke Oliver, Navka Tadeus. Diseases of the Ear, Throat and Nose. - MEDpress-Inform. - 2016 - 776 p.
- 3)Kryukov A.I. Guide to emergency care for diseases of the ear and upper respiratory tract. -GEOTAR-Media. - 2016 - 386 p.

The student should be able to:

1. Perform types of pharyngoscopy, diagnose correctly pharyngeal disease, make differential diagnosis of acute primary tonsillitis with tonsil lesions in infectious diseases and pathology of the blood system, timely identify complications, choose therapeutic tactics, perform some manipulations, namely: lubrication of the back wall of the throat with drugs, lavage of tonsil lacunae with solutions, etc.

References:

1)Palchun V.T., Luchikhin L.A., Magomedov M.M.: Manual for practical otorhinolaryngology. MIA. - 2011 . - 565 p. Palchun V.T.,Luchikhin L.A., Magomedov M.M.-MIA. -2011- 344 p. 2)Kryukov Andrev Ivanovich,: Inflammatory diseases of the pharynx. GEOTAR-Media.-2014.- 102-285 p.

Assignment for independent work

1.	The main causative agents of acute pharyngitis are	
2.	The predisposing factors of acute pharyngitis are	
3.	Tonsillitis is	
4.	Trivial forms of tonsillitis include	
5.	Atypical forms of tonsillitis include	
6.	Tonsillitis accompanying infectious diseases	
7.	Tonsillitis associated with blood diseases	
8.	Tonsillitis is treated in the dep	partment
	Plaques in diphtheria have the following signs	
10	The following three forms of diphtheria are distinguished	
	1. According to clinical and morphological changes the following forms of p stinguished	paratonsillitis are

12. Mesopharyngoscopy in case of a pharyngeal abscess is characterized by
12. (1)
13. Chronic pharyngitis is classified as follows
14. Zack's sign is
15. Preobraznensky's sign is
16. Giese's sign is
17.Indications for tonsillectomy are
18. Contraindications for tonsillectomy are
19 Surgery to treat hypertrophy of the palatine tonsils is called
20. Surgery in the treatment of adenoids is called
<u>Тесты</u>
1.CHRONIC PHARYNGITIS IS CHARACTERIZED BY
1) sore throat
2) difficulty in swallowing
3) scratchy throat
4) cough with sputum
2. CHARACTERISTIC CHANGE OF MUCOUS MEMBRANE IN CHRONIC ATROPHIC PHARYNGITIS
1)bright hyperemia
2)dryness
3) edema
4. vascular injection
3. TONSIL PLAQUE SPREADS BEYOND TONSIL SURFACE IN CASE OF
1) pharyngeal diphtheria
2) lacunar tonsillitis
3) ulcerative necrotic tonsillitis
4) catarrhal tonsillitis
4. THE CAUSE OF DISORDER OF THE SOFT PALATE MOBILITY IN PHARYNGEAL DIPHTHERIA
1) swelling of pharyngeal soft tissues
2) toxic paresis of the palatineal muscles
3) paresis of pharyngeal nerve tongue
5. OPEN PHARYNGEAL RHINOLALIA OCCURS WITH
1) cleft palate
2) pharyngeal abscess
3) chronic tonsillitis

4) laryngitis

6. THE CAUSATIVE AGENTS OF SIMANOVSKY - PLAUTE - VENSENZA TONSILLITIS ARE

- 1) yeast-like fungi and streptococci
- 2) fusiform stick and spirochete of the oral cavity
- 3) pale treponema and Escherichia coli
- 4) Escherichia coli and Staphylococcus aureus

7 CAUSE OF PARATONSILLITIS

- 1) chronic pharyngitis
- 2) acute pharyngitis
- 3) tonsillitis
- 4) adenoiditis

8. CONE-SHAPED YELLOWISH-WHITE MASSES ON PALATINE TONSILS AND TONGUE ARE A SIGN OF

- 1) follicular tonsilltiis
- 2) lacunar tonsillitis
- 3) pharyngomicosis
- 4) catarrhal tonsillitis
- 9. PINK GRANULES ON THE BACK WALL OF THE THROAT ARE OBSERVED AT
- 1) catarrhal pharyngitis
- 2) subatrophic pharyngitis
- 3) atrophic pharyngitis
- 4) granular pharyngitis
- 10. REMOVAL OF PHARYNGEAL TONSILS IS CALLED
- 1) adenotomy
- 2) tonsillectomy
- 3) tonsillotomy

Keys:

№	Answer	№	Answer
11	3	19	3
12	3	20	2
13	3		
14	4		
15	1		
16	2		
17	2		
18	2		



Fig.42. What is the name of the instrument, what surgery and diseases is it used for?

Признак	Дифтерия глотки	Ангины
Налеты	Расположены на поверхности мин- далин Распространяются за пределы мин- далин Снимаются с трудом, оставляя кро- воточащую поверхность	Расположены в глубине лакун Находятся в пределах свободной поверхности миндалин (за исключением скарлатинозной и язвеннопленчатой ангины, при которых они могут выходить за пределы миндалин) Поверхностные и легко снимаются
Гиперемия и болезнен- юсть при глотании	Большей частью незначительные	Выражены
Температура тела	Субфебрильная или быстро снижающаяся	Держится, особенно первые 2 дня, около 39–40 °C
	Сравнительно низкая	
Пупьс	Сначала замедлен, затем учащен, поверхностный и аритмичный	Соответствует темперетуре тела
Общее состояние	Тяжелое, прогрессивно ухудшаю- щееся (особенно при токсической форме)	Обычно не очень тяжелое
Состояние регионарных шейных лимфатических узлов	Болезненность и припухлость. При токсической дифтерии отечность подкожной клетчатки шеи	Болезненность и припухлость
Бактериологическое исспедование напетов	Коринебактерия дифтерии	В редких случаях может быть носи- тельство коринебактерии (диффе- ренциальная диагностика в таких случаях должна основываться на тщательном клиническом наблюде- нии, эффекте сывороточной тера- пии и учете эпидемиологических данных)

Symptom	Pharynx diphtheria	Tonsillitis
Plaques	Located on the surface of the tonsils Spread beyond the tonsils Is difficult to remove, leaving a bleeding surface	Located inside the tonsils Are within the free surface of the tonsils(except for scarlatinal and necrotic tonsillitis when they can stretch beyond the tonsils) Are easily removed

Hyperemia and pain when swallowing	Insignificant	Significant
Fever	Subfebrile or quickly going down, relatively low	About 39-40 C for the first two days
Heart rate	First slow, then rapid, shallow and irregular	Corresponds with the body temperature
General condition	Critical, progressively aggravating(especially with the toxic form)	Generally not very serious
Condition of regional cervical lymph nodes	Sore and swollen. With toxic diphtheria the subcutaneous tissue of the neck is swollen	Sore and swollen
Bacteriological examination of plaque	Corynebacterium of diphtheria	In rare cases can carry corynebacterium(differentials should be based on careful clinical observation, serum therapy effect and record of epidemiological data

Fig 43. Table.

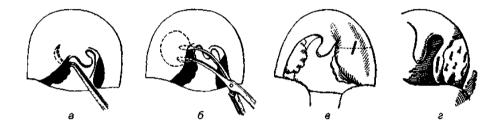


Fig.44. In what disease is this pharyngoscopic picture observed?

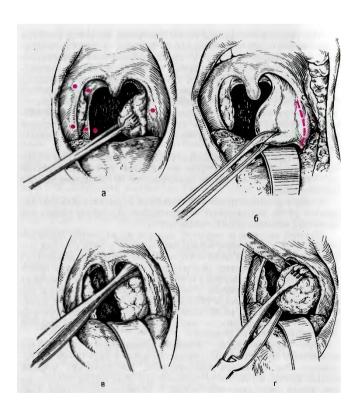


Fig.45. Name the surgery, indications and contraindications for this method of treatment.

Lesson 10

Topic: Diseases of the larynx.

Questions to check:

- 1. Acute and chronic laryngitis: etiology, clinical picture, treatment.
- 2. Acute laryngotracheitis in children, classification, clinical picture, treatment. Laryngeal edema and diphtheria.
- 3. Acute stenosis of the larynx, causes, classification, clinic, emergency care.

Objectives

The student should know:	References:		
1. The main clinical symptoms of	1) Bogomilsky M.R. Children's		
laryngeal diseases, features of the course	Otorhinolaryngology Moscow:		
of laryngeal stenosis in childhood,	Geotar-Media 2006 432 p.		
principles of conservative treatment,	2)Luchikhin L.A.		
indications for intubation and	Otorhinolaryngology. Textbook.		
tracheostomy, types of tracheotomy.	Approved by the Ministry of Education		
	of RFGEOTAR-Media 2016 - 584		
	p.		
The student should be able to:	References:		
1.Perform indirect laryngoscopy, diagnose and make differential diagnosis of laryngeal diseases, determine the stage of stenosis, select appropriate therapeutic tactics, perform some therapeutic manipulations, perform tracheostomy when indicated, and in extreme situations perform cricotomy or criconicotomy.	1) Luchikhin L.A. Examination of an otorhinolaryngological patient GEOTAR Media 2014 - 256 p.		

Assignment for independent work.

1. The laryngoscopic picture of subclavian laryngitis is presented	
2. Chronic laryngitis is classified into the following forms	
3. In its turn there are four varieties of chronic hypertrophic laryngitis	
4. The most favorable form of laryngeal stenosis is	
5. The adaptive responses in laryngeal stenosis include	
mechanisms	
6. There are different stages of stenosis	
7. Laryngeal stenosis is characterized by	dyspnea,
and tracheal stenosis by	
8. The main types of tracheostomy	,
depending on	

9. Laryngeal cancer is divided into three forms according to localization	
with the most unfavorable of these	
10. There are the following treatments for malignant tumors	

Tests.

- 1. FOR LARYNGOSTENOSIS IN CHILDREN IS PERFORMED
- 1) upper tracheostomy
- 2) middle tracheostomy
- 3) lower tracheostomy
- 4) conicotomy
- 2. URGENT TRACHEOTOMY IS INDICATED IN ACUTE LARYNGOSTENOSIS
- 1) 1st degree
- 2) 2nd degree
- 3) 3rd degree
- 4) 4th degree
- 3. DURING CONICOTOMY THE LIGAMENT IS DISSECTED
- 1) signetracheal
- 2) scapular laryngeal
- 3) cricothyroid
- 4) thyroid hyoid
- 4. ACUTE LARYNGOSTENOSIS IS CAUSED BY
- 1) chronic hypertrophic laryngitis
- 2) laryngeal cancer
- 3) scleroma of the larynx
- 4) laryngeal diphtheria
- 5. IN SUBCUTANEOUS NECK EMFYZEMA AFTER TRACHEOSTOMY IS MOST EFFECTIVE
- 1) introduction of a tracheostomy tube with an inflatable cuff into the trachea
- 2) replacement of the tracheostomy tube with a tube of larger diameter
- 3) wide opening of the skin wound
- 6. THE ATTACK OF FALSE CROP DEVELOPS MORE FREQUENTLY
- 1) in the evening
- 2) at night
- 3) in the morning
- 4) in the afternoon
- 7. THE MOST SEVERE COMPLICATION OF ACUTE SUBGLOTTIC LARYNGITIS
- 1) persistent dysphonia
- 2) acute stenosis of the larynx
- 3) asthmatic bronchitis
- 4) hypersensitivity of the larynx
- 8. COMPLEX OF SYMPTOMS CHARACTERISTIC FOR PHLEGMONOUS LARYNGITIS
- 1) dysphonia and laryngeal pain
- 2) dysphonia, dysphagia, laryngeal pain, dyspnea
- 3) dysphagia, chest pain
- 4) dysphagia, pain when swallowing
- 9. CLINICAL MANIFESTATION OF SINGLE NODES
- 1) pain
- 2) paroxysmal cough
- 3) persistent dysphonia
- 4) do not manifest clinically
- 10. SYMPTOMS CHARACTERISTIC FOR WELL -CONTROLLED LARYNGOSTENOSIS
- 1) inspiratory dyspnea at rest, pallor of the skin, restless state of the patient
- 2) reduction and deepening of breathing, loss of pauses between inhalation and exhalation
- 3) breathing is frequent and shallow, forced position of the patient, cyanosis of the lips, frequent pulse

$N_{\overline{0}}$	Answer	№	Answer
1	3	8	3
2	2	9	4
3	1	10	1
4	2		
5	1		
6	2		
7	3		

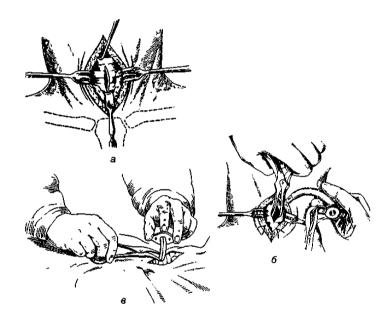


Fig.46. What surgery is shown in the picture, what types of it exist.



Fig.47. Indicate 3 main types of throat dissection

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