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**Federal State Budgetary Educational Institution of Higher Education
«North-Ossetia State Medical Academy»
of the Ministry of Healthcare of the Russian Federation
The Department of Otorhinolaryngology with Ophthalmology**

APPROVED

**By the record of the meeting of the Central
Coordinating Educational and Methodical
Council as of «02» April 2024. Record № 4**

Collection of Assessment Materials

In «Otorhinolaryngology»

For basic professional academic program – specialty program in 31.05.01 General
Medicine

approved on 17.04.2024

For students of the 4th year

majoring in 31.05.01 General Medicine

**Reviewed and approved at the meeting of the department
as of February 28, 2024 (record No. 7)**

Head of the Department

Doctor of Medicine, Associate Professor

E.T. Gappoeva

Vladikavkaz 2024

The contents of the assessment materials collection

1. Title page
2. The structure of the assessment materials collection
3. Reviews of the assessment materials collection
4. Passport of the assessment materials
5. Evaluation kit:
 - questions for the module
 - questions for the pass/fail test
 - bank of cases
 - sample tests (with a title page and table of contents),
 - examination cards for the pass/fail test
 - examination cards on practical skills

**FEDERAL STATE BUDGETARY EDUCATIONAL INSTITUTION
OF HIGHER EDUCATION
«NORTH-OSSETIA STATE MEDICAL ACADEMY»
OF THE MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION**

**REVIEW
of the Collection of Assessment Materials**

In «Otorhinolaryngology»

For students of the 4th year

majoring in 31.05.01 General Medicine

The assessment materials are developed at the department of Otorhinolaryngology with Ophthalmology based on the work program for Otorhinolaryngology of the basic professional academic program – specialty program in 31.05.01 General Medicine approved on 17.04.2024. The materials meet the requirements of the Federal State Educational Standard in Higher Education in 31.05.01 General Medicine, approved by the Ministry of Education and Science of the RF as of 12 August 2020 №988.

The assessment materials include: 1) questions for the module; 2) questions for the pass/fail test; 3) bank of cases; 4) sample tests (with a title page and table of contents); 5) examination cards for the pass/fail test; 6) examination cards on practical skills.

Bank of cases includes tasks and answer templates. All the tasks correspond with the work program of otorhinolaryngology, competencies developed during its study and cover all its sections. The bank includes keys to all cases.

Sample tests include the following elements: tests, answer templates. All the tasks correspond with the work program of otorhinolaryngology, competencies developed during its study and cover all its sections. The complexity of the tasks varies. The number of tasks for each section of the discipline is sufficient for knowledge control and excludes repetition of the same question in different versions. Sample tests include keys to all tests.

The number of cards is sufficient for the test and excludes the repeated use of the same card during the exam in the same academic group on the same day. Examination cards are made on blanks of a single sample in a standard form, on paper of the same color and quality. The card includes 3 questions. The wording of the questions coincides with the wording of the list of questions submitted for the exam. The questions of one card refer to different sections of the program, allowing to fully cover the material of the academic discipline..

The theoretical questions are completed with a bank of cases. Cases allow to evaluate objectively the level of knowledge of the students during the current and interim testing. The questions in the cards are equally difficult. Cards for evaluating practical skills allow you to adequately assess the level of practical training of students in the discipline.

There are no comments on the peer-reviewed collection of assessment materials.

In general, the collection of assessment tools in the discipline of "Otorhinolaryngology"

contributes to a qualitative assessment of the level of students' mastery of general cultural and professional competencies. The peer-reviewed collection of assessment tools in the discipline of "Otorhinolaryngology" can be recommended for interim assessment at the Faculty of Medicine for 4th year students.

Reviewer:

Head of the Central Coordinating Educational
and Methodical Council , doctor of Medicine, professor

L. V. Tsallagova

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Passport of the assessment tools for Otorhinolaryngology

| № | Name of the section (topic) of the discipline / module | Code of the formed competence (stage) | Name of the assessment tool |
|---------------------------|--|---------------------------------------|---|
| 1 | 2 | 3 | 4 |
| Type of test | Interim | | |
| Checking practical skills | General issues of otorhinolaryngology | GC-1 | Practical skills (training on each other) |
| Quiz | Introduction to otorhinolaryngology History of otorhinolaryngology | GPC-1 | Questions to the topic |
| Current testing, quiz | Examination methods, clinical anatomy, physiology of the nose and paranasal sinuses | GPC-1 | Questions to the topic, tests in clinical anatomy, physiology of the nose and paranasal sinuses |
| Current testing, quiz | Examination methods, clinical anatomy, physiology of the pharynx and esophagus. | GPC-1 | Questions to the topic, tests in clinical anatomy, physiology of the pharynx and esophagus |
| Current testing, quiz | Examination methods, clinical anatomy, physiology of the larynx. | GPC-1 | Questions to the topic, tests in clinical anatomy, physiology of the larynx |
| Current testing, quiz | Clinical anatomy, physiology and examination methods of the trachea and bronchi. | GPC-1 | Questions to the topic, tests in clinical anatomy, physiology of |

| | | | |
|-----------------------------------|---|-------|---|
| | | | the trachea and bronchi |
| Current testing, quiz | Examination methods, clinical anatomy, physiology of the outer and middle ear, inner ear | GPC-1 | Questions to the topic, tests in anatomy, physiology of the outer, middle and inner ear |
| Current testing, quiz, case-study | Diseases of the nose and paranasal sinuses. | PC-2 | Questions to the topic, current testing, case study |
| Current testing, quiz, case-study | Injuries to the nose and paranasal sinuses | PC-2 | Questions to the topic, current testing, case study |
| Current testing, quiz, case-study | Diseases of the external nose and nasal cavity. | PC-2 | Questions to the topic, current testing, case study |
| Current testing, quiz, case-study | Inflammatory diseases of the nose. | PC-3 | Questions to the topic, current testing, case study |
| Current testing, quiz, case-study | Inflammatory diseases of the paranasal sinuses. | PC-3 | Questions to the topic, current testing, case study |
| Current testing, quiz, case-study | Diseases of the pharynx, esophagus and neck. | PC-2 | Questions to the topic, current testing, case study |
| Current testing, quiz, case-study | Acute diseases of the pharynx | PC-2 | Questions to the topic, current testing, case study |

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|-----------------------------------|--|------|---|
| Current testing, quiz, case-study | Chronic diseases of the pharynx. | PC-4 | Questions to the topic, current testing, case study |
| Current testing, quiz, case-study | Diseases of the larynx, trachea and bronchi. | PC-4 | Questions to the topic, current testing, case study |
| Current testing, quiz, case-study | Acute diseases of the larynx. | PC-3 | Questions to the topic, current testing, case study |
| Current testing, quiz, case-study | Chronic diseases of the larynx. | PC-4 | Current testing, case study |
| Current testing, quiz, case-study | Acute and chronic stenoses of the larynx. | PC-3 | Current testing, case study |
| Current testing, quiz, case-study | Ear diseases. | PC-5 | Current testing, case study |
| Current testing, quiz, case-study | Diseases of the outer ear | PC-3 | Current testing, case study |
| Current testing, quiz, case-study | Acute and chronic diseases of the middle ear. | PC-4 | Current testing, case study |
| Current testing, quiz, case-study | Diseases of the inner ear | PC-3 | Current testing, case study |
| Current testing, quiz, case-study | Otogenic intracranial complications | PC-4 | Current testing, case study |

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|-----------------------------------|--|-------|-----------------------------|
| Current testing, quiz, case-study | Ear injuries and wounds. | OPC-7 | Current testing, case study |
| Current testing, quiz, case-study | Neoplasms of ENT organs. | PC-9 | Current testing, case study |
| Current testing, quiz, case-study | Neoplasms of the nose and paranasal sinuses | PC-9 | Current testing, case study |
| Current testing, quiz, case-study | Neoplasms of the pharynx. | PC-9 | Current testing, case study |
| Current testing, quiz, case-study | Neoplasms of the larynx. | PC-8 | Current testing, case study |
| Current testing, quiz, case-study | Ear neoplasms. | PC-8 | Current testing, case study |
| Current testing, quiz, case-study | Specific diseases of the ENT organs. | OPC-7 | Current testing, case study |

Questions for module 1

1. Basic anatomical concepts necessary to describe the endoscopic picture of ENT organs.
2. Equipment tools for performing endoscopic methods of research.
3. Otoscopy.
4. Anterior rhinoscopy.
5. Posterior rhinoscopy.
6. Pharyngoscopy.

7. Indirect laryngoscopy.
8. Detailed structure of the external, middle and inner ear
9. Anatomic-topographical features of the external auditory canal.
10. Clinical anatomy of the tympanic cavity, its parts and contents.
11. Structure of the auditory ossicles.
12. Topography of the facial nerve.
13. Anatomy of the auditory tube.
14. The mastoid bone and its walls.
15. The mastoid process.
16. Structure of the bony and membranous cochlea.
17. Receptor apparatus, conductive pathways and centers of the auditory analyzer.
18. Adequate stimulus and patterns peculiar to the auditory analyzer
19. Functional divisions of the auditory analyzer
20. Sound conduction mechanisms
21. Theories of hearing.
22. Methods of hearing research
23. Hearing passport
24. Tone threshold audiometry
25. Tympanometry.
26. Barofunction of the ear.
27. Divisions of the inner ear related to the vestibular analyzer.
28. Anatomy of the semicircular canals and structure of the cupular apparatus.
29. Anatomy of the vestibule and structure of the otolith apparatus.
30. Conducting pathways and nuclei and their anatomical and functional connections and relationship to the central nervous system.
40. Adequate stimuli of the vestibular analyzer and their excitability thresholds.
41. Vestibular reflexes.
42. The mechanism of spontaneous nystagmus and its characteristics.
43. Patterns of nystagmus.
44. Load vestibular tests to study the function of the semicircular canals.
45. Vestibular passport.
46. Methods for studying the function of the vestibule.
47. Otolith test and its evaluation.
48. Bone and cartilaginous bases of the external nose
49. Walls of the nasal cavity, their structure

50. Features of the nasal mucosa.
51. Clinical anatomy of the paranasal sinuses.
52. Blood supply to the nasal cavity, features of the outflow of venous blood and lymph.
53. Physiology of the nose.
54. Methods for examining the nose.
55. Methods for studying the paranasal sinuses.
56. Clinical anatomy of the pharynx.
57. Lymphadenoid pharyngeal ring.
58. Methods for examining the pharynx.

59. Anatomical, topographical and structural features of the larynx.
 - A) Cartilage and ligaments b) muscles
 - B) Features of the mucous membrane.
 - B) Blood supply and innervation
 - D) Floors of the larynx
60. Physiology of the larynx.
61. Methods for studying the larynx
62. Anatomical and topographical features of the lower respiratory tract.
63. Anatomical and topographical features of the esophagus.
64. Methods for studying the lower respiratory tract and esophagus.

Questions for module 2

1. External otitis
 - 1) causes and predisposing factors:
 - 2) clinical manifestations
 - 3) treatment
2. Otomycosis.
3. Sulfur plug.
4. Acute purulent otitis media:
 - 1) ways of spreading the infection.
 - 2) stages of flow.
 - 3) clinical symptoms of stages I, II, III.
 - 4) features of the course in childhood.

5) features of the course of infectious diseases

5. Mastoiditis, anthritis.

6. Surgical treatment (anthrotomy).

7. Mesotympanitis:

1) localization of the inflammatory process, the nature of the perforation of the eardrum and discharge from the ear

2) clinical manifestations

8. Epitympanitis:

1) localization of the inflammatory process, the nature of the perforation of the eardrum and discharge from the ear

2) clinical manifestations

3) Cholesteatoma.

4) Conservative treatment of chronic suppurative otitis media

5) Surgical treatment of chronic suppurative otitis media:

Radical surgery

Tympanoplasty

9. Labyrinthitis.

10. Paths of infection penetration from the ear into the cranial cavity and stages of its spread.

11. Orogenic diffuse purulent meningitis.

12. Stages of the brain and cerebellum abscess.

13. Brain abscess.

14. Cerebellar abscess.

15. Orogenic sepsis.

16. Principles of treatment of otogenic complications.

17. Middle ear catarrh.

18. Sensorineural hearing loss.

19. Otosclerosis.

20. Meniere's disease.

21. Deviation of the nasal septum.

22. Nasal boil.

23. Acute rhinitis

24. Chronic rhinitis:

a) catarrhal

b) hypertrophic

c) atrophic

- d) vasomotor
- 25. Acute sinusitis.
- 26. Chronic sinusitis.
- 27. Rhinogenic intraorbital complications.
- 28. Rhinogenic intracranial complications.
- 29. Classification of tonsillitis.
- 30. Acute primary tonsillitis:
 - 1) forms
 - 2) clinical manifestations
 - 3) differential diagnosis with secondary tonsillitis
 - 4) complications
 - 5) treatment
- 31. Pharyngitis
 - 1) clinical forms
 - 2) treatment methods
- 32. Retropharyngeal abscess
- 33. Chronic tonsillitis:
 - 1) clinical forms
 - 2) local signs
 - 3) treatment methods
 - 4) prevention and medical examination
- 34. Hypertrophy of the pharyngeal tonsil (adenoids)
- 35. Acute laryngitis.
- 36. Acute laryngotracheitis in children.
- 37. Edema of the larynx.
- 38. Diphtheria of the larynx.
- 39. Chronic laryngitis.
- 40. Paresis and paralysis.
- 41. Laryngeal stenosis.
- 42. Tracheostomy.
- 43. Ear injuries.
- 44. Nose injuries.
- 45. Hematoma and abscess of the nasal septum. Injuries to the larynx and other organs of the neck.
- 46. Chemical burns of the pharynx, larynx, esophagus.
- 47. Foreign bodies in the ear.

48. Foreign bodies in the nose.
49. Foreign bodies in the pharynx, larynx, trachea and bronchi.
50. Nosebleed.
51. Malignant tumors of the nose.
52. Juvenile angiofibroma of the nasopharynx.
53. Poorly differentiated tonsillar tumors.
54. Benign tumors.
55. Cancer of the larynx.
56. Scleroma.
57. Tuberculosis of the larynx.
58. Syphilis of the upper respiratory tract

Questions to prepare for the pass/fail test in otorhinolaryngology for students of the General Medicine Faculty

General issues.

1. Syphilis of the upper respiratory tract. Clinic, diagnosis and treatment.
2. The role of S. P. Botkin and G. A. Zakharyin in the development of domestic otorhinolaryngology.
3. Otorhinolaryngology as a branch of medicine.
4. The work of an ENT doctor in pre-conscription and conscription commissions at the military registration and enlistment office.
5. Deontology in otorhinolaryngology.
6. Development of otorhinolaryngology in our country.
7. Antibiotics in ENT pathology. Antibiotics for toxic effects.
8. Blastomycosis. Epidemiology, pathogenesis, clinic, diagnosis, treatment and prevention.
9. Tuberculosis of the upper respiratory tract. Clinic, diagnosis, treatment, prevention.
10. Indications for nasopharyngeal intubation.
11. Rhinosporidiosis. Epidemiology, pathogenesis, clinic, diagnosis, treatment.
12. Lupus of the upper respiratory tract.
13. Wegener's granulomatosis.
14. Scleroma of the upper respiratory tract.
15. Damage to the ENT organs due to HIV infection.
16. Tuberculous otitis media.

Nose.

1. Features of the structure of the nasal mucosa (olfactory, respiratory, bleeding zones).
2. Nosebleed. Causes, ways to stop nosebleeds.
3. Intraorbital complications of diseases of the nose and paranasal sinuses. Pathogenesis, clinical picture, treatment.
4. Intracranial complications of diseases of the nose and paranasal sinuses. Pathogenesis, clinical picture, treatment.

5. Methods for examining the nose.
6. The role of nasal breathing in the physiological development of the body.
7. Differential diagnosis of vasomotor and allergic rhinitis.
8. Acute rhinitis. Features of its manifestation and treatment in infants.
9. Abscess of the nasal septum. Cause, clinic, treatment.
10. Clinical anatomy of the external nose.
11. Acute purulent sinusitis. Clinic, diagnosis, treatment.
12. Hematoma of the nasal septum. Causes, clinic, treatment.
13. Structure and topography of the paranasal sinuses.
14. Chronic rhinitis. Classification. Clinic, diagnosis, treatment.
15. Physiology of the paranasal sinuses.
16. Acute purulent ethmoiditis and sphenoiditis. Clinic, diagnosis, treatment.
17. Protective function of the nose.
18. Injuries to the nose, fractures of the nasal bones. Clinic, diagnosis, treatment.
19. Chronic sinusitis. Clinic, diagnosis, treatment.
20. Methods for studying the paranasal sinuses.
21. Nasal boil. Features of the flow.
22. Nasal diphtheria. Differences between acute rhinitis. Clinic, diagnosis, treatment.
23. Structure of the lateral wall of the nose.
24. Chronic ethmoiditis and sphenoiditis. Clinic, diagnosis, treatment.
25. Study of the respiratory function of the nose.
26. Study of the olfactory function of the nose.
27. Deformation of the external nose and methods for their correction.
28. Acute purulent frontal sinusitis. Causes, clinic, diagnosis and treatment.
29. Mechanism of reflex function of the nose.
30. Foreign bodies of the nose, rhinoliths - diagnosis and treatment.
31. Protective function of the nose.
32. Chronic frontal sinusitis. Clinic, diagnosis, treatment.
33. Ozena. Etiology, clinical picture, diagnosis, treatment.
34. Anatomy of the nasal septum.
35. Deviation of the nasal septum.
36. Acute rhinitis in infants.
37. Malignant tumors of the nose, paranasal sinuses. Clinic, diagnosis, principles of treatment.
38. Age-related features of the development of the paranasal sinuses and their connection with the nasal cavity.
39. Features of blood supply to the nasal cavity.
40. Venous outflow from the external nose.
41. Vasomotor rhinitis. Forms, etiology, clinic, diagnosis, treatment.

Pharynx.

1. Adenoids. Clinic, diagnosis, treatment.
2. Retropharyngeal abscess. Clinic, diagnosis, treatment.
3. Hypertrophy of the palatine tonsils. Clinic, diagnosis, treatment.
4. Injuries and burns of the pharynx. Clinic, treatment.
5. Pharyngo and candidomycosis. Causes. Diagnosis, treatment.
6. Malignant tonsillar tumors of the pharynx. Clinic, diagnosis, treatment.
7. Physiology of the palatine tonsils.
8. The main forms of chronic pharyngitis. Diagnosis and treatment. Differential diagnosis.
9. Diphtheria of the pharynx with sore throats. Differential diagnosis.
10. Sore throat with infectious mononucleosis. Etiology, clinical picture, diagnosis, treatment.
11. Clinical anatomy of the pharynx. Divisions, layers.

12. Ulcerative membranous tonsillitis. Etiology, clinical picture, diagnosis, treatment.
13. Lymphadenoid ring of the pharynx, its components.
14. Peritonsillar abscess. Causes, clinic, treatment. Urgent Care.
15. Foreign bodies of the pharynx. Clinic, diagnosis, emergency care, doctor's tactics.
16. Juvenile angiofibroma (JAN) of the nasopharynx.
17. Agranulocytous tonsillitis.
18. Sore throat with leukemia.
19. Chronic tonsillitis. Classification according to tonsillitis.
20. Adenoids.
21. Conservative treatment of chronic tonsillitis.
22. Primary tonsillitis.
23. Forms of nonspecific chronic tonsillitis. Clinic, diagnostics Treatment.
24. Definition of the concepts "pharyngitis" and "angina". Causes, clinical picture and treatment of acute pharyngitis.
25. Adenoiditis.
26. Anatomical and morphological structure of the palatine tonsils.
27. Pathological changes in the tissue of the palatine tonsils in chronic tonsillitis.
28. Acute pharyngitis. Clinic, diagnostics. Treatment.
29. Chronic pharyngitis. Clinic, diagnostics. Treatment.
30. Peritonsillitis.
31. Injuries to the pharynx.

Larynx. Trachea. Bronchi. Esophagus.

1. Physiology of the trachea, bronchi, esophagus.
2. Edema of the larynx. Etiology, clinical picture, treatment.
3. Acute subglottic laryngitis. Etiology, clinical picture, treatment.
4. Anatomy of the trachea and bronchi.
5. Anatomy of the esophagus. The significance of physiological constrictions in the clinic of foreign bodies.
6. Ligaments and muscles of the larynx.
7. Lymphatic system of the larynx and its importance in the development of malignant tumors.
8. Chronic laryngitis. Classification. Causes. Clinic, treatment.
9. Cancer of the larynx. Clinic, diagnosis, treatment.
10. Classification of tumors according to Karpov.
11. Injuries and burns of the larynx. Clinic, treatment.
12. Acute laryngitis. Laryngeal sore throat - causes, diagnosis, treatment.
13. Paresis and paralysis of the muscles of the larynx. Clinic, treatment.
14. Methods for studying the trachea, bronchi, esophagus.
15. Indications and technique of tracheostomy.
16. Foreign bodies of the esophagus. Causes, clinic, diagnosis, treatment.
17. Features of the structure of the mucous membrane of the larynx.
18. Clinical anatomy of the larynx. Cartilaginous skeleton. Ligaments.
19. Diphtheria of the larynx. Clinic, diagnosis, treatment.
20. Laryngeal papillomatosis in children and adults. Clinic, treatment.
21. Functions of the larynx.
22. Acute laryngotracheitis in children. Etiology, clinical picture, diagnosis. Organization of assistance, treatment, emergency care.
23. Benign tumors of the larynx.
24. Indications for intubation and intubation technique.
25. Foreign bodies of the larynx. Clinic, emergency care.

26. Benign tumors of the larynx.
27. Chronic stenosis of the larynx. Causes, methods of treatment.
28. Forms of laryngeal stenosis.
29. Acute laryngeal stenosis. Stages, clinic, treatment.
30. Foreign bodies of the trachea and bronchi. Classification, clinic, diagnosis, emergency care.
31. Innervation of the larynx.
32. Acute catarrhal laryngitis. Etiology, clinical picture, diagnosis
33. Chondroperichondritis of the larynx. Etiology, clinical picture, diagnosis
34. Burns of the larynx and trachea. Etiology, clinical picture, diagnosis.

Ear.

1. Otogenic brain abscesses. Clinic, diagnosis, treatment.
2. Differential diagnosis of meso- and epitympanitis.
3. Study of hearing acuity with speech, tuning forks, audiological, ultrasound.
4. Foreign bodies of the ear. Sulfur plug. Classification. Principles for their removal.
5. Clinical anatomy of the vestibule and semicircular canals.
6. Types of structure of the mastoid processes and their significance in the clinic of purulent otitis.
7. Sound transmission mechanism. Helmholtz's theory, its confirmation by Andreev's experiments.
8. Furuncle and phlegmon of the external auditory canal. Causes, clinic, treatment.
9. Pneumatic test and otolith reaction according to Vojacek. Their clinical interpretation.
10. Sound transmission mechanism. The role of all components of the sound conducting system.
11. Study of the vestibular analyzer (Romberg's posture, gait, pointing test).
12. Anomalies of ear development.
13. Physiology of the vestibular analyzer.
14. Otogenic meningitis. Clinic, diagnosis, treatment.
15. Topographical features of the facial nerve and their significance for otogenic paresis and paralysis.
16. The structure of the cochlea and its receptor analyzer.
17. Basic patterns of nystagmus. Laws of Ewald and V.I. Voyachek.
18. Chronic purulent otitis media. Types, causes, role of the upper respiratory tract in the development of chronic otitis.
19. Features of the structure of the eardrum in adults and young children, their clinical significance.
20. Rotational and caloric tests. Their clinical interpretation.
21. Meniere's disease. Clinic, diagnosis, treatment.
22. Acute purulent inflammation of the middle ear. Causes, clinic, treatment.
23. Anatomical and topographical features of the external auditory canal, their significance in the pathology of the ear and the clinic of other diseases.
24. Thrombosis of the sigmoid sinus and otogenic sepsis. Etiology, clinical picture, treatment.
25. Determination of the mobility of the eardrum and the patency of the auditory tube. Ear monometry.
26. Technique and clinical interpretation of the experiments of Weber and Schwabach.
27. Otogenic intracranial complications. Pathways for infection to enter the cranial cavity.
28. The structure of the receptor apparatus of the vestibule sacs and semicircular canals. Adequate stimuli for these receptors.
29. Anatomical features of the structure of the external auditory canal in young children, their significance during otoscopy and in the clinic of otitis media.
30. Hydrodynamic theory of Bekesy-Fletcher.
31. Acute and chronic catarrhal otitis. Causes, clinic, treatment.
32. Damage and injury to the auricle, external auditory canal, and eardrum. Clinic, diagnostics,

emergency care.

33. The structure and functions of the auditory tube in adults and children and its role in the development of otitis media, hearing loss and hearing-improving operations.
34. Indications for paracentesis, paracentesis technique.
35. Ear operations for the purpose of hearing rehabilitation.
36. Otoscopy and identification marks of the tympanic membrane.
37. Tympanogenic labyrinthitis.
38. System of cavities of the middle ear, topography of the tympanic cavity.
39. Spontaneous nystagmus and its characteristics.
40. Acute mastoiditis. Forms, causes, clinic, treatment.
41. Rine, Jelly tests, their clinical interpretation.
42. Sensorineural hearing loss. Etiology, clinical picture, diagnosis, treatment.
43. Neuroma of the VIII pair. Clinic, diagnosis, treatment.

Federal State Budgetary Educational Institution of Higher Education
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of the Ministry of Healthcare of the Russian Federation

Department of otorhinolaryngology with ophthalmology

Faculty General Medicine

Year 4

Discipline otorhinolaryngology

Otorhinolaryngology case No.1

The patient complains of a painful swelling in the area of the left auricle which appeared two days ago after an injury in the area of the auricle during boxing.

Objectively: on the anterior surface of the upper third of the left auricle there is a round-shaped swelling of a bluish-red color, moderately painful, fluctuating upon palpation. The remaining ENT organs were without pathological changes.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.2

The patient complains of pain and swelling in the area of the right auricle, which appeared five days after he pierced the skin near the tragus during careless manipulations in the ear canal with a sharp object.

Objectively: the right auricle is enlarged in size due to infiltration of soft tissues, its skin is moderately hyperemic. Touching the ear is painful. Only the earlobe remains unchanged. The

auditory canal in the outer section is sharply narrowed. Visible parts of the eardrum are within normal.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.3

The patient complains of pain in the ear, sensations of heat, burning, increased body temperature, chills, and headache. A week before she injured the skin of the auricle, after which the auricle started to hurt. Two days ago the pain intensified and spread to the entire ear, her skin became crimson, and the ear increased in size.

Objectively: the general condition is satisfactory, the temperature is 38.5°C. Otoscopically: severe hyperemia, infiltration of the skin of the auricle, spreading to the parotid area. The affected area is clearly delimited from healthy skin. The skin of the external parts of the auditory canal is also hyperemic, somewhat infiltrated, there is no discharge, the eardrum is not changed.

What is the diagnosis? What treatment should be prescribed?

Otorhinolaryngology case No.4

The patient complains of severe pain in the right ear, radiating to the temporal and parietal regions, intensifying with chewing. Temperature is 37.4°C.

Objectively: the right auricle has a normal configuration. In the initial part of the external auditory canal a cone-shaped infiltrate is determined on its anterior wall, at the top of which a yellow dot is visible. The lumen of the ear canal is sharply narrowed, it is not possible to examine the eardrum. The lymph node located in front of the auricle is enlarged and painful on palpation. Sharp pain on palpation of the tragus area, the left ear is unchanged. Hears whispers at a distance of 5 m in both ears.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.5

An 18-year-old patient complains of pain, itching, a feeling of heat in both ears, and purulent discharge from them. No hearing loss is noted. The general condition is satisfactory, the temperature is normal. The disease began two weeks ago after removing wax from the ear canals (the patient has a tendency to form cerumen plugs). Outpatient treatment had no effect and the patient was hospitalized.

Objectively: the ears have a normal configuration. The skin of the ear canals is hyperemic and infiltrated. The lumen of the ear canals is narrowed, filled with mucopurulent discharge, after removing which it is possible to introduce only a narrow funnel. The eardrums are gray in color, in places covered with desquamated epidermis. Hearing acuity in SR in each ear is 5 m.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.6

The patient complains of itching and a burning sensation in the area of the left ear, which has been bothering her for six months, periodically intensifying, especially after water procedures. Medical and physiotherapeutic treatment methods had no effect.

Objectively: hyperemia and infiltration of the skin of the auricle and ear canal on the left are determined. On the surface of the skin there are yellow crusts, scales, and areas of maceration. The lumen of the right auditory canal is somewhat narrowed.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.7

The patient complains of decreased hearing on the right side which occurred after washing her hair. There were no ear diseases in the past.

Objectively: the skin of the right auricle and ear canal is not changed. The right ear perceives whispers at a distance of 3 m, and the left ear - 6 m.

What is the diagnosis? What measures need to be taken?

Otorhinolaryngology case No.8

A 5-year-old boy was taken to the doctor by his parents because he pushed a pea into his left ear while playing.

Otoscopy: the skin of the left auricle is not changed; a foreign body with a smooth surface is found in the outer part of the auditory canal. The eardrum is not visible.

What is the doctor's tactics?

Otorhinolaryngology case No.9

A 7-year-old girl was playing with beads and stuck one of them into her ear canal. The nurse who was asked to help tried to remove the foreign body with tweezers, but the attempt was unsuccessful - the bead went deep into the ear canal. The girl was taken to the ENT department.

Objectively: upon examination slight infiltration of the tissues of the left auditory canal, there are single abrasions on the skin. A foreign body is identified in the depths of the ear canal, behind the

isthmus. The eardrum is not visible. An attempt to remove a foreign body from the ear canal by washing failed.

What is the doctor's next tactics?

Otorhinolaryngology case No.10

The patient complains of stuffy ears, decreased hearing and tinnitus which appeared two days ago associated with a cold.

Objectively: hyperemia, infiltration of the nasal mucosa, mucous discharge in the nasal passages are determined. The posterior wall of the pharynx is also hyperemic. Otoscopy: the eardrums are pink, retracted, injected along the handles of the hammer. Whispers can be heard at a distance of 4 m in both ears.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.11

A 7-year-old child was brought to an otolaryngologist with complaints of constant itching in the external auditory canals, stuffy ears, a feeling of a foreign body, and a slight decrease in hearing in both ears. She has been ill for three months.

Objectively: the general condition is satisfactory. The temperature is 36.7°C. The skin of the external auditory canals is hyperemic and infiltrated. In the membranous-cartilaginous sections there are multiple pityriasis-like scales of the epidermis; on the skin of the bony sections of the external auditory canals multiple threads of green mycelium are clearly visible. The eardrums are slightly hyperemic, infiltrated, and covered with films that look like wet blotting paper. Regional lymph nodes are not enlarged and are painless on palpation.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.12

The patient complains of severe pain in the right ear, radiating to the temple, ear congestion, headache, and fever up to 38°C. Sick for two days. Associates the disease with a previous runny nose.

During otoscopy the external auditory canal is free, its skin is not changed. The eardrum is hyperemic, infiltrated, and there are no identifying marks. Hearing acuity for whispered speech is 2 m, conversational speech is 5 m. Lateralization of sound in Weber's experiment to the right.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.13

A 23-year-old patient complains of moderate pain in the left ear, purulent discharge from it, decreased hearing, increased body temperature, and general malaise. The disease began seven days ago after a runny nose with a severe shooting pain in the left ear, fever up to 39°C, and headache. The next day the patient noted decreased hearing. Pus-flow from the ear appeared two days ago. Since then there has been some improvement in the general condition, the temperature has dropped to 37.5°C.

Objectively: internal organs are without pathology. The mucous membrane of the nasal cavity is hyperemic. There is no pathological discharge in the nasal passages. There are also no pathological changes in the throat and pharynx; the right ear is unchanged.

The left ear has purulent discharge in the auditory canal, its skin is not changed. The eardrum is hyperemic and bulging; pulsating reflex in the anterioinferior quadrant.

The right ear hears a whisper at a distance of 5 m, the left ear - 1.5 m.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.14

The patient complains of pain in the right ear, purulent discharge from it, decreased hearing and headache. He has been sick for two weeks. He was treated at the clinic - the pain in the ear decreased, the temperature returned to normal, but the suppuration continued. Two days ago pain and swelling of soft tissues appeared in the right behind-the-ear area, the temperature increased to 37.5°C and the amount of discharge from the ear increased.

Objectively: swelling of the mastoid process and smoothness of its contours are determined; soft tissues are swollen, tense, painful on palpation and percussion.

Otoscopy: there was a copious amount of creamy pus in the right ear canal. After rinsing the ear a narrowing of the external auditory canal in the bony part is determined due to the overhang of the posterosuperior wall. Hearing acuity for whispered speech is 2-2.5 m.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.15

A 6-year-old child was admitted to the ENT department with complaints of severe pain in the right ear and behind the ear, high temperature, chills, headache and decreased hearing in the right ear. Ill

for 10 days, no treatment.

Objectively: the general condition is moderate. Temperature is 38.3°C. Pulse 98 beats per minute. The right ear is protruding. The skin in the area behind the ear is slightly hyperemic, infiltrated, swollen and fluctuation is detected on palpation. The external auditory canal in the bony part is narrowed due to the overhang of its posterosuperior walls.

The tympanic septum is hyperemic, infiltrated, identification points are not differentiated. X-rays of the temporal bones according to Schüller and Mayer show destruction of the septa between the cells of the mastoid process.

Blood test: hemoglobin 128 g/l, erythrocytes - $3.8 \cdot 10^{12}$ /l, leukocytes - $22 \cdot 10^9$ /l, eosinophils - 2%, band cells - 6%, segmented cells - 53%, lymphocytes - 36%, monocytes - 3 %, ESR - 32 mm/h.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.16

The patient with an acute dextral otitis developed dizziness with a sensation of counter-clockwise movement, complete loss of hearing in the right ear, nausea. He vomited once. The examination shows a slight hyperemia of the nasal mucous membrane and the posterior pharynx.

Otосcopy: pus in the right ear auditory channel, acute hyperemia of the tympanum with a pulsating reflex in its centre.

The mastoid process area is not painful on palpation from the right and left.

The left ear is normal. The auditory function from the right is completely disabled, there is a spontaneous nystagm to the right. When performing finger-finger and finger-nose tests the patient misses to the left. In the Romberg position he deviates to the left

Otorhinolaryngology case No.17

The patient complains of purulent discharge from the left ear and decreased hearing. He has been ill for 10 years and was repeatedly treated for purulent discharge from the ear on an outpatient and inpatient basis with a temporary effect.

Objectively: the patient's general condition is satisfactory. The area of the mastoid process is not changed, palpation and percussion are painless. There is a large amount of mucopurulent discharge in the external auditory canal. After rinsing the ear hyperemia of the tympanic membrane is determined with rounded perforation in the lower quadrants. The visible part of the mucous membrane of the tympanic cavity is hyperemic and swollen. Hearing acuity for whispered speech is 2 m, for spoken speech – 6 m. Lateralization of sound in Weber's experiment to the left. The experiments of Rinne and Federici are negative.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.18

A 30-year-old patient complains of throbbing pain in the left ear, purulent discharge from it and hearing loss. Has been sick for two weeks. After hypothermia a runny nose and ear congestion first appeared, then he felt a severe pain and suppuration began. The temperature rose to 39°C. With the appearance of purulent discharge from the left ear the pain subsided. The temperature dropped to low-grade fever, however, despite the outpatient treatment, copious mucopurulent discharge from the ear continued to bother him and the pain spread to the postauricular area.

Objectively: mucopurulent discharge in the ear canal, the eardrum is red, infiltrated, swollen, with perforation in the posteroinferior quadrant. Swelling of the apex of the mastoid process, painful on palpation. An X-ray of the temporal bones shows darkening of the mastoid cells.

The right ear is normal, the nose and throat are normal.

What is the diagnosis? What treatment is necessary?

Otorhinolaryngology case No.19

The patient complains of pressing pain in the right ear, purulent discharge, general weakness, malaise, and fever up to 38°C. Has been ill since childhood. About 10 days ago, after a cold, the process in the ear worsened.

Objectively: the area of the mastoid process is not changed, percussion and palpation are painless.

During otoscopy there is purulent discharge with an unpleasant odor in the right external auditory canal. In the anterosuperior quadrant of the tympanic membrane there is a marginal perforation through which whitish epidermal masses are visible. In the stretched part the eardrum is moderately hyperemic and injected. Hearing acuity for whispered speech is 3m, conversational speech - 6m.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.20

The patient was brought to the ENT department in a severe condition, hazy and had difficulty answering questions. Complains of severe headache, suppuration from the left ear. Body temperature is 38.5°C. According to those accompanying him it was established that he has been suffering from purulence from the ear since childhood. Over the past two weeks, after a cold, a moderate pain has occurred in the left ear, the amount of discharge from it has increased, and the temperature has risen to 37.5°C. The patient did not get any treatment. The day before admission a headache appeared, the body temperature increased, the general condition worsened and he had short periods of loss of consciousness.

Otoscopy: in the left external auditory canal there is purulent discharge with an unpleasant odor, the tympanic membrane is hyperemic, in its postero-superior quadrant there is a marginal perforation through which cholesteatoma is determined. Rigidity of the occipital muscles is pronounced, Kernig's sign is positive on both sides. The fundus is without features.

What is the diagnosis? Determine an examination plan to clarify the diagnosis.

Otorhinolaryngology case No.21

A 15-year-old patient was admitted to the hospital with complaints of pain and swelling in the right postauricular area, decreased hearing in the right ear and suppuration from it. He has had otorrhea from the age of five after measles. Over the past 5 years the patient was repeatedly offered surgery, which his parents refused. Two months before admission to the hospital, a pain in the right ear, suppuration and headache appeared. After using antibiotics he felt better, the headache went away, but suppuration from the ear continued. Two weeks ago, a swelling appeared in the right behind-the-ear area, which slowly increased, pain in this area increased, headaches began to occur, the temperature rose to 38°C, and his general condition worsened.

Objectively: the general condition of the patient is of moderate severity. Pulse 120 beats per minute, rhythmic, satisfactory filling. Body temperature is 39°C. Blood pressure - 120/70 mm of Mercury. No pathology of internal organs was identified. There are no neurological symptoms. In the area of the mastoid process there is a diffuse swelling without clear contours, measuring 3x5 cm, extending from the tip of the process to the parietal area. The postauricular fold is smoothed, the auricle is protruded anteriorly. The swelling is sharply painful and fluctuation is detected in its center.

Otосcopy: there is pus in the right ear canal, overhang of its postero-superior wall. After removal of pus and cheesy masses, a scar-altered stretched part of the tympanic membrane was discovered, its relaxed part was missing, and the lateral wall of the attic was carious. Through the defect curdled masses and small granulations are visible. In the left ear the eardrum is pale with clear identifying contours.

On radiographs of the temporal bones on the left the pneumatic type of structure of the mastoid process is determined. On the right there is a sclerosis of the mastoid process, the antral cell is expanded, destruction of the cortical layer, caries of the lateral wall of the attic is clearly visible. During puncture in the center of fluctuation of the right postauricular region up to 5 ml of foul-smelling pus was obtained.

Blood test: leukocytosis 15000 with a shift to the left, blood count without pathological changes, ESR - 30 mm/h.

Urine test is within normal. What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.22

A 42-year-old patient was taken to an otorhinolaryngological hospital after the patient became very dizzy, nauseated and sweated profusely while a doctor at the clinic was rinsing his left ear. The doctor observed nystagmus. In the past similar symptoms occurred, but to a lesser extent, when the patient rinsed the ear himself.

The ear disease has been noted since the age of seven. Periodically, exacerbations occur with suppuration from the ear and hearing impairment.

The general condition is satisfactory. The skin is of normal color. In the left ear there are no changes detected in the outer ear. An extensive, almost total defect of the eardrum; its mucous membrane is moderately infiltrated. The remaining ENT organs are without pathology. There are no spontaneous vestibular disorders. There is pressor nystagmus.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.23

A 42-year-old patient complains of severe pain in the left side of the head, which is especially disturbing in recent days, lack of appetite, and repeated bouts of vomiting not associated with eating. For about 30 years he has suffered from a disease of the left ear with decreased hearing. Periodically, after hypothermia, suppuration appears from the ear, and sometimes he feels pain. Six months ago during an exacerbation of otitis media, the patient noted dizziness, nausea and a sharp decrease in hearing in the left ear, which persists to this day.

Objectively: the skin is pale with an earthy tint. The tongue is coated. The pulse is 48 beats per minute. The patient is lethargic, tearful, hazy, cannot correctly name the object shown to him,

does not understand speech addressed to him, and does not complete the task.

Speech is impaired: verbose, incorrectly constructs sentences, incorrectly pronounces individual words. Slight stiffness of the neck muscles, a positive Babinski sign and a slight increase in deep reflexes on the right are detected. During otoscopy on the left a moderate amount of purulent discharge is found in the ear canal; upon its removal a defect in the eardrum is determined in the superoposterior section, through which juicy granulations are visible. The preserved sections of the eardrum are moderately hyperemic. Palpation of the planum mastoideum area on the left is painful. The phenomenon of a congestive nipple when examining the fundus. During puncture the cerebrospinal fluid is cloudy and flows out under pressure.

What is the diagnosis? What is the medical tactics?

Otorhinolaryngology case No.24

A 28-year-old patient, after an exacerbation of left-sided chronic otitis, developed a severe headache, mainly in the back of the head, and dizziness. After examination at the outpatient clinic he was sent to the hospital for examination and treatment.

Objectively: the patient is lethargic, answers questions reluctantly, and lies on the side of the affected ear. The skin is pale with a grayish tint. The pulse is 58 beats per minute, rhythmic. The temperature is 38.9°C.

Otoscopy: purulent discharge in the left ear canal. The tympanic membrane is hyperemic, a defect is identified in its superoposterior quadrant, through which granulations and white layered masses are visible. On palpation there is pain in the postauricular area on the left, pain on percussion of the occipital bone.

Other ENT organs are within normal. The left ear cannot hear. Horizontal nystagmus is detected when looking to the left. Bradykinesia and adiadochokinesia on the left. During finger-nose and knee-heel tests on the left there is intention tremor. Muscle tone in the left extremities is reduced. Deviation to the left in the Romberg pose. The direction of fall does not change when the position of the head changes.

What is the diagnosis? What is the medical tactics?

Otorhinolaryngology case No.25

A 53-year-old patient was taken to the ENT clinic with complaints of severe dizziness (a feeling of objects rotating from right to left), nausea, vomiting, ringing in the left ear, and balance disorder. The attack began suddenly for no apparent reason. Similar attacks have been bothering the patient for the last three years since her menstruation stopped.

An examination of the ENT organs revealed no noticeable deviations from the norm. When

studying vestibular function spontaneous horizontal-rotatory nystagmus of the third degree to the left is determined, deviation of both hands to the right when performing the Barany pointing test. The whisper on the left is heard at a distance of 1.5 m, on the right - 5 m.

What is the diagnosis? What additional studies are needed to clarify the diagnosis? What is the medical tactics?

Otorhinolaryngology case No.26

A 6-year-old child consulted an otorhinolaryngologist with complaints of discomfort in the left ear, purulence from the ear for the last two years, and hearing loss. Exacerbations once or twice a year. The last suppuration began after swimming in the lake.

Objectively: the general condition is satisfactory. The temperature 36.8°C. The pulse is 82 beats per minute, rhythmic. There is a small amount of purulent discharge in the left external auditory canal. The eardrum is hyperemic. In its central part there is a lenticular perforation, through which the hyperemic and edematous mucous membrane of the medial wall of the tympanic cavity is visible. The audiogram showed a decrease in hearing in the left ear due to damage to the sound-conducting apparatus.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.27

An 18-year-old patient was brought to the hospital emergency department in a severe condition with complaints of a very severe headache, nausea, vomiting, lack of appetite, a feeling of heat throughout the body, pus flowing from the left ear, and hearing loss. Otorrhea since childhood. The latest exacerbation began rapidly against the background of a respiratory disease two weeks ago. Profuse discharge from the ear appeared, hearing decreased, and the temperature rose to 39°C. A week later, a headache appeared, which intensified every day, and two days ago nausea and vomiting began.

Objectively: the patient is excited, restless, lying on his side with his eyes closed (irritated by light). Herpetic rashes above the upper lip. The pulse is 98 beats per minute, body temperature 39.9°C. A neurological examination reveals rigidity of the occipital muscles, Kernig's and Brudzinski's symptoms. No focal pathology was identified.

ENT examination: slight hyperemia of the mucous membrane of the nasal cavity and pharynx.

Otoscopy: left ear – there is a purulent discharge in the ear canal, total defect of the tympanic membrane, pus, granulations in the tympanic cavity, caries of the lateral wall of the attic, cholesteatoma scales. The right ear can hear whispers at a distance of 5 m, and the left ear can hear whispers near the auricle. A blood test reveals hyperleukocytosis - 20-10%, neutrophilic shift to the left. ESR - 50 mm/h. During a spinal puncture ϕ cloudy cerebrospinal fluid flowing out under increased pressure was obtained.

What is the diagnosis? What is necessary to clarify it? What are the treatment tactics?

Otorhinolaryngology case No.27

A 25-year-old patient was brought to the clinic with complaints of headache, fever up to 39°C, chills, pain in the left ear and purulent discharge from it, and decreased hearing. From the anamnesis it was found that suppuration from the ear has continued since childhood. Treatment was irregular. Five days before admission a pain in the left ear and headache appeared, the discharge of pus increased, and there were chills for two days.

The patient's condition is of moderate severity, the skin is of an earthy color. The pulse is 94 beats per minute, rhythmic at a temperature of 38°C.

Otoscopy: in the external auditory canal there is purulent discharge with an odor, the eardrum is hyperemic, there is a marginal defect in the postero-superior quadrant through which granulations are visible. The mastoid process is unchanged, painful on palpation along its posterior edge.

Whispered speech is perceived by the left ear at a distance of 0.5 m, spoken speech - from 1 m. Blood test: leukocytes - 18 10 /l, eosinophils - 2%, band neutrophils - 18%, segmented neutrophils - 68%, lymphoma cytes - 10%, monocytes - 2%, ESR - 52 mm/h; prothrombin index - 118%.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.29

A 50-year-old patient came to the ENT hospital with complaints of decreased hearing, purulent discharge with an unpleasant odor from the right ear, and facial asymmetry that had developed over the last 24 hours. There is anamnesis of periodic suppuration from the right ear for 20 years. Treatment was irregular.

Objectively: the right eye does not close, the nasolabial fold on the right is smoothed, the right corner of the mouth is lowered; facial muscles of the right half of the face are weakened.

Otoscopy: in the external auditory canal there is purulent discharge with an unpleasant odor, a marginal defect of the tympanic membrane, in the tympanic cavity there are crumbly white masses.

Hearing acuity: whispered speech is perceived from 0.25 m, spoken speech - 1.5 m.

Diagnose the case, determine medical tactics. Explain the causes of facial nerve paresis.

Otorhinolaryngology case No.30

A 9-year-old child suffering from chronic purulent mesoepithympanitis developed severe

headache, especially in the occipital region, nausea, vomiting, and gait disturbance. He was transported by ambulance to the ENT department.

Objectively: the general condition is severe. The temperature is 38.4°C. The pulse 52 beats per minute, rhythmic. Adiadochokinesis. Missing during the finger-nose test. Large-scale horizontal nystagmus to the left. In the left external auditory canal there is mucopurulent discharge. The tympanic membrane is hyperemic, the posterosuperior parts of the tympanic membrane are destroyed. In the attic there are cholesteatoma masses. The area of the mastoid process is not changed and is painless on palpation. X-rays of the temporal bones according to Schüller and Mayer show destruction of the upper wall of the attic. Fundus: the vessels are full-blooded and tortuous. Lumbar puncture: cerebrospinal fluid flows out under pressure, transparent. Cellular elements—15/3.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.31

A 26-year-old patient complains of tinnitus and hearing loss. Three years ago after giving birth she first noticed a gradually progressive decline in hearing function. Notes that she hears better in noisy environments.

Objectively: no pathological changes are detected in the nose, pharynx, throat, larynx.

Otoscopy: wide ear canals, no wax masses, eardrums pale, thin.

When studying auditory function, SR=1m/1m, RR=2 m/2m on both sides. The pure tone audiogram shows a horizontal type of curve with a bone-air interval of about 20 dB.

Type A tympanogram, absence of auditory reflex. Negative tuning fork experiments by Rinne and Jelle on both sides. No violations of the vestibular apparatus are determined.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.32

A 40-year-old patient came to the audiology office with complaints of hearing deterioration over the past nine months. She suffered from diffuse peritonitis 11 months ago and therefore received kanamycin injections for 25 days. During the treatment she noticed the appearance of high-frequency noise in the right ear, deterioration of hearing in the right ear and unsteadiness of gait. Two months after treatment hearing began to progressively decrease.

When examined no pathology was detected in the ENT organs. When studying the auditory function SR = 0.5/5.5 m, RR = 4.5 m/6 m, the tuning fork experiments of Rinne, Federice, and Jelle were positive. On a tonal audiogram a descending type of curve is determined, the absence of a bone-air interval (show), when performing suprathreshold tests, FUNG is

determined. When performing speech audiometry speech intelligibility was 80%. A study of the vestibular analyzer revealed inhibition of the function of both labyrinths.

What is the diagnosis? How to treat the patient? What type of hearing loss does the patient have? Why is lateralization to the left?

Otorhinolaryngology case No.33

A 62-year-old patient suffering from hypertension a year ago, after a quarrel with a neighbor, had a sharp deterioration of hearing in her left ear. Significant hearing loss persists to this day.

Objectively: the condition is satisfactory. The pulse is somewhat tense. Blood pressure is 180/100 mm Mercury. No pathological abnormalities were identified in the ENT organs. The right ear hears whispers at a distance of 5 m, the left ear hears only loud conversational speech. According to the audiogram, hearing in the right ear is normal, in the left ear it is sharply reduced due to a type of sound perception disorder. Vestibular function disorders are not determined.

What is the diagnosis?

Otorhinolaryngology case No.34

About a week ago during a trip to the training ground, friends suggested that the patient shoot a little with a Kalashnikov assault rifle. The patient shot several times into the pond. By the end of the day a strong noise appeared in the left ear and hearing deteriorated.

Otoscopy shows no features. When studying the auditory function on the left - SR = 5 m, RR = 2.5 m. Rinne's tuning fork experiment is positive, the lateralization of the tuning fork sound in Weber's experiment is to the right. The pure tone audiogram shows decreased hearing in the left ear in the high frequency range. There are no vestibular disorders.

What is the diagnosis and treatment tactics?

Otorhinolaryngology case No.35

A 28-year-old patient, a nurse, came to the clinic with complaints of itching and a feeling of fullness in the right ear. The patient considers herself sick for 2 months after she injured the skin of the external auditory canal.

Otoscopically on the right: the skin of the external auditory canal and tympanic membrane is moderately hyperemic, infiltrated with areas of maceration; in the external auditory canal there is a moderate amount of viscous mucous discharge of black color with desquamated epidermis. Hearing acuity for whispered speech is 4.5 m, for spoken speech - more than 6 m.

What is the expected diagnosis and treatment options? What additional tests are necessary to clarify the diagnosis?

Otorhinolaryngology case No.36

While composing a musical piece the composer, lost in thought, put his elbow on the piano stand and combed the external auditory canal with the handle of an iron comb. The hand fell off and the elbow hit the keys of the instrument. The handle of the comb, having pierced the eardrum, entered the tympanic cavity. Severe dizziness occurred, the patient fell to the floor, vomited, hearing in the left ear sharply deteriorated and the left half of the face was distorted. Delivered by ambulance to the emergency department.

During the examination spontaneous nystagmus of the III degree is noted. To the left ptosis of the upper eyelid, enophthalmos, lacrimation from the left eye, the patient cannot stand. Otoscopy reveals a scalloped perforation in the postero-superior quadrant of the eardrum, and blood clots in the external auditory canal.

In what place of the medial wall of the tympanic cavity did the comb penetrate, what is the medical tactics?

Otorhinolaryngology case No.37

During a vacation in Crimea a 27-year-old patient fell ill with an acute respiratory disease accompanied by severe rhinorrhea. As a child, his ears hurt repeatedly and he was diagnosed with adhesive otitis media. He was urgently called to work and flew out by plane, despite a strong runny nose. During the landing of the plane both ears were severely blocked. Upon landing he felt a sharp, severe cutting pain in both ears, a sharp deterioration in hearing and tinnitus.

Otoscopy reveals total hemorrhage, hyperemia of both eardrums, and the level of fluid in the left tympanic cavity is determined.

What is the suspected diagnosis? How to treat the patient? What should the patient do before the flight?

Otorhinolaryngology case No.38

A 23-year-old patient complained of the presence of dense round formations in the area of her earlobes, which appeared after they were pierced for wearing earrings.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.39

A 33-year-old patient, a combat officer, after leaving the Armed Forces, got a job with a lot of physical activity. During the day he worked as a loader at the station, at night as a taxi driver. About 2 months ago for the first time he felt a noise in the ears, decreased hearing, nausea and unsteadiness when walking. After rest, the condition recovered on its own. The last 2 days he worked around the clock. By the morning, vomiting, dizziness of a non-systemic nature developed (the ground disappears from under his feet, there is a “thin swamp” under his feet),

tinnitus and decreased hearing.

On the electronystagmogram there is an increase in the amplitude of the nystagmus waves.

What is the diagnosis and treatment? Is it necessary to carry out rotational tests?

Otorhinolaryngology case No.40

A 35-year-old patient was painting the ceiling, throwing her head back high. On the third day of repair a noise appeared in the right ear and hearing in the right ear disappeared. Came to see the doctor on the 3rd day.

Upon examination pathologies in the ENT organs are not determined. When studying the auditory function on the right, SR=0, PP=cry at the auricle. The pure tone audiogram shows a descending type of curve with a small air-bone interval of about 10 dB. The acoustic reflex is preserved, type A tympanogram. Transcranial computer Dopplerography determines the asymmetry of the VBB: the vascular supply of the right ear is 20%. An x-ray shows signs of cervical osteochondrosis with a decrease in the height of the vertebrae at the level of C4-C6.

What is the diagnosis? What are the tactics? Prognosis?

Otorhinolaryngology case No.41

Determine the type of hearing loss according to the following data

| AD | TESTS | AS |
|-------|-------------------------|----------------|
| 0 | Subjective noise | + |
| 6 m | Whispered speech | At the auricle |
| > 6 m | Normal speech | 2m |
| Muted | "Scream" with a ratchet | + |
| 115s | C128 in (norm 120) | 85s |
| 50 s | C128 to (norm 60 s) | - |
| 45s | s2048 in (norm 50 | 20s |

Otorhinolaryngology case No.42

Determine the type of hearing loss according to the following data

| AD | TESTS | AS |
|-----------|-------------------------|-----------|
| + | Subjective noise | 0 |
| 1,5m | Whispered speech | 6 m |
| 4,5m | Normal speech | >6m |
| + | "Scream" with a ratchet | muted |
| 50s | C128 in (norm 120) | 120 s |
| 70 s | C128 to (norm 60 s) | - |
| 35s | s2048 in (norm 50 | 55 s |

Otorhinolaryngology case No.43

Determine the type of hearing loss according to the following data

| AD | TESTS | AS |
|-----------|-------------------------|-----------|
| 0 | Subjective noise | 0 |
| 6 m | Whispered speech | 0 |
| >6m | Normal speech | 1,5 |
| muted | "Scream" with a ratchet | 0 |
| 125 s | C128 in (norm 120) | 15s |
| 55 s | C128 to (norm 60 s) | - |
| 50s | C2048 in (norm 50 | 5 s |

Otorhinolaryngology case No.44

What localization of a pathology can be suggested according to the following data?

| AD | TESTS | AS |
|-----------|-------------------------|-----------|
| + | Subjective noise | + |
| 2 m | Whispered speech | 1 m |
| 5 m | Normal speech | 3,5 m |
| + | "Scream" with a ratchet | + |
| 85s | C128 in (norm 120) | 80 s |
| 20 s | s2048 in (norm 50 | 10 |
| 40 s | C128 to (norm 60 s) | 40 s |

Otorhinolaryngology case No.45

What localization of a pathology can be suggested according to the following data?

| AD | TESTS | AS |
|-----------|-------------------------|-----------|
| 0 | Subjective noise | + |
| 6 m | Whispered speech | 0,5 m |
| >6 m | Normal speech | 2,5 m. |
| + | "Scream" with a ratchet | muted |
| 110 s | C128 in (norm 120) | 75 s |
| 55 s | C128 to (norm 60 s) | - |
| 50 s | s2048 in (norm 50 | 15 s |

Otorhinolaryngology case No.46

What localization of a pathology can be suggested according to the following data?

| AD | TESTS | AS |
|-----------|-------------------------|-----------|
| + | Subjective noise | 0 |
| 2 m | Whispered speech | 6 m |
| 6 m | Normal speech | >6 m. |
| + | "Scream" with a ratchet | muted |
| 55 s | C128 in (norm 120) | 125s |
| 65 s | C128 to (norm 60 s) | - |
| 40 s | s2048 in (norm 50 | 50 s |

Otorhinolaryngology case No.47

How can vestibular dysfunction be explained by the following vestibular passport data:

| AD | Tests | AS |
|-----------|--|-----------|
| 0 | Subjective sensations (systematic dizziness, nausea, vomiting) | + |
| 0 | Spontaneous nystagmus | + |
| + | Caloric nystagmus | + |
| 25s | Postrotational nystagmus | 50s |
| 0 | Pressor nystagmus | 0 |

Otorhinolaryngology case No.48

How can vestibular dysfunction be explained by the following vestibular passport data:

| AD | Tests | AS |
|-----------|---|-----------|
| + | Subjective sensations (systematic dizziness, nausea, vomiting) | 0 |
| + | Spontaneous nystagmus | 0 |
| + | Caloric nystagmus | + |
| 30 s | Postrotational nystagmus | 15s |
| 0 | Pressor nystagmus | 0 |

Otorhinolaryngology case No.49

How can vestibular dysfunction be explained by the following vestibular passport data:

| AD | Tests | AS |
|-----------|---|-----------|
| + | Subjective sensations (systematic dizziness, nausea, vomiting) | 0 |
| + | Spontaneous nystagmus | 0 |
| + | Caloric nystagmus | 0 |
| 30c | Postrotational nystagmus | 10s |
| 0 | Pressor nystagmus | 0 |

Otorhinolaryngology case No.50

In what ear disease are the following data of vestibular deportation observed? How are they explained?

| AD | Tests | AS |
|-----------|---|-----------|
| 0 | Subjective sensations (systematic dizziness, nausea, vomiting) | 0 |
| 0 | Spontaneous nystagmus | 0 |

| | | |
|-----|--------------------------|-----|
| + | Caloric nystagmus | + |
| 25s | Postrotational nystagmus | 30s |
| + | Pressor nystagmus | 0 |

Otorhinolaryngology case No.51

Determine the localization of the pathological process according to the auditory passport and the following vestibular disorders:

| AD | TESTS | AS |
|-------|-------------------------|-------|
| 0 | Subjective noise | + |
| 5,5 m | Whispered speech | 0,5 m |
| > 6 m | Normal speech | 3 m |
| Muted | "Scream" with a ratchet | + |
| 115s | C128 in (norm 120) | 70s |
| 55 s | C128 to (norm 60 s) | - |
| 50s | s2048 in (norm 50 | 15 s |

When performing finger-finger and finger-nose tests the patient misses to the right. In the Romberg position and when walking with closed eyes he deviates to the right.

Otorhinolaryngology case No.52

The patient has atresia of the external auditory canal after a thermal burn. He was healthy before the injury.

What type of hearing loss can be assumed in the patient? What is the treatment plan?

Otorhinolaryngology case No.53

The parents of a nine-year-old girl reported that their child was treated with streptomycin for severe pneumonia at age two. Clinically complete deafness was detected.

What is its genesis? What's the prognosis? What modern ways to solve this problem exist?

Otorhinolaryngology case No.54

The patient's x-ray revealed a significant increase and darkening of the left antral cell, destruction of the lateral wall of the attic and the posterior wall of the external auditory canal.

What is the diagnosis? Offer treatment.

Otorhinolaryngology case No.55

In a patient suffering from Meniere's disease audiometry reveals a “rocky” type of hearing loss in the left ear with manifestations of the loudness recruitment.

What methods of diagnosing this phenomenon do you know? With damage to what structures is it associated with?

Otorhinolaryngology case No.56

A 68-year-old patient complained of swelling in the area of the upper third of the outer surface of the auricle, which suddenly appeared in the morning two days ago. No pain noted. A woman of asthenic build. The swelling in the area of the right ear has a smooth shape, reddish color and fluctuates.

What needs to be found out from the anamnesis? What disease can you think of? What are the treatment tactics?

Otorhinolaryngology case No.57

The patient has left-sided adhesive non-perforative otitis media with severe hearing impairment. A disturbance in barofunction was detected on the side of the affected ear.

What is the plan for a clarifying clinical examination and treatment tactics?

Otorhinolaryngology case No.58

The patient complained of a sudden decrease in hearing, a feeling of transfusion in the ear, autophony, and noise in the ear. The general condition is satisfactory, body temperature is 36.7°C, blood test is within normal limits. Conductive hearing impairment.

What is the diagnosis? What are the treatment tactics?

Otorhinolaryngology case No.59

CTs of the temporal bones reveal signs of bone destruction of the lateral wall of the attic, the posterosuperior wall of the external auditory canal, while the lumen of the lateral semicircular canal is not closed by a bone capsule on the protrusion of the canal.

What do these changes indicate?

Otorhinolaryngology case No.60

A 32-year-old patient consulted an otorhinolaryngologist with complaints of pain and purulent discharge from the right ear, decreased hearing, swelling in the right temporomycomatic region and increased temperature. He fell ill three weeks ago after having the flu. Four days later copious discharge from the ear appeared, the pain decreased, the body temperature decreased, but continued to remain at 37.7°C.

In the third week of the disease the pain in the right ear intensified again, and swelling appeared in front of the auricle.

Objectively: swelling, painful on palpation in the area of the zygomatic process on the right, abundant mucopurulent discharge in the right ear canal, the eardrum is hyperemic, a small perforation in the posteroinferior quadrant. The left ear is unchanged. The right ear hears a whisper at a distance of 0.5 m, the left ear - 5 m. No pathology was detected in other ENT organs.

What is the diagnosis? What is the pathogenesis of the disease?

Otorhinolaryngology case No.61

In a patient suffering from chronic purulent epitympanitis radiographs of the temporal bones in the Schüller and Manner configurations reveal expansion of the cave and diffuse sclerosis of its walls. The upper-posterior wall of the external auditory canal is destroyed, the entrance to the cave is widened.

What pathological process takes place in the cavities of the middle ear?

Otorhinolaryngology case No.62

In a patient with acute otitis media on the 15th day after the onset of the disease an X-ray of the temporal bone in the Schüller position in the area of the mastoid process reveals a decrease in pneumatization and initial signs of bone cells destruction. What disease is this X-ray picture typical for?

Otorhinolaryngology case No.63

During a professional examination an otolaryngologist revealed that the worker had unilateral epitympanitis with cholesteatoma. X-rays of the temporal bones according to Schüller, Mayer and Highway show destructive changes in the temporal bone, in particular the expansion of the antrum against the background of a sclerotic mastoid process. The patient does not make any complaints. Hearing is not impaired.

Is such an asymptomatic course possible? Suggest a plan for examining the patient and treatment.

Otorhinolaryngology case No.64

A 52-year-old patient suffered from bilateral otitis media nine years ago. Since that time he has noted a progressive decrease in hearing in both ears. Objectively: the eardrums are scarred, their identification points are deformed. According to the results of pure tone threshold audiometry the bone-air interval is up to 40 - 45 dB in the conversational frequency zone. Tympanogram type B.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.65

At five o'clock the nurse on duty urgently called the doctor on duty into the clinic corridor. He saw a lying patient who had been admitted the day before with medial laryngeal stenosis in the compensation stage. The sharp cyanotic appearance of the skin, complete cessation of breathing and convulsive twitching of the limbs attracted attention.

What type of emergency throat section is most appropriate in this situation?

Otorhinolaryngology case No.66

A 36-year-old patient complains of hearing loss, purulent discharge, and mild pain in the depths of the left ear canal. Her ear first started hurting in childhood after measles. Since then her hearing has been reduced. Every year there are exacerbations, during which the hearing deteriorates to an even greater extent, there is suppuration from the ear and pain in it. The real exacerbation began a week ago after suffering a respiratory illness without sticking to bed.

Objectively: the mucous membrane of the nasal cavity and pharynx is slightly hyperemic.

Otoscopy: left ear –there is purulent discharge in the auditory canal, a rounded central defect of the membrane about 4 mm in diameter, its remains are moderately hyperemic, there is pus in

the tympanic cavity. There is no pain on palpation of the mastoid processes. Hearing is reduced only in the left ear due to a type of sound conduction disorder. No vestibular disorders were found.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.67

A 38-year-old patient complains of a slight decrease in hearing in the right ear and purulence from it. The disease began at the age of six. Discharge from the ear periodically bothers her, and her hearing worsens. General condition is satisfactory. Mild hyperemia of the mucous membrane of the pharynx and nasal cavity is detected.

Otoscopy: right ear - the skin of the auricle and ear canal is not changed, the eardrum is slightly hyperemic, in the upper posterior quadrant there is a marginal defect through which whitish masses are visible. The right ear can hear whispers at a distance of 4 m, and the left ear – 5 m.

What is the diagnosis? What is the doctor's tactics? If surgical treatment is indicated what type of surgery should be used? Is conservative treatment of the patient possible?

Otorhinolaryngology case No.68

A 28-year-old patient complains that the day before a facial asymmetry appeared - the left eye does not close, the left half of the face is motionless. Three weeks ago he suffered from acute left-side otitis media. Recently he has noted mucopurulent discharge from the left ear, decreased hearing, and over the past week he has been bothered by pain in the area behind the ear. He was treated as an outpatient.

Objectively: the condition is satisfactory. The pulse is 78 beats per minute, body temperature 37.3°C. The left half of the face is motionless - the patient cannot raise the eyebrow or close his eye. The left nasolabial fold is smoothed, the corner of the mouth is lowered. Meningeal and focal symptoms are not determined.

Otoscopy: left ear – there is mucopurulent discharge in the ear canal. The tympanic membrane is stagnant, with a slit-like defect in the center. The contours of the hammer and the light reflex are not visible. On palpation pain is detected in the area of projection of the antrum on the left.

Whispers are perceived by the right ear at a distance of 5 m, and by the left - at the auricle. There are no deviations in other ENT organs.

What is the diagnosis? Is surgical treatment indicated?

Otorhinolaryngology case No.69

A 59-year-old patient was admitted with complaints of pain in the left ear and swelling in the area of the left mastoid process and decreased hearing on the left.

Upon examination the condition is satisfactory. There is a slight protrusion of the left auricle, swelling and pain in the mastoid area, the ear canal is narrowed due to the overhang of its posterosuperior wall, but the visible areas of the eardrum are not changed. The right membrane is well contoured and pale. The rest of the ENT organs are unremarkable. No spontaneous vestibular disorders are detected. There is a decrease in hearing in the left ear - whispered speech is perceived from 3 m. Audiometrically there is a decrease in hearing on the left to 40 - 50 dB for air conduction and up to 20 - 30 dB for bone-tissue conduction. X-ray images of the temporal bones in three projections show: on the right - the pneumatic structure of the process; on the left is a mixed building. On the left, there is destruction of intercellular partitions and the presence of zones of destruction. The above was an indication for surgery.

What is the diagnosis? What operation was performed?

Otorhinolaryngology case No.70

A 36-year-old patient, against the background of acute purulent right-sided otitis, developed severe chills on the ninth day from the onset of the disease, the temperature rose to 40°C, and her general condition worsened.

On examination: the patient's condition is of moderate severity. The skin is moist. The pulse is 98 beats per minute, rhythmic. When measuring temperature every three hours variations of up to 3°C are observed.

During otoscopy: copious purulent discharge in the right ear canal, a sharply hyperemic, bulging eardrum is visible. In its center there is a slit-like defect through which pus flows from the tympanic cavity synchronously with the pulse. Pain is detected on palpation in the projection of the antral cell and in the area of the apex of the mastoid process and the neurovascular bundle of the neck on the right. There are no deviations in the ENT organs.

What is the diagnosis? What is the nature of the surgical intervention?

Otorhinolaryngology case No.71

The patient turned to an otorhinolaryngologist with complaints of bilateral hearing loss, which he had suffered for many years after an acute purulent otitis media.

Otoscopy: bilateral dry mesotympanitis, on the left - with a small central perforation localized in the posteroinferior quadrant, on the right - with a large rim perforation. The mucous membrane of the promontorial wall of the right and left ear is not changed. The cochlea reserve is up to 40 - 50 dB in the speech frequency zone.

What additional examination should be performed? Is hearing enhancement surgery possible? What type? Under what conditions can it be carried out?

Otorhinolaryngology case No.72

The patient was hospitalized with chronic purulent epitympanitis with cholesteatoma. X-ray examination revealed sigmoid sinus.

Is surgery advisable? If yes, what type of surgery is preferable?

Otorhinolaryngology case No.73

A 28-year-old patient complained of decreased hearing in both ears and tinnitus for several years. Hearing deterioration occurs after childbirth. Hearing is reduced by the conductive type. Early progressive hearing loss was detected in four female blood relatives. The patient has Paracusis Willisii. Otoscopy revealed the Schwartz and Khilov symptom. Tympanogram type As.

What disease can you think of? What other symptoms are characteristic of it? What are the treatment tactics?

Otorhinolaryngology case No.74

The patient complained of severe hearing loss. There is an anamnesis of bilateral whole-cavitary radical surgery. Otoscopy revealed complete epidermization of the postoperative cavities, both labyrinthine windows were covered with scar tissue.

Is complete deafness possible in such a situation (with the function of the inner ear intact)? Is

tympanoplasty indicated? What type of tympanoplasty is most appropriate?

Otorhinolaryngology case No.75

The patient has bilateral chronic purulent otitis and the audiogram shows a decrease in air conduction hearing in the speech frequency zone: on the right - up to 60 -65 dB., on the left - up to 55 - 60 dB. On the right a bone-air interval is detected in the zone of the indicated frequencies up to 20 dB, on the left up to 30-35 dB. The equipressor function turned out to be better for the left auditory tube.

Does it make sense to have hearing-improving surgery? If yes, then under what conditions is it more appropriate to do this? Which ear?

Otorhinolaryngology case No.76

A 60-year-old patient with chronic epitympanitis was diagnosed together with a neurologist with an abscess of the temporal lobe of the brain on the right. An extended radical operation was performed on the right ear, during which the dura mater of the middle cranial fossa was widely exposed. The latter is gray, shiny, tense. There is no pulsation.

What is the surgeon's technique for further actions? What are the features of the postoperative period in this patient? Describe methods for sanitation of otogenic brain abscesses.

Otorhinolaryngology case No.77

A 50-year-old patient was hospitalized with symptoms of right-sided otogenic neuritis of the facial nerve three days ago. Otoloscopically chronic epitympanitis is revealed with partial destruction of the lateral wall of the attic, which is confirmed on x-rays. A test with probing of the attic indicates the presence of cholesteatoma in the supratympanic space.

Is surgery indicated? When? What is the surgical technique?

Otorhinolaryngology case No.78

A 23-year-old patient was admitted to the ENT department in a serious condition. Consciousness is confused, there are signs of meningitis occurring against the background of acute right-sided purulent otitis media. At the same time spontaneous nystagmus towards the

healthy ear is observed. Taking into account the clinical picture and severity of the disease, what tactics should be followed? If surgery is required, what is the extent and technique of the operation? What is the range of conservative therapy?

Otorhinolaryngology case No.79

After an acute runny nose the patient developed swelling, redness and soreness of the skin of the nose, more on the left. The pain radiates to the teeth, temple and left orbital area, the temperature increased to 38°C, and a feeling of chilling appeared.

Objectively: a limited swelling of bright red color with an abscess in the center on the wing of the nose on the left.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.80

A 36-year-old patient squeezed out the purulent core of a boil on the wing of the nose on the left and the next day his general condition worsened. Severe chills, profuse sweating, hectic temperature (with changes of up to 3°C during the day), and severe headache appeared. Locally, in the circumference of the wing of the nose, where the boil is located, there is swelling and infiltration of soft tissues, spreading to the area of the cheek and lip on the left.

What complication can be suspected? What should be the doctor's tactics?

Otorhinolaryngology case No.81

A 27-year-old patient complains of a feeling of stuffiness in the nasal cavity, watery nasal discharge, sneezing, lacrimation, sore throat and fever up to 37.3°C. These symptoms appeared after hypothermia three days ago.

Objectively: the skin of the external nose in the area of the wings is slightly hyperemic. The skin of the face and body is of normal color, slightly moist. Pulse is 82 beats per minute, voice with a nasal tinge. The mucous membrane of the nasal cavity is hyperemic, infiltrated, abundant mucous discharge in the nasal passages. Pain in the area of the paranasal sinuses cannot be detected on palpation. Nasal breathing is difficult, sense of smell is reduced.

Pharyngoscopy reveals hyperemia of the mucous membrane of the posterior pharyngeal wall. The remaining ENT organs are without pathology.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.82

A 32-year-old patient complains of difficulty breathing through the nose, clear discharge from the nasal passages, impaired sense of smell, attacks of sneezing and lacrimation. The listed symptoms have been bothering him frequently for the last two years, since he started working in the chemical industry.

Objectively: the mucous membrane of the nasal cavity is swollen, unevenly colored - bluish, sometimes white spots are visible on its surface. The nasal turbinates are enlarged. The lumen of the nasal passages is narrowed. After lubricating the nasal mucosa with a solution of adrenaline, the turbinates noticeably decreased in size, and the lumen of the nasal passages increased. Palpation of the paranasal sinuses is painless. The remaining ENT organs are without pathology.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.83

A 47-year-old patient complains of difficulty in nasal breathing, more on the right, heaviness in the forehead, and decreased sense of smell. These complaints appeared 1.5-2 years ago. At first, nasal congestion bothered her periodically and then it intensified and became constant. Vasoconstrictor drops and ointments previously had a positive effect, but have recently stopped working.

Objectively: in the right half of the nose in the middle and lower nasal passages there are multiple formations of a grayish-gray color, reminiscent of bunches of grapes determined against the pink color of the mucous membrane of the nasal septum and nasal turbinates. On the left, the nasal cavity is filled with a smaller number of similar formations of different sizes, located in the middle nasal meatus. Nasal breathing is absent on the right, weakened on the left.

The mucous membrane of the larynx and pharynx is not changed. The eardrums are somewhat retracted. Whispers can be heard at a distance of 4 m in both ears. Internal organs without noticeable deviations from the norm.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.84

A 42-year-old patient complains of difficulty in nasal breathing, copious mucus discharge from the nose, and a disorder of smell. The listed symptoms first appeared four years ago, and since then he has almost constantly felt difficulty breathing through his nose. Exacerbations are often observed when the patient can only breathe through the mouth and suffers from copious mucous discharge from the nose.

Objectively: swelling of the nasal mucosa and its hyperemia are determined. The nasal turbinates, especially the lower and middle ones, are enlarged. The lumen of the nasal passages is narrowed. At the bottom of the nasal cavity there is an accumulation of white mucus. After lubrication with a solution of adrenaline, the mucous membrane of the nasal cavity becomes pale, but no noticeable reduction in the nasal turbinates is detected. Palpation of the paranasal sinuses is painless. The remaining ENT organs are without pathology. What is the diagnosis? What is the doctor's tactics?

Otorhinolaryngology case No.85

A 27-year-old patient complains of a feeling of dryness in the nasal cavity, the formation of dry crusts in the nasal passages with an unpleasant odor, which often make nasal breathing difficult.

Objectively: the mucous membrane of the nasal cavity is dry, thinned. The nasal turbinates are reduced in size, the nasal passages are wide. In the nasal passages there are dry green crusts in significant quantities with an admixture of foul-smelling purulent discharge. The mucous membrane of the posterior wall of the pharynx is thinned, smoothed, and looks as if covered with varnish. There are no deviations from the norm from other organs.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.86

A 28-year-old patient complains of a feeling of dryness in the nose, the formation of crusts in

the nasal passages, and a disorder of smell. Thick purulent discharge from the nose often appears, sometimes mixed with blood.

Objectively: the mucous membrane of the nasal cavity is dry, sharply thinned, there are dry crusts on its surface and thick pus in places. The nasal turbinates are reduced in size, the nasal passages are wide. The mucous membrane of the back wall of the pharynx is dry, but to a much lesser extent than the mucous membrane of the nose. There are no deviations from the norm in the other ENT organs.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.87

A 26-year-old patient complains of a headache localized mainly in the right half of the forehead, heaviness in the head, runny nose, difficulty in nasal breathing, fever up to 38°C, and general malaise. He fell ill five days ago, a week after suffering a respiratory illness.

Objectively: the skin is somewhat moist. The pulse is rhythmic, 84 beats per minute. No changes in internal organs are detected. The mucous membrane of the nasal cavity is clearly hyperemic and moderately infiltrated. Mucopurulent discharge in the middle and lower nasal passages on the right. On palpation, pain is detected in the superciliary region and in the area of the projection of the maxillary sinus on the right. The radiograph shows a parietal veil of the right frontal sinus and intense darkening of the area of the ethmoid labyrinth and the maxillary sinus on the right.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.88

A 12-year-old patient was admitted to the ENT clinic with complaints of severe headache, purulent runny nose, and difficulty in nasal breathing. She fell ill five days ago, a week after suffering from a respiratory illness. The disease began with pain in the superciliary region on both sides and an increase in temperature to 38.5°C. The next day the eyelids were swollen. On admission the temperature was 39.5°C. Swelling of the soft tissues of the forehead and eyelids on both sides. During rhinoscopy the mucous membrane of the nasal cavity is sharply hyperemic, infiltrated, and creamy pus is detected in the middle nasal passages on both sides. Pain on palpation in the area of projections of the maxillary sinuses and superciliary region on both sides. X-ray of the paranasal sinuses shows homogeneous darkening of the maxillary and frontal sinuses.

Blood test: leukocytosis $19.5 \cdot 10^9 / l$, ESR - 60 mm/h.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.89

The patient complains of pain in the left half of the forehead and left cheek, heaviness in the head, runny nose with discharge mainly from the left half of the nose. He fell ill after a respiratory illness a week ago.

Objectively: rhinoscopy reveals hyperemia, infiltration of the mucous membrane of the nasal cavity on the left, purulent discharge in the middle nasal meatus. On palpation pain is detected in the area of the left maxillary sinus and the superciliary region on the left. Blood tests showed leukocytosis $9.5 \cdot 10^9/l$, ESR - 30 mm/h.

What is the diagnosis? What additional examination is necessary?

Otorhinolaryngology case No.90

A 14-year-old patient complains of severe pain in the forehead on the right, nasal congestion, and an increase in temperature to 38.7°C . These symptoms appeared four days ago after suffering from the flu.

Objectively: the mucous membrane of the nasal cavity is hyperemic, infiltrated, creamy pus is detected in the middle and lower nasal passages on the right. Pain on palpation of the superciliary area on the right. An x-ray of the paranasal sinuses shows darkening of the right frontal sinus with a horizontal level of fluid, a parietal veil of the maxillary sinus on the right.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.91

The patient complains of a frequent runny nose with stronger discharge from the right half of the nose, which is accompanied by a headache, fever, and a disturbance in the general condition. Almost constantly breathes poorly with the right half of the nose. He considers himself sick for about four years.

Objectively: the mucous membrane of the nasal cavity is moderately hyperemic and infiltrated. The right half is filled with oval-shaped edematous formations emanating from the middle and upper nasal passages. Palpation reveals pain in the right maxillary sinus. Nasal breathing on the right is severely difficult. There are no deviations from the norm in other organs.

Potential diagnosis? What additional examination is necessary?

Otorhinolaryngology case No.92

The patient complains of a constant runny nose, mainly on the right side, nasal congestion, pain in the right half of the forehead. These symptoms appeared about a year ago after suffering from flu.

Objectively: there is an increase in the inferior and middle nasal concha on both sides, in the middle nasal passage on the right there are polyps and a small amount of purulent discharge. Pain on palpation in the superciliary region on the right.

What is the presumptive diagnosis? What additional research methods are necessary to clarify the diagnosis? How to treat the patient?

Otorhinolaryngology case No.93

A 34-year-old patient complains of purulent discharge from the left half of the nose, difficulty in nasal breathing, and low-grade fever. Over the past 10 years a runny nose has been bothering him frequently and has not stopped for a long time. Three years ago during an exacerbation, inflammation of the paranasal sinuses was first diagnosed.

During rhinoscopy: the mucous membrane of the nasal cavity is hyperemic, infiltrated, hypertrophy of the inferior and middle nasal turbinates on the left, purulent discharge in the middle and lower nasal passages on the left. Palpation of the projection area of the left maxillary sinus on the left is painful. Nasal breathing on the left is difficult. Purulent discharge flows down the back wall of the pharynx. An x-ray of the paranasal sinuses showed intense darkening of the left maxillary sinus.

What is the diagnosis? What needs to be done to clarify it? How to treat the patient?

Otorhinolaryngology case No.94

A 33-year-old patient complains of sudden attacks of nasal congestion with copious mucous-watery discharge, accompanied by headache and cough; also notes irritability and sweating. Attacks often occur after hypothermia. Ill for about three years.

Rhinoscopy: the mucous membrane of the inferior nasal concha is swollen, cyanotic, and in some places bluish-white spots are visible on it. After lubrication with a 3% ephedrine solution

the nasal turbinates sharply decrease in volume.

What is the diagnosis? What are the principles of treatment?

Otorhinolaryngology case No.95

The patient complains of a headache in the forehead, heaviness in the head, purulent discharge from the left half of the nose, difficulty in nasal breathing and an increase in temperature to 37.5°C. These symptoms first appeared six years ago after suffering a respiratory disease on my legs. A diagnosis was made: acute sinusitis. She was treated conservatively by an otolaryngologist. Since then the disease has recurred every year.

Objectively: the mucous membrane of the nasal cavity is moderately hyperemic, infiltrated, the nasal turbinates are enlarged, more on the left, on the same side - there are polyps and purulent discharge in the middle nasal passage. On palpation pain is detected in the superciliary area on the left. Nasal breathing is weakened to a greater extent on the left, the mucous membrane of the posterior pharyngeal wall is slightly hyperemic. An x-ray of the paranasal sinuses reveals a homogeneous darkening of the left frontal sinus. What is the diagnosis? What is the doctor's tactics?

Otorhinolaryngology case No.96

A 31-year-old patient complains of a runny nose with thick discharge from the left half of the nose, difficulty in nasal breathing, headache, heaviness in the forehead, and an increase in temperature to 37.8°C. He believes that he fell ill three years ago when after the flu he developed a lingering runny nose with thick purulent discharge and a headache. Since then, when hypothermia occurs, the disease worsens. The latest exacerbation began a week ago.

Objectively: the mucous membrane of the nasal cavity is hyperemic and infiltrated. On the left the nasal turbinates are hypertrophied, and in the middle nasal meatus pus and small polyps are detected. Palpation in the superciliary area on the same side is painful. An x-ray of the paranasal sinuses reveals intense darkening of the frontal sinus with a fluid level and a light parietal veil of the maxillary sinus on the left. What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.97

A 14-year-old patient developed right-sided purulent sinusitis after influenza. Despite treatment the condition worsened - the headache intensified, the temperature increased to 39.4°C, and general weakness and malaise appeared.

Objectively: the patient is weak, the skin is moist. The pulse is 98 beats per minute, rhythmic. Exophthalmos and tissue infiltration of the upper eyelid on the right are detected. The mobility of the right eyeball is limited.

During rhinoscopy: the mucous membrane of the nasal cavity is hyperemic, infiltrated, purulent discharge in the middle nasal passage on the right. Pain on palpation in the superciliary area on the same side.

What complication of sinusitis can you think about? What additional research is needed? What is the doctor's tactics?

Otorhinolaryngology case No.98

A 35-year-old patient complains of severe headache, purulent nasal discharge, poor general condition, chills, and increased body temperature up to 40°C.

Objectively: the general condition is of moderate severity. The skin is moist. The pulse is 120 beats per minute. Heart sounds are slightly muffled.

A neurological examination reveals neck rigidity, Kernig's sign. The ophthalmologist's conclusion: the veins of the fundus are dilated. In the nasal cavity there is a significant amount of purulent discharge in the middle meatus on the right, pain on palpation of the outer wall of the frontal and maxillary sinuses. The radiograph shows uniform darkening of the frontal, maxillary sinus and ethmoidal labyrinth on the right. Puncture of the right maxillary sinus yielded foul-smelling pus and cholesteatoma masses.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.99

A 44-year-old patient complains of severe headache, mainly in the forehead, attacks of vomiting, lack of appetite, general weakness, runny nose with discharge from the left half of the nose, difficulty in nasal breathing, decreased sense of smell. A runny nose and pain in the forehead have been bothering her for 10 years. The last exacerbation of the disease began violently two weeks ago after the flu. The treatment prescribed by the clinic doctor (UHF on the forehead, vasoconstrictor ointments and endonasal sulfa drugs) had no effect. Recently the patient's condition worsened: the headache became more severe, vomiting and severe general weakness appeared.

Objectively: the condition is of moderate severity. The pulse is 58 beats per minute. The temperature is 38.6°C. The skin is pale. The tongue is coated. The psyche is changed: euphoric, talkative, often uses flat jokes in conversation, untidy, sometimes urinates on the floor in the room. A neurological examination reveals Kokhanovsky's symptom on the left and a grasping reflex. Rhinoscopy: the mucous membrane of the nasal cavity is moderately infiltrated, somewhat stagnant. Copious purulent discharge in the left half of the nose. Pain on palpation in the superciliary region on the left. No significant changes in other ENT organs were detected.

An x-ray of the paranasal sinuses shows homogeneous darkening of the left frontal sinus, suspicion of destruction of its inner wall.

What is the presumptive diagnosis? What additional examination is necessary to clarify the diagnosis? What is the doctor's tactics?

Otorhinolaryngology case No.100

A 26-year-old patient in a state of alcoholic intoxication received a strong blow to the face with a fist in a fight, after which nosebleeds occurred and mild nausea was noted. He was taken to the ENT hospital three hours after the incident.

Upon admission there was hemorrhage in the circumference of the orbits, displacement of the nasal bridge to the right; upon palpation crepitus was detected in this area. The radiograph revealed a violation of the integrity of the nasal bones and the orbital wall of the left maxillary sinus, and its homogeneous darkening.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.101

The patient complains of difficulty breathing through the nose, pain in the nose, and an increase in temperature to 37.5°C. All of the above symptoms appeared after he received a blow to the nose three days ago, and there were nosebleeds.

Objectively: the nasal passages are sharply narrowed due to infiltration of soft tissues in the area of the nasal septum. There is softening in the center of the infiltrate; when probing this area fluctuation is determined. Nasal breathing is difficult.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.102

A 20-year-old patient complains of constant difficulty in nasal breathing on the right and headache. As a child, he suffered a nose injury.

Objectively: the bridge of the nose is slightly shifted to the left. Otherwise, the shape of the nose is unchanged. Anterior rhinoscopy reveals a sharp curvature of the septum to the right, the mucous membrane is pink and moist. Palpation of the paranasal sinuses is painless.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.103

An 18-year-old female patient was admitted to the hospital due to nosebleeds. Such bleeding, more or less profuse, often occurs during the premenstrual period. On examination there is no bleeding. The skin and visible mucous membranes are pale, the pulse is rhythmic - 88 beats per minute.

On rhinoscopy: bloody clots in the nasal passages, on the left in the anterior lower part of the septum the vessels are sharply dilated. Other ENT organs without pathology.

What is the diagnosis? What is the most appropriate way to deal with the patient in this case?

Otorhinolaryngology case No.104

A 48-year-old patient suffering from hypertension was transported by ambulance to the ENT clinic due to severe nosebleeds, which could not be stopped at home.

What is the diagnosis? What urgent measures need to be taken? What are the treatment tactics in the future?

Otorhinolaryngology case No.105

A 31-year-old patient was brought to the clinic with severe nosebleeds, which began after he was hit on the nose with a hard object. He didn't faint. There was no nausea or vomiting. When examining the bridge of the nose along the midline, infiltration of soft tissues and sharp pain on palpation of this area are determined. In the nasal passages there are tampons soaked in blood, however, despite this, the bleeding continues - blood flows down the back wall of the

pharynx on the left. An x-ray reveals a fracture of the nasal bones without displacement of the fragments. What is the doctor's next tactics?

Otorhinolaryngology case No.106

A three-year-old crying girl was taken to the clinic. The parents reported that about two hours ago the child, while playing with a button, stuck it in the right side of his nose. The attempt to remove it failed; the button slipped into the depths of the nasal passage.

Objectively: the mucous membrane of the nasal cavity on the right is hyperemic, infiltrated, a foreign body is detected in the depths. Nasal breathing on the right is difficult.

How should the doctor help the child?

Otorhinolaryngology case No.107

A 23-year-old patient, who arrived from Ukraine a year ago, complains of the formation of crusts in the nose and difficulty in nasal breathing.

Objectively: upon rhinoscopy there is infiltration in the vestibule of the nose, narrowing of the lumen due to infiltration of the lower and lateral walls, and dry crusts in the nasal passages are determined on both sides. Posterior rhinoscopy reveals narrowing in the area of the choanae. When probing the nasal passages the density of the infiltrate is felt.

What is the presumptive diagnosis? What additional tests are needed to clarify the diagnosis?
How to treat the patient?

Otorhinolaryngology case No.108

A 40-year-old patient complained of frequent bleeding from the left side of the nose. The bleeding is small and stops spontaneously. There are no complaints from other bodies and systems. Three months ago she underwent a preventive examination at work; no ENT pathology was detected.

Rhinoscopy: on the nasal septum, in its cartilaginous part on the left, there is a rounded purple-blue formation on a narrow stalk. There is no infiltration of the mucous membrane around the leg. The lesion bleeds easily when touched. Bleeding is stopped by pressing the left wing of the nose against the septum.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.109

A 34-year-old patient complains of swelling in the area of the right nasolabial fold and at the base of the wing of the nose. For the first time 10 years ago she noticed a painless formation in the indicated area, which gradually increased in size.

Objectively: facial asymmetry due to deformation at the base of the right wing of the nose and smoothness of the right nasolabial fold, the skin over the formation is not changed in color and is painless on palpation. The internal part of the formation protrudes the side wall and the bottom of the vestibule of the nose. In the vestibule of the oral cavity, upon palpation a painless swelling of a round shape and soft-elastic consistency is determined. Upon puncture a homogeneous amber-colored liquid was obtained. The skin of the nasal vestibule and the mucous membrane of the nasal cavity on the right are without pathological changes. Nasal breathing is free. The remaining ENT organs are without pathology. A plain radiograph of the paranasal sinuses revealed no changes.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.110

A 16-year-old patient complained of lack of nasal breathing and decreased hearing in the right ear. A week ago the right side of the nose started bleeding, the bleeding was stopped by the ambulance doctor through tamponade, administration of calcium chloride and Vicasol. Two years ago he first noticed nasal congestion and difficulty breathing through his nose. He consulted a doctor several times, but outpatient treatment turned out to be ineffective.

Rhinoscopy: the mucous membrane of the nasal cavity is swollen, a bright red formation is identified in the right posterior sections, which is not connected with the walls of the nasal cavity. There is no nasal breathing.

Posterior rhinoscopy: the nasopharyngeal cavity is occupied by a smooth formation that almost completely covers the choanae. On palpation: the consistency is dense.

X-ray of the paranasal sinuses: on the anterior X-ray there is a slight shadow of a soft tissue formation, occupying the right half of the nose and pushing outward the right lateral wall of the nose. Paranasal sinuses without pathological changes. In the lateral image, the shadow of a

soft tissue formation fills the cavity of the nasopharynx, the main sinus and is embedded in the nasal cavity. The bone walls surrounding the formation have clear contours without interruption in their length. Other organs and systems without pathology.

What is the diagnosis? Are additional tests needed? How to treat the patient?

Otorhinolaryngology case No.111

The patient complains of a headache in the forehead, which he first noticed four months ago. Recently, the headache intensified and became permanent, which forced him to go to the clinic.

Objectively: the patient's condition is satisfactory, there are no deviations from the norm in the internal organs. When examining the ENT organs no pathological changes were also found. On the radiograph of the paranasal sinuses there is a shadow of bone density of a round shape with smooth edges in the area of the left frontal sinus, the shadow reaches the level of the brain wall of the frontal sinus.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.112

A 34-year-old patient complained of headache in the occipital region and periodic runny nose. Over the past three years blood pressure has risen. The therapist diagnosed stage I hypertension.

Anterior rhinoscopy: slight swelling of the nasal mucosa with bluish spots on the anterior ends of the inferior turbinates. The nasal passages are free, the back wall of the nasopharynx is easily visible, nasal breathing is not difficult. Posterior rhinoscopy without features.

X-ray of the paranasal sinuses: on the anterior X-ray in the center of the right frontal sinus there is an intense rounded darkening of bone density with a diameter of up to 1 cm. The outer surface of the formation does not reach the orbital wall of the sinus, there is no obstruction of the frontonasal canal. The lateral image shows that the formation comes from the anterior wall, its posterior surface does not reach the cerebral wall, the other paranasal sinuses and the nasal cavity have a normal structure. No pathology was identified from in organs and systems. What is the diagnosis? What is the tactics of the otorhinolaryngologist in this case?

Otorhinolaryngology case No.113

A 25-year-old patient complained of pain in the frontal region. The headache has been bothering her for a year, its intensity slowly increases, nasal breathing is not difficult.

Rhinoscopy: the nasal passages are free, the mucous membrane is pale pink, the anterior end of the left middle turbinate is somewhat swollen. Nasal breathing is not difficult. Posterior rhinoscopy is unremarkable.

X-ray of the paranasal sinuses: on the anterior radiograph in the lumen of the left frontal sinus there is an intense darkening of bone density, round, with smooth contours, 5 cm in diameter, completely obstructing the left frontonasal canal. Slight shading of the remaining parts of the left frontal sinus. Other paranasal sinuses and nasal cavity are without pathological changes. No pathology was detected in other organs and systems.

What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.114

A 38-year-old patient was admitted with complaints of difficulty in nasal breathing in the right half of the nose, bloody-purulent discharge from this half of the nose, and headache in the right half of the frontal region. She has been ill for three months, difficulty in nasal breathing has been slowly increasing and a headache has developed over the last month.

Rhinoscopy: the right half of the nose is obstructed by a large, tuberous formation of a purplish-bluish color, its anterior sections are ulcerated, bleeding when touched with a probe. The nasal septum is shifted to the left. The left half of the nose is somewhat narrowed, the mucous membrane is moderately swollen, cyanotic, nasal breathing is slightly weakened. Posterior rhinoscopy: the nasopharyngeal cavity is free. The right choana is obturated by the formation described above. The x-ray shows a shadow of a soft tissue formation occupying the right half of the nose, the cells of the right ethmoidal labyrinth are destroyed, and the lateral wall of the maxillary sinus is destroyed. The frontal and maxillary sinuses on the right are darkened. Their walls with the exception of the lateral wall of the maxillary sinus are clearly visible. On the left the paranasal sinuses are without pathological changes.

What is the presumptive diagnosis? What additional tests are required?

Otorhinolaryngology case No.115

A 62-year-old patient complained of headache, weakness, lacrimation, lack of nasal breathing, and bleeding from the right side of the nose. About a year ago he noticed difficulty breathing through his nose and suffered with headaches. He was observed by a local doctor; restorative treatment was carried out, but there was no improvement.

Objectively: facial asymmetry due to proptosis on the right and deformation of the right cheek. The right nasolabial fold is smoothed. The conjunctiva of the right eye is hyperemic, with “purulent lakes” at the corners of the eye. Full mobility of the eyeball.

Anterior and posterior rhinoscopy: the right half of the nose is occupied by a purple-blue formation, pushing the nasal septum to the left. The left half of the nose is narrowed, the mucous membrane is somewhat swollen, the nasal passages on the left are free. The posterior part of the formation hangs from the right side of the nose into the nasopharyngeal cavity. On palpation, the anterior wall of the right maxillary sinus is absent, the hard palate is deformed, and bone destruction is determined by palpation. Significant decrease in skin sensitivity of the right cheek compared to the left. X-ray of the paranasal sinuses: on the anterior X-ray a shadow of a soft tissue formation is detected, occupying the right half of the nose. Bone destruction of the medial and orbital walls of the right maxillary sinus. Homogeneous darkening of the right frontal and maxillary sinuses. What is the diagnosis? How to treat the patient?

Otorhinolaryngology case No.116

A 63-year-old patient has been experiencing bloody discharge from the nose for three months, lack of nasal breathing on the right, thickening of the soft tissues of the buccal region, pain in the area of the right maxillary sinus. An x-ray of the paranasal sinuses reveals darkening of the right maxillary sinus, destruction of its medial and superior walls, and thickening of the soft tissues accompanying the lower orbital margin.

Make a preliminary diagnosis. What x-ray plan do you offer?

Answer key:

No. 1. Otohematoma. Hematoma puncture. Pressure bandage on the area of the auricle

hematoma. If this treatment is ineffective, open the hematoma. Drainage of the wound. Antibacterial and anti-inflammatory therapy.

No. 2. Chondroperichondritis of the auricle. Opening the auricle abscess, removing necrotic, sequestered areas of cartilage. Drainage of the wound. Antibacterial and anti-inflammatory therapy.

No. 3. Erysipelas of the external ear. Antibacterial and anti-inflammatory treatment. Irradiation with an erythematous dose of ultraviolet rays, lubricating the skin with anti-inflammatory ointments.

No. 4. Furuncle of the right external auditory canal in the infiltration stage. Insertion of gauze turundas with 3% boric alcohol into the external auditory canal. Semi-alcohol compresses on the ear area. Antibacterial, anti-inflammatory and desensitizing treatment. Sollux, UHF therapy. If the boil abscesses, open and drain the abscess.

No. 5. Bilateral acute diffuse external otitis. Toilet the external auditory canals, lubricate the skin with a 3 - 5% solution of lapis, corticosteroid ointments. Antibacterial, desensitizing therapy. Warming semi-alcohol compresses at night. Physiotherapeutic treatment (quartz tube, UHF).

No. 6. Eczema of the auricle and external auditory canal. Anti-inflammatory and desensitizing treatment. Ointments containing corticosteroids. Physiotherapeutic treatment (UV irradiation, therapeutic laser).

No. 7. Sulfur plug. Removing wax plug by washing the external auditory canal.

No. 8. Foreign body of the membranous-cartilaginous part of the external auditory canal. Removing a foreign body by rinsing the ear.

No. 9. Foreign body of the bony part of the external auditory canal. Try to remove the foreign body under an operating microscope (instrumentally). If it is impossible to remove it in this way, surgical removal of the foreign body is indicated.

No. 10. Acute rhinitis. Bilateral acute tubotympanitis. Antibacterial therapy - bioparox. Vasoconstrictors in the nose, antihistamines orally. Blowing out the ears according to Politzer. Physiotherapy treatment.

No. 11. Otomycosis. Toilet the ears using antifungal drugs: candibiotic, clotrimazole, flavofungin, levorin, etc.

No. 12. Right-sided acute catarrhal otitis media. Antibacterial, anti-inflammatory and desensitizing treatment. Measures aimed at restoring the function of the auditory tube. Warming semi-alcohol compresses on the ear.

No. 13. Left-sided acute purulent otitis media. Antibacterial, anti-inflammatory and desensitizing treatment. Measures aimed at the fastest evacuation of exudate from the middle

ear. Physiotherapeutic treatment in the stage of disease resolution. Ear drops: otofa, tsipromed, candibiotic, etc.

No. 14. Right-sided acute purulent otitis media, complicated by mastoiditis. The operation is anthromastoidotomy. Drug treatment of acute otitis media.

No. 15. Right-sided acute otitis media, complicated by mastoiditis, subperiosteal abscess. Urgent antromastoidotomy. Antibacterial and anti-inflammatory treatment.

No. 16. Right-sided acute otitis complicated by labyrinthitis. Treatment is surgical along with antibiotic therapy and anti-inflammatory treatment.

No. 17. Left-sided chronic recurrent purulent mesotympanitis in the acute stage. Surgical treatment of the sanitary type (anthrotomy with anthrodrainage).

No. 18. Left-sided acute purulent mesotympanitis complicated by periostitis of the mastoid process. Antibiotic therapy, anti-inflammatory treatment, measures to ensure effective evacuation of exudate from the cavities of the middle ear. Dynamic radiography of the temporal bones. If there is bone destruction, mastoidotomy is performed.

No. 19. Right-sided chronic purulent epitympanitis complicated by cholesteatoma. Surgical treatment of the sanitizing type is a radical operation on the right ear.

No. 20. Left-sided chronic purulent epitympanitis complicated by secondary purulent meningitis. X-ray of the temporal bones according to Schüller, Mayer. Lumbar puncture with cerebrospinal fluid examination. Examination by a neurologist. Clinical blood test.

No. 21. Right-sided chronic purulent epitympanitis complicated by cholesteatoma and abscess in the postauricular area. Surgical treatment of the sanitizing type is a radical operation on the right ear.

No. 22. Left-sided chronic purulent epimesotympanitis complicated by a labyrinthine fistula. Surgical treatment - radical surgery on the ear with plastic surgery of the horizontal semicircular canal fistula.

No. 23. Left-sided chronic purulent epitympanitis complicated by an abscess of the temporal lobe of the brain. In terms of examining the patient the following are necessary: radiography of the skull, computed tomography of the brain, examination by a neurologist and neurosurgeon, and examination of the cerebrospinal fluid. Once the diagnosis is confirmed, extended radical surgery on the ear with exposure of the middle cranial fossa is indicated. Opening an abscess using a needle (the abscess is first punctured). In the postoperative period antibacterial, anti-inflammatory, dehydration and detoxification treatment is carried out.

No. 24. Left-sided chronic purulent epitympanitis complicated by cholesteatoma and granulations. Otogenic cerebellar abscess. In terms of additional examination of the patient, the following are indicated: radiography of the skull (survey), computed tomography of the brain, lumbar puncture with examination of the cerebrospinal fluid, consultation with a neurologist

and neurosurgeon. If the diagnosis is confirmed, extended radical surgery on the ear with exposure of the posterior cranial fossa and opening of the abscess.

No. 25. Meniere's disease. In terms of examination - acumen, vestibulometry. Treatment is medicinal and complex.

No. 26. Left-sided chronic purulent mesotympanitis in the acute stage. Anti-inflammatory and desensitizing treatment. "Dry" toilet of the ear, instillation of 3% boric alcohol into the ear, ear drops (otofa, tsipromed, etc.), vasoconstrictors in the nose (in the form of ointments or drops), physiotherapeutic treatment.

No. 27. Left-sided chronic purulent epimesotympanitis in the acute stage complicated by cholesteatoma and granulations. Otogenic purulent meningitis. Examination of cerebrospinal fluid, consultation with a neurologist, ophthalmologist, x-ray of the temporal bones according to Schüller and Mayer. If the diagnosis is confirmed, extended radical surgery on the ear is performed. Antibacterial, dehydration and detoxification therapy.

No. 28. Left-sided chronic purulent epitympanitis in the acute stage complicated by thrombosis of the sigmoid sinus. Urgent extended radical surgery on the ear with revision of the sigmoid sinus.

No. 29. Right-sided chronic purulent epitympanitis complicated by paresis of the facial nerve. Surgical treatment of the sanitary type is radical surgery on the ear. The reason for the development of facial nerve paresis was the destruction of the facial nerve canal by the carious process.

No. 30. Left-sided chronic purulent epitympanitis complicated by cholesteatoma and cerebellar abscess. Urgent extended radical surgery on the left ear, opening and drainage of the cerebellar abscess. Anti-inflammatory and antibacterial treatment.

No. 31. Otosclerosis - surgical treatment - stapedoplasty. Conductive type of hearing loss.

No. 32. Bilateral sensorineural hearing loss of intoxication origin. Detoxification treatment, drugs that improve cerebral circulation, nerve fiber trophism and synaptic transmission. Stimulating treatment.

No. 33. Stage II hypertension, left-sided chronic sensorineural hearing loss of vascular origin.

No. 34. Acute injury, left-sided sensorineural hearing loss. IV infusion of angiolytic polarizing solutions, drugs that improve blood rheology, dehydration in a hospital setting. Cavinton, cinnarizine i.v. Parameatal blockades with proserin or its analogues.

No. 35. Otomycosis, presumably aspergillus niger. Microscopic examination of a smear of ear discharge and culture for fungi. Toilet the ear with nitrofungin solution. Oral: nystatin.

No. 36. Localization of the wound - the knee of the facial nerve in the area of the oval window. Subluxation of the stapes and injury to the facial nerve in the knee area. An urgent diagnostic

tympanotomy under a microscope is required, returning the stapes to its normal position, decompression of the facial nerve. Dehydration therapy, antibiotics, bed rest.

No. 37. Grade III ear barotrauma, hemotympanum on the left. Treatment: anemization of the pharyngeal mouths of the auditory tubes, vasoconstrictors in the nose, antibiotics, analgesics, cotton filters or turundas with hydrocortisone in the external auditory canals.

No. 38. Keloid of the earlobes. Treatment is surgical.

No. 39. Meniere's disease, initial manifestations. Intravenous infusions of lytic mixtures, sodium bicarbonate, dehydration therapy.

No. 40. O. mixed hearing loss due to an anomaly in the development of VBB vessels. Ostyochondrosis . During hyperextension of the neck, a vascular supply of the right ear was disturbed(spasm or thrombosis a. auditivalex., a. cochlearislex.), provoked by irritation of the C4-Sb sympathetic roots. A diagnostic tympanotomy is necessary to check for rupture of the round window membrane. Angiolytic intravenous infusion therapy for thrombosis of the auditory artery. The prognosis is unfavorable.

No. 41. Acumetric data correspond to sound-perceiving hearing loss.

No. 42. Acumetric data correspond to sound-conducting hearing loss.

No. 43. Acumetric data indicate left-sided deafness.

No. 44. Acumetric data correspond to bilateral mixed hearing loss.

No. 45. Acumetric data correspond to the localization of the pathological process in the area of the receptor (organ of Corti).

No. 46. Acumetric data correspond to the localization of the pathological process in the middle ear.

No. 47. The presence of symptoms of vestibular dysfunction is explained by the asymmetry of the function of the vestibular apparatus due to the excitation of the left labyrinth.

No. 48. The presence of symptoms of vestibular dysfunction is explained by the asymmetry of the function of the vestibular apparatus due to inhibition of the left labyrinth.

No. 49. The presence of symptoms of vestibular dysfunction is explained by the asymmetry of the function of the vestibular apparatus due to the switching off of the left labyrinth.

No. 50. For chronic purulent epitympanitis. The presence of a fistula of the horizontal semicircular canal.

No. 51. The pathological process is localized in the left ear labyrinth with suppression of the function of the auditory and vestibular analyzers.

No. 52. Severe conductive hearing loss. Surgical treatment is indicated - elimination of atresia

of the external auditory canal.

No. 53. Deafness of intoxication genesis. The prognosis is unfavorable. The modern way to solve this problem is cochlear implantation.

No. 54. Left-sided chronic purulent epitympanitis complicated by cholesteatoma. Surgical treatment of the sanitizing type is a radical operation.

No. 55. About 20 methods for identifying recruitment are known. Preferred: volume leveling according to Fowler, determination of differential thresholds of strength (DPS) and frequency (DFC) of sounds, determination of reverse adaptation time, determination of the level of discomfort loudness (UDL) and dynamic range of the auditory field (DDF). The appearance of recruitment is associated with damage to the neuroepithelium of the organ of Corti.

No. 56. It is necessary to find out whether there is a history of trauma to the auricle. You can think about otohematoma. Therapeutic tactics are surgical.

No. 57. Computed tomography of the temporal bones, pure tone threshold audiometry, impedance measurement. After normalization of nasal breathing, the patient is indicated for surgery - tympanoplasty on the left ear.

No. 58. You can think of acute tubo-otitis with the presence of transudate in the middle ear. Therapeutic tactics are aimed at normalizing the function of the auditory tube, evacuating contents from the middle ear cavities, and preventing the adhesive process.

No. 59. About the destruction of the horizontal semicircular canal and the presence of a fistula of the ear labyrinth in a patient with chronic purulent epitympanitis.

No. 60. Right-sided acute purulent otitis media, complicated by zygomatitis. Zygomatitis occurs with extensive pneumatization of the temporal bone with the development of cells in the zygomatic process. More often it is the result of the spread of a purulent inflammatory process during mastoiditis to the zygomatic process. Isolated inflammation of the zygomatic process is rare. More often, zygomatitis develops in children, which is explained by non-fusion of the sutures and the close proximity of the antrum to the root of the zygomatic process.

No. 61. Cholesteatoma process.

No. 62. For mastoiditis.

No. 63. An asymptomatic course of chronic epitympanitis is possible in cases where the pathological process is localized predominantly in the supratympanic space without violating the integrity of the auditory ossicles. Surgical treatment is recommended.

No. 64 Bilateral adhesive non-perforated otitis media. Hearing-improving surgery (tympanoplasty) is indicated.

No. 65 Conicotomy followed by tracheostomy.

No. 66. Left-sided chronic purulent mesotympanitis in the acute stage. Conservative treatment is indicated to achieve stable remission. Subsequently, surgical treatment is indicated - tympanoplasty, which has two goals: 1) elimination of the focus of purulent inflammation, 2) improvement of hearing. The operation can be performed either simultaneously or in two stages, that is, reconstructive-auditory-improving surgical intervention is performed on a “dry” ear after a previous surgical intervention of a sanitizing type.

No. 67. Right-sided chronic purulent epitympanitis complicated by cholesteatoma. Considering the patient’s good hearing in the intervals between exacerbations, surgical treatment of a sanitary nature such as atticotomy is indicated. Conservative treatment in such cases is usually ineffective.

No. 68. Diagnosis: acute otitis media, complicated by otogenic neuritis of the facial nerve. The patient should be operated on to eliminate the cause of facial neuritis. A sanitizing operation such as anthromastoidotomy with the prescription of antibiotics and dehydration medications, vitamins B1 and B12, dibazol, and proserin is indicated. Physiotherapeutic procedures include UHF for the behind-the-ear area, galvanization, and massage.

No. 69. Left-sided acute non-perforated otitis media, complicated by mastoiditis. Anthromastoidotomy surgery is indicated.

No. 70. Right-sided acute purulent otitis media, complicated by thrombosis of the sigmoid sinus. Operation: mastoidotomy with wide exposure of the wall of the sigmoid sinus and ligation of the jugular vein. If possible, the entire thrombus is removed before bleeding starts from the upper and lower segments of the sinus. Bleeding is stopped using the Whiting method (insertion of a tampon between the sinus wall and the bone).

No. 71. It is necessary to examine the barofunction of the ears. In such cases reconstructive hearing-improving surgery is possible. If the purpose of the auditory ossicles is preserved and functionally complete, myringoplasty surgery is possible.

No. 72. Surgical intervention is advisable. The presentation of the sigmoid sinus is not a contraindication for surgical intervention. The scope of a sanitizing operation, depending on the extent of the pathological process, can range from atticotomy to conservative radical surgery.

No. 73. You can think about otosclerosis. With it the following characteristic symptoms are often observed: wide external auditory canals (Tillo-Verkhovsky symptom), decreased tactile sensitivity of the skin of the auditory canals (Frechels symptom), lack of secretion of earwax (Toynbee-Bing symptom), thinning eardrums (Lempert’s sign). The therapeutic tactics are surgical - stapedoplasty surgery.

No. 74. Complete deafness is impossible if the function of the inner ear is preserved. In such a situation tympanoplasty surgery is indicated. The most appropriate type of tympanoplasty according to Wulstein’s classification is the fourth type (screening of the round window).

No. 75. In such a situation hearing-improving surgery makes sense. It is more expedient to do this on the left ear due to a more pronounced bone-air interval and better function of the auditory tube. It is better to perform the tympanoplasty operation as a second stage after preliminary surgical sanitation of the focus of purulent inflammation.

No. 76. Currently, treatment of otogenic brain abscesses is carried out with the participation of a neurosurgeon using special approaches and removal of the abscess along with the capsule from the brain tissue. Treatment of a brain abscess can also be closed (puncture with suction of pus and the introduction of antibiotics into its cavity) and open (wide opening of the abscess after an incision of the dura mater) with subsequent drainage of the cavity. In the postoperative period vigorous antibacterial treatment and dehydration therapy are carried out.

No. 77. The occurrence of otogenic neuritis of the facial nerve in a patient with chronic cholesteatoma otitis media is an indication for radical surgery. If during an operation a fistula is discovered in the wall of the facial nerve canal, it is advisable to decompress the facial nerve, that is, to expose the trunk of the nerve within a healthy-looking segment of it. In the absence of a fistula, opening the facial nerve canal is not advisable. In the postoperative period, the patient is prescribed dehydration therapy, antibiotics, vitamins B1 and B12, and proserin.

No. 78. For otogenic meningitis urgent surgical intervention of a sanitary nature is indicated with wide exposure of the dura mater in the middle and posterior cranial fossa. Postoperative treatment consists of antibacterial, dehydration, detoxification and symptomatic therapy.

No. 79. Nasal boil. Antibacterial, hyposensitizing, detoxification treatment using anticoagulants under the control of blood clotting.

No. 80. Cavernous sinus thrombosis, rhinogenic sepsis. Opening the boil to ensure drainage. Powerful antibacterial treatment, dehydration, detoxification, vitamin therapy, immunomodulators, hemosorption, use of anticoagulants, ultraviolet irradiation of autologous blood.

No. 81. Acute nasopharyngitis. |DN₉-19, vasoconstrictor drops, “unloading” ointments, inhalations with a decongestant vasoconstrictor mixture. Herbal antipyretic teas, vitamins, antihistamines.

No. 82. Allergic rhinosinusopathy. Desensitizing. Nonspecific hyposensitization, vitamin therapy. Local application - nasal sprays: Allergodil, Gismanal, Sintaris, Beklomet, etc. Topical corticosteroids: nasonex, flixonase. If possible a change of the job.

No. 83. Polypous rhinosinusitis. Bilateral salpingootitis. Removal of polyps from the nasal cavity. Normalization of the function of the Eustachian tube (Politzer blowing, catheterization of tubes). Topical corticosteroids.

No. 84. Chronic hypertrophic rhinitis. The treatment is surgical.

No. 85. Ozena (fetid runny nose). Treatment is conservative and surgical.

- No. 86. Chronic atrophic rhinopharyngitis. Locally: vitamin-containing oils and ointments, alkaline oil inhalations. Inside - vitamins, biogenic stimulants and drugs that regulate physiological and reparative regeneration. Nasal sprays: aqua maris, solin.
- No. 87. Right-sided hemisinusitis. Antibacterial therapy. Puncture of the right maxillary sinus (nasal mucolytics), anemization of the middle nasal meatus, vasoconstrictors drops and “unloading” ointments. Anti-inflammatory treatment.
- No. 88. Acute purulent pansinusitis. Puncture of the maxillary sinuses, trephine puncture of the frontal sinuses. Intensive antibacterial, detoxification treatment, local treatment, nasal mucolytics.
- No. 89. Left-sided hemisinusitis. Radiographs of the paranasal sinuses in two projections.
- No. 90. Right-sided hemisinusitis. Trephine puncture of the frontal sinus, puncture of the maxillary sinus. Antibacterial therapy, treatment, nasal mucolytics.
- No. 91. Right-sided polyposis-purulent hemisinusitis. X-rays of the paranasal sinuses in two projections, diagnostic puncture of the maxillary sinus.
- No. 92. Right-sided polyposis-purulent rhinosinusitis. X-rays of the paranasal sinuses in two projections, diagnostic puncture of the maxillary sinus. Treatment is surgical.
- No. 93. Chronic left-sided purulent sinusitis. To clarify the diagnosis an x-ray of the paranasal sinuses in the axial projection is necessary. Treatment is surgical.
- No. 94. Vasomotor rhinitis. Conservative treatment. Antihistamines, topical corticosteroids, halotherapy. If ineffective, surgical treatment (submucosal inferior vasotomy, ultrasound or laser disintegration of the inferior turbinates).
- No. 95. Left-sided polyposis-purulent hemisinusitis. Removal of polyps from the nasal cavity, drainage of the frontal sinus. If conservative treatment fails, trephine puncture is performed.
- No. 96. Left-sided polyposis-purulent hemisinusitis. Treatment is surgical.
- No. 97. Acute right-sided purulent hemisinusitis. Orbital phlegmon. Consultation with an ophthalmologist. Urgent surgery.
- No. 98. Right-sided purulent hemisinusitis. Rhinogenic meningitis. Urgent surgical intervention (opening all sinuses on the right).
- No. 99. Exacerbation of left-sided chronic purulent sinusitis, abscess of the left frontal lobe of the brain. CT scan. Lumbar puncture. Consultation with an ophthalmologist, neuropathologist. Treatment is surgical. Intensive antibacterial, dehydration and detoxification treatment.
- No. 100. Displaced fracture of the nasal bones, fracture of the orbital wall of the maxillary sinus on the left. Hematosinus. Brain concussion. Reposition of the nasal bones, puncture of the maxillary sinus on the left.

No. 101 Suppurating hematoma of the nasal septum. Wide opening of the hematoma, drainage. Antibacterial treatment. Local anti-inflammatory treatment.

No. 102 Deviation of the nasal septum. Treatment is surgical.

No. 103. Vicarious nosebleed. Locally - cauterization of the vessels of the bleeding area with a 50% solution of silver nitrate, if ineffective - surgical detachment of the mucous membrane. Laser destruction of dilated vessels in the loc Kisselbachii area is possible. Consultation with a gynecologist.

No. 104 Hypertension. Nosebleeds. Anterior nasal tamponade. Treatment by a therapist.

No. 105. Posterior tamponade.

No. 106 Removal using a nose hook.

No. 107. Rhinoscleroma. Biopsy, microbiological examination. Treatment is conservative.

No. 108. Bleeding polyp of the nasal septum. Treatment is surgical.

No. 109. Herbert's cyst. Treatment is surgical.

No. 110. Angiofibroma of the nasopharynx. Biopsy, angiography, MRI. Treatment is surgical.

No. 111. Osteoma of the left frontal sinus. Treatment is surgical.

No. 112. Osteoma of the right frontal sinus. Observation by an otorhinolaryngologist, treatment of hypertension by a general practitioner.

No. 113. Osteoma of the left frontal sinus. Treatment is surgical.

No. 114. Tumor of the right maxillary sinus. Tumor biopsy. CT scan.

No. 115. Tumor of the right maxillary sinus, right-sided purulent frontal sinusitis. Radiation therapy, trephine puncture of the right frontal sinus.

No. 116. Tumor of the right maxillary sinus. Contrast radiography of the sinus. Computed tomography.

ЛД-21

**Federal State Budgetary Educational Institution of Higher Education
«North-Ossetia State Medical Academy»
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The Department of otorhinolaryngology with ophthalmology

Test Samples

In discipline «Otorhinolaryngology»

For basic professional academic program – specialty program in 31.05.01 General
Medicine approved on 17.04.2024

For students of the 4th year

majoring in 31.05.01 General Medicine

Head of the Department

Doctor of Medicine, Associate Professor

E.T. Gappoeva

Vladikavkaz 2024

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• The name of the controlled section (topic) / or topics (sections) of the discipline / module, educational / industrial training is taken from the work program.

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №1

1. Otorhinolaryngology as a branch of medicine.
2. Acute paratonsillar abscess. Cause, clinic, treatment, emergency care.
3. Paresis and paralysis of the muscles of the larynx, clinic, treatment.
4. Anatomical and topographic features of the structure of the external auditory canal.

Head of the department, Doctor of Medicine

E.T. Gappoeva

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №2

1. Development of otorhinolaryngology in Russia.
2. Chronic rhinitis, classification, clinic, diagnosis and principles of treatment.
3. Clinical anatomy of the larynx.
4. Injuries and wounds of the auricle, external auditory canal, tympanic membrane, diagnostics, emergency care.

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №3

1. Deontology in otorhinolaryngology.
2. Structure of the cavity mucous membrane
3. Ulcerative membranous angina. Etiology, clinic, diagnosis, treatment.
4. Foreign bodies of the ear. Classification, methods for their removal.

Head of the department, Doctor of Medicine

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №4

1. Clinical physiology of the nose and paranasal sinuses
2. Peritonsillitis: etiology, pathogenesis, stages of the disease, localization of paratonsillar abscess, clinic, pharyngoscopy picture, treatment.
3. Acute laryngitis, laryngeal tonsillitis. Etiology, pathogenesis, clinic, laryngoscopy picture, treatment.
4. Exudative otitis media. Etiology, clinic, diagnosis, treatment

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Discipline otorhinolaryngology

Credit test card №5

1. Lymphadenoid ring of the pharynx.
2. Furuncle of the nose: etiology, pathogenesis, stages, clinic, additional examination methods, principles of therapy, possible complications.
3. Laryngeal edema: etiology, pathogenesis, clinic, laryngoscopy picture, therapy.
4. Mechanism of sound transmission. Modern methods of diagnosing disorders of sound conduction.

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Department of otorhinolaryngology with ophthalmology

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Discipline otorhinolaryngology

Credit test card №6

1. The work of an otorhinolaryngologist in pre-conscription and draft commissions at military registration and enlistment offices.
2. Erysipelas of the external nose.
3. Swelling of the larynx. Etiology, clinic, treatment.
4. Inflammatory diseases of the outer ear.

Head of the department, Doctor of Medicine

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Department of otorhinolaryngology with ophthalmology

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Discipline otorhinolaryngology

Credit test card №7

1. Antibiotics in otorhinolaryngology.
2. Anatomical and morphological structure of the palatine tonsils.
3. Foreign bodies of the esophagus. Etiology, clinic, treatment.
4. Examination methods of the vestibular analyzer

Head of the department, Doctor of Medicine

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Department of otorhinolaryngology with ophthalmology

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Discipline otorhinolaryngology

Credit test card №8

1. Olfactory analyzer.
2. Classification of pharyngitis. Chronic pharyngitis. Etiology, clinic, treatment.
3. Acute stenosis of the larynx. Classification, etiology, clinic, treatment.
4. Types of structure of the mastoid process. Their significance in the clinic of purulent otitis media.

Head of the department, Doctor of Medicine

E.T. Gappoeva

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Faculty General Medicine **Year 4**
Discipline otorhinolaryngology

Credit test card №9

1. Features of the blood supply and lymphatic drainage of the nasal cavity.
2. Curvature of the nasal septum.
3. Parapharyngeal (near-pharyngeal) abscess: etiology, pathogenesis, clinical picture, treatment, possible complications.
4. Foreign bodies of the larynx. Etiology, clinic, treatment.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №10

1. Physiology of the palatine tonsils.
2. Burns of the pharynx. Etiology, clinic, treatment, prevention.
3. Papillomatosis of the larynx. Etiology, clinic, treatment.
4. Meniere's disease.

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Discipline otorhinolaryngology

Credit test card №11

1. The role of nasal breathing in the physiological development of the body, the formation of the dentoalveolar system.
2. Acute tonsillitis (catarrhal, lacunar, follicular, membranous tonsillitis).
3. Hematoma and abscess of the nasal septum.
4. Ligaments and muscles of the larynx.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №12

1. Clinical anatomy of the outer ear (structure of the auricle, external auditory canal, its walls, departments).
2. Nosebleeds. Methods for stopping bleeding.
3. Chronic atrophic pharyngitis: etiology, pathogenesis, clinic, pharyngoscopy picture, therapy.
4. Acute stenosis of the larynx and trachea: diseases leading to it, clinic, stages, laryngoscopy picture, treatment. Types of tracheotomy.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №13

1. Clinical anatomy of the middle ear. System of cavities of the middle ear. The structure of the tympanic cavity.

2. Acute rhinitis: etiology, pathogenesis, stages of the disease, clinic, rhinoscopy picture, treatment.

3. Hypertrophy of the palatine tonsils: etiology, degree of hypertrophy according to Preobrazhensky, clinical picture, treatment of the disease.

4. Chronic hyperplastic laryngitis, classification.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №14

1. Anatomical and topographic features of the structure of the outer and middle ear.

2. Classification of chronic rhinitis. Chronic catarrhal rhinitis.

3. Hypertrophy of the pharyngeal tonsil (adenoids): etiology, stages, clinical picture, principles of therapy.

4. Topographic features of the structure of the facial nerve and their significance for otogenic paresis and paralysis.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №15

1. Clinical anatomy of the middle ear, system of cavities. Types of structure of the mastoid process.
2. Chronic hypertrophic rhinitis: etiology, pathogenesis, clinical and rhinoscopic picture, principles of treatment.
3. Foreign bodies of the pharynx.
4. Acute stenosis of the larynx: diseases leading to it, clinic, stages, laryngoscopy picture, treatment. Types of tracheotomy.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №16

1. The function of the hearing organ, the sound-conducting and sound-perceiving apparatus of the auditory analyzer.
2. Chronic atrophic rhinitis: etiology, pathogenesis, clinic, diagnosis, treatment.
3. Wounds of the pharynx.
4. Chondroperichondritis of the larynx.

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Discipline otorhinolaryngology

Credit test card №17

1. Examination of the nose functions.
2. Tuberculosis of the upper respiratory tract.
3. Chronic laryngitis. Classification, etiology, clinic, diagnosis, treatment.
4. The mechanism of sound perception.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №18

1. Physiology of the paranasal sinuses.
2. Agranulocytic angina. Clinic, diagnosis, treatment.
3. Features of the structure of the mucous membrane of the larynx (voice and Ventricular folds, ventricles and infraglottic space).
4. Thrombosis of the sigmoid sinus (otogenic sepsis) causes, clinic, diagnosis, treatment.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №19

1. The structure of the lateral wall of the nose.
2. Benign tumors of the pharynx.
3. Foreign bodies of the larynx. Etiology, clinic, treatment.
4. Pneumatic test. Otolithic reaction according to Voyachik and its clinical interpretation.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №20

1. Age peculiarities of the paranasal sinuses and their relationship with the nasal cavity.
2. Angina with leukemia.
3. Physiology of the larynx - respiratory, protective, phonatory and speech functions.
4. Tuning fork study of hearing acuity. Rinne's test, Gelle's test and their clinical interpretation.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №21

1. Anatomy of the nasal cavity, the walls, the constituent parts of the nasal septum.
2. Juvenile angiofibroma of the nasopharynx.
3. Physiology of the trachea, bronchi and esophagus.
4. Determination of the mobility of the tympanic membrane and the patency of the auditory tubes. Ear manometry.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №22

1. Methods for examination of the paranasal sinuses.
2. Adenoids. Classification, clinic, diagnosis, treatment.
3. Subglottic laryngitis. Etiology, clinic, treatment.
4. The mechanism of sound perception. Theories of A.A. Ukhtomsky, Lazarev, Gershuni, Helmholtz. Confirmation of Helmholtz's theory by Andreev's experiments.

Head of the department, Doctor of Medicine

E.T. Gappoeva

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Faculty General Medicine **Year 4**
Discipline otorhinolaryngology

Credit test card №23

1. Acute rhinitis, features of its manifestation of treatment
2. Hypertrophy of the palatine tonsils.
3. Blood supply of the larynx, lymphatic system of the larynx and their importance in development of malignant tumors.
4. Study of hearing by speech.

Head of the department, Doctor of Medicine

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Discipline otorhinolaryngology

Credit test card №24

1. Differential diagnosis of vasomotor and allergic rhinitis.
2. Classification of tonsillitis.
3. Anatomy of the trachea and bronchi.
4. Otogenic meningitis. Clinic, diagnosis, treatment.

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №25

1. Furuncle of the nose, features of its course.
2. Nonspecific chronic tonsillitis. Etiology, clinic, diagnosis, treatment.
3. Indications and technique of tracheotomy.
4. The structure of the cochlea and its receptor apparatus.

Head of the department, Doctor of Medicine

E.T. Gappoeva

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №26

1. Ozena, theories, clinic, diagnostics, treatment.
2. Methods of treatment of chronic tonsillitis.
3. Acute laryngotracheitis in children, clinic, diagnosis, treatment.
4. Anatomical features of the ear contributing to otogenic intracranial complications in purulent otitis.

Head of the department, Doctor of Medicine

E.T. Gappoeva

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №27

1. Hematoma and abscess of the nasal septum.
2. Faringo - candidiasis. Causes, clinic, diagnosis and treatment.
3. Foreign bodies of the trachea and bronchi. Classification, clinic, Diagnosis and treatment.
4. The structure of the receptor apparatus of the sacs of the vestibule and semicircular channels, an adequate irritant of these receptors.

Head of the department, Doctor of Medicine

E.T. Gappoeva

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Discipline otorhinolaryngology

Credit test card №28

1. Foreign bodies of the nose, rhinoliths. Diagnosis, treatment.
2. Retropharyngeal abscess. Clinic, treatment.
3. Diphtheria of the larynx. Clinic, diagnosis, treatment.
4. Otoscopy. Identification points of the tympanic membrane.

Head of the department, Doctor of Medicine

E.T. Gappoeva

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №29

1. Nosebleed. Etiology, ways to stop nosebleeds in stages.
2. Diphtheria of the pharynx, differential diagnosis with tonsillitis.
3. Indications for intubation and intubation technique.
4. Acute and chronic catarrh of the middle ear. Etiology, clinic, diagnosis, treatment.

Head of the department, Doctor of Medicine

E.T. Gappoeva

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №30

1. Acute purulent sinusitis. Etiology, clinic, diagnosis, treatment.
2. Foreign bodies of the pharynx. Clinic, diagnosis, treatment.
3. Benign tumors of the larynx.
4. Spontaneous nystagmus of labyrinthine origin and its characteristics.

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №31

1. Injuries of the nose, fractures of the nasal bones, clinic, diagnosis, treatment, emergency care.
2. Malignant tonsillar tumors of the pharynx. Clinic, diagnosis, treatment.
3. Chronic atrophic laryngitis.
4. Ewald's laws and Woyachek's "iron" laws.

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №32

1. Chronic sinusitis, causes, clinic, diagnosis, treatment.
2. Angina with tularemia.
3. Cancer of the larynx. Classification, clinic, diagnosis, treatment.
4. Indications for paracentesis, paracentesis technique.

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №33

1. Intraorbital and intracranial complications of the nose and paranasal sinuses diseases. Pathogenesis, clinic, treatment.
2. Angina with scarlet fever.
3. Acute laryngitis. Etiology, clinic, diagnosis, treatment.
4. Differential diagnosis of meso- and epitympanitis.

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №34

1. Chronic frontal sinusitis.
2. Angina with typhoid fever.
3. Types of tracheotomies.
4. Acute purulent inflammation of the middle ear. Etiology, clinic, diagnostics, treatment.

Head of the department, Doctor of Medicine

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Faculty General Medicine

Year 4

Discipline otorhinolaryngology

Credit test card №35

1. Tropical diseases of ENT organs (blastomycosis, rhinosporidiosis, leishmaniasis, frambesia).
2. Anatomy of the esophagus. The significance of the physiological narrowing of the esophagus in foreign body clinic.
3. Acute mastoiditis, forms, causes, clinic, treatment.
4. Physiology of the palatine tonsils.

Head of the department, Doctor of Medicine

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Faculty General Medicine

Year 4

Discipline otorhinolaryngology

Credit test card №36

1. The role of nasal breathing in the physiological development of the body.
2. Angina with alimentary - toxic aleukia.
3. Stenosis of the esophagus. Etiology, clinic, diagnosis, treatment.
4. Sulfur plug. Clinic, treatment.

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №37

1. Nasal diphtheria, difference from acute rhinitis, Clinical picture, diagnosis and treatment.
2. Retropharyngeal abscess.
3. Acute stenosis of the larynx. Stages, the clinical picture of each stage, treatment.
4. Meniere's disease, etiology, clinical diagnosis, treatment.

Head of the department, Doctor of Medicine

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №38

1. Tuberculosis of the upper respiratory tract, clinic, diagnosis, treatment.
2. Angina with syphilis.
3. Indications and technique of tracheotomy.
4. Chronic suppurative otitis media. Classification, the role of the upper respiratory tract in the development of chronic suppurative otitis media.

Head of the department, Doctor of Medicine

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №39

1. Malignant tumors of the nose and sinuses. Clinic, diagnosis, principles of treatment.
2. Peritonsillar and parapharyngeal tissue and pharyngeal space.
3. Scleroma and leprosy of the upper respiratory tract.
4. Otogenic intracranial complications, ways of penetration into the cavity skulls.

Head of the department, Doctor of Medicine

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №40

1. Deontology in otorhinolaryngology.
2. Acute purulent frantitis, causes, clinic, diagnosis, treatment.
3. Lymphadenoid ring of Waldeyer - Pirogov.
4. Labyrinthitis, clinical forms, diagnosis, treatment.

Head of the department, Doctor of Medicine

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №41

1. Syphilis of the upper respiratory tract.
2. Classification of tonsillitis.
3. Acute laryngotracheitis in children, clinic, diagnosis, treatment.
4. Differences between acute catarrhal and acute suppurative otitis media.

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №42

1. The work of an ENT doctor in pre-prescription and draft commissions with military commissariats.
2. Methods for examining the nose.
3. Prevention of tonsillitis and chronic tonsillitis.
4. Hearing aid and cochlear implantation.

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №43

1. Diseases of the external nose: abnormal development of the nose, erysipelas inflammation, eczema.
2. Hypertrophy of the palatine tonsils.
3. Tumor-like formations of the ear.
4. Damage to ENT organs in HIV infections.

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №44

1. Acute pharyngitis.
2. The lymphatic system of the larynx and its importance in the spread of malignant neoplasms.
3. Indications and technique of tracheotomy.
4. Prevention of otitis media.

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine

Year 4

Discipline otorhinolaryngology

Credit test card №45

1. The mechanism of the reflex function of the nose.
2. Tumor-like diseases of the larynx.
3. Neurinoma of the vestibulocochlear nerve (VIII pair).
4. Foreign bodies of the esophagus.

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Department of otorhinolaryngology with ophthalmology

Faculty General Medicine

Year 4

Discipline otorhinolaryngology

Credit test card №46

1. Tumor-like diseases of the nose and paranasal sinuses.
2. Examination of the function of the auditory tubes.
3. Chondroperichondritis of the larynx.
4. Federici's test and its clinical interpretation

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №47

1. The role of nasal breathing in the physiological development of the body.
2. Modern methods of endonasal endoscopic surgery.
3. Examination of the trachea, bronchi and esophagus.
4. Otogenic neuritis of the facial nerve.

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №48

1. Lupus of the upper respiratory tract.
2. Types of tracheotomies.
3. Wegener's granulomatosis.
4. Objective audiometry (auditory evoked potentials, impedancemetry, tympanometry, acoustic reflexometry).

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №49

1. Acute sphenoiditis. Etiology, clinic, diagnosis, treatment.
2. Angina in infectious diseases. Etiology, clinic, diagnosis, treatment.
3. Physiology of the larynx.
4. Foreign bodies of the esophagus

Head of the department, Doctor of Medicine

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Faculty General Medicine **Year 4**

Discipline otorhinolaryngology

Credit test card №50

1. Classification of tumors according to Karpov.
2. Stabilometry.
3. First aid for nosebleeds.
4. Exostosis of the external auditory canal.

Head of the department, Doctor of Medicine

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