MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION, MINISTRY OF EDUCATION AND SCIENCE OF THE KYRGYZ REPUBLIC

Kyrgyz-Russian Slavic University named after B. N. Yeltsin

APPROVING IT
OVED BY
icine Faculty
ofessor
09.09.2021

Neurology, medical genetics, neurosurgery

working program of the discipline (module)

Assigned to the Department **of Neurology, Neurosurgery and Medical Genetics**

Curriculum 31050150_21_12ldi. plx
Specialty 31.05.01. - RF, 560001-KR Medical business

Qualification **medical doctor**

Form of study **full-time**

Total labor **intensity**

6 ZET

Hours according to the curriculum, including: 216

classroom sessions 126
independent work 53.7
exams 35.5

Types of control in semesters:
exams 8
credits 7

Distribution of discipline hours by semester

Semester (<Course>.<Semester on the course>)	7 (4.1)		8 (4.2)		Total	
Weeks	16		16			
Type of classes	UP	RP	UP	RP	UP	RP
Lectures	26	26	18	18	44	44
Practical	54	54	28	28	82	82
Contact work during theoretical training	0.3	0.3			0.3	0.3
Contact work during the exam session			0.5	0.5	0.5	0.5
Including int.	7	7			7	7
Total aud.	80	80	46	46	126	126
Contact work	80.3	80.3	46.5	46.5	126.8	126.8
Self-work	27.7	27.7	26	26	53.7	53.7
Control hours			35.5	35.5	35.5	35.5
Total	108	108	108	108	216	216

The program was compiled by:

Candidate of Medical Sciences, Associate Professor, Head of the Department of Neurology, Neurosurgery and Medical Genetics of KRSU, Tynar Musabekova; Candidate of Medical Sciences,Associate Professor of the Department of Neurology, Neurosurgery and Medical Genetics of KRSU, Viktoriya Vasilenk

Reviewer(s):

2834005 2209165 Doctor of Medical Sciences, Professor, Deputy Director for Science of the Kyrgyz Research Institute of Balneology and Rehabilitation Treatment, Kulov Bolot Beishenalievich; Candidate of Medical Sciences, Responsible for FME, Associate Professor of the Department of Neurology and Clinical Genetics named after A.M. Murzaliev, Kyrgyz State Medical Academy named after I. K. Akhunbayev, Abitova Gulmira Kasymovna

Working program of the discipline

Neurology, medical genetics, neurosurgery

developed in accordance with the Federal State Educational Standard 3++:

Federal State Educational Standard of higher education-specialist in the specialty 31.05.01 Medical Science (Order of the Ministry of Education and Science of the Russian Federation No. 988 dated 12.08.2020)

compiled on the basis of the curriculum:

Specialty 31.05.01. - RF, 560001-KR Medical business approved by the

Academic Council of the university of 29.06.2021 protocol No. 10.

The working program was approved at the meeting of the Department

Neurology, Neurosurgery, and Medical Genetics

ProtocolNo. 1 of 25.08.2021 №1
Duration of the program: 2021-2025 year
Head of the Department Candidate of Medical Sciences, Associate Professor Musabekova T.O

Approval of the RPA for execution in the next academic year

Chairman of the UMS
29.09.2022

The work program was reviewed, discussed and approved for implementation in the 2022-2023 academic year at a meeting of the Department **of Neurology, Neurosurgery and Medical Genetics**

Protocol No. 1 of 29.08.2022
Head of the Department Candidate of Medical Sciences, Associate Professor Musabekova T.O.

Approval of the RPA for execution in the next academic year

Chairman of the UMS
08.09.2023

The work program was reviewed, discussed and approved for implementation in the 2023-2024 academic year at a meeting of the Department **of Neurology, Neurosurgery and Medical Genetics**

Protocol No. 1 of 30.08.2023

Head of the Department Candidate of Medical Sciences, Associate Professor Musabekova T.O

Approval of the RPA for execution in the next academic year

Chairman of the UMS
_____2024

The work program was reviewed, discussed and approved for implementation in the 2024-2025 academic year at a meeting of the Department **of Neurology, Neurosurgery and Medical Geneticsand**

Protocol No.1 of 26.08.2024
Head of the Department Candidate of Medical Sciences, Associate Professor Musabekova T.O.

Approval of the RPA for execution in the next academic year

Chairman of the UMS
_____2025

The work program was reviewed, discussed and approved for implementation in the 2025-2026 academic year at a meeting of the Department **of Neurology, Neurosurgery and Medical Genetics**

Protocol No. 1 of 2025
Head of the Department Candidate of Medical Sciences, Associate Professor Musabekova T.O.

1. GOALS OF MASTERING THE DISCIPLINE	
1.1	Teaching students the ability of neurological examination and detection of symptoms of nervous system damage, the ability to combine symptoms into syndromes and make a topical diagnosis;
1.2	Obtaining knowledge about the etiology, pathogenesis, clinic, diagnosis, treatment, prevention of major diseases of the nervous system;
1.3	Formation of clinical neurological thinking among students, the ability to independently diagnose the most common neurological diseases, treat urgent neurological conditions and prevent diseases of the nervous system;
1.4	Develop students ' theoretical knowledge and practical skills in neurology, which are necessary for a doctor to work with patients with disorders of the nervous system.

2. PLACE OF THE DISCIPLINE IN THE STRUCTURE OF OOP	
Cycle (section) OOP:	B1. O
2.1	**Requirements for preliminary training of a student:**
2.1.1	Pathological anatomy
2.1.2	General surgery
2.1.3	Epidemiology
2.1.4	Propaedeutics of internal diseases
2.1.5	Pharmacology
2.1.6	Biochemistry
2.1.7	Microbiology, virology
2.1.8	Normal Physiology
2.1.9	Histology, Embryology, Cytology
2.1.10	Biology
2.1.11	Latin
2.1.12	Pathophysiology, clinical Pathophysiology
2.1.13	Communication psychology
2.2	**Disciplines and practices for which mastering this discipline (module) is necessary as a preliminary:**
2.2.1	Obstetrics and Gynecology
2.2.2	Occupational diseases
2.2.3	Psychiatry, medical psychology
2.2.4	Urology
2.2.5	Endocrinology
2.2.6	Hospital therapy
2.2.7	Hospital surgery
2.2.8	Infectious diseases
2.2.9	Clinical pharmacology
2.2.10	Clinical Biochemistry
2.2.11	Otorhinolaryngology
2.2.12	Ophthalmology
2.2.13	Pediatrics
2.2.14	Traumatology, orthopedics
2.2.15	Gerontology
2.2.16	Oncology, radiation therapy
2.2.17	Outpatient therapy
2.2.18	Anesthesiology, resuscitation, intensive care
2.2.19	Medical rehabilitation
2.2.20	Forensic medicine

3. STUDENT'S COMPETENCES FORMED AS A RESULT OF MASTERING THE DISCIPLINE (MODULE)
OPK-4: Is able to use medical devices provided for in the procedure for providing medical care, as well as conduct examinations of the patient in order to establish a diagnosis
.:

Level 1	- medical devices provided for by the procedure for providing medical care; - comparative characteristics of medical devices provided for by the procedures for providing medical care to patients; - Application of medical devices provided for by the procedures for providing medical care to patients.
Be able to:	
Level 1	- determine the scope of application of medical devices provided for by the procedures for providing medical care; - Conduct comparative characteristics of medical devices; - Apply medical devices provided for by the procedures for providing medical care to patients.
Own:	
Level 1	- Skills in determining medical devices, their scope and algorithm of use for medical care; - Skills in comparative characteristics of medical devices and their use in standard cases; - Skills in using medical devices provided for in the procedures for providing medical care to patients.

OPK-5: Is able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional tasks	
.:	
Level 1	- Basic morphofunctional, physiological states and pathological processes in the human body; - Specifics of the main morphofunctional, physiological states, pathological processes of the human body in comparison; - Main ways of differentiation and making a conclusion based on the results of evaluating the patient's morphofunctional, physiological processes and pathological conditions.
Be able to:	
Level 1	- To reveal the meaning of the main morpho-functional, physiological states and pathological processes in the human body; - To compare various morphofunctional, physiological states and pathological processes of the human body - To note the practical value of specific morphofunctional, physiological processes and pathological states of the human body.
Own:	
Level 1	- Skills in determining the main morphofunctional, physiological states and pathological processes in the human body; - Techniques for searching and comparing various morphofunctional, physiological states and pathological processes of the human body; - Skills for evaluating, differentiating the main morphofunctional, physiological and pathological states of the human body and their own justification.

OPK-7: Able to prescribe treatment and monitor its effectiveness and safety	
Know:	
Level 1	Etiology, pathogenesis, clinic of major diseases with various nosological forms, methods of management and treatment of patients in outpatient and day hospital settings;
Be able to:	
Level 1	- Compare different types and methods of treatment of patients with different nosological forms, develop a treatment plan for diseases; - Manage and treat patients in outpatient and day hospital settings; - Monitor the effectiveness and safety of prescribed treatment at all stages of its implementation.
Own:	
Level 1	- Skills of analysis of various types of treatment of patients with various nosological forms; - Skills of management and treatment of patients with various diseases in outpatient and day hospital settings.

PC-4: Ready to collect and analyze patient complaints, medical history, examination results, laboratory, instrumental, pathoanatomical and other studies in order to recognize the condition or establish the presence or absence of the disease
.:

Level 1	methods and tools for collecting and analyzing patient complaints, medical history data, indications and contraindications for conducting additional clinical and paraclinical research methods; -the need to collect and analyze patient complaints, medical history data; - etiopathogenesis, clinical picture and diagnosis of major diseases; - indications and contraindications for choosing to conduct additional clinical and paraclinical - research methods indications and contraindications for additional clinical and paraclinical research methods.
Be able to:	
Level 1	collect and analyze patient complaints and medical history. - prescribe laboratory, instrumental, pathoanatomical and other studies in order to recognize the condition or establish the fact of the presence or absence of the disease. -conduct a survey, collect complaints and anamnesis from the patient; - create a pedigree model for families with hereditary diseases; - conduct a study of clinical status; - determine indications and contraindications for choosing additional clinical and paraclinical research methods; - use methods and means of medical examination, diagnostic measures.
Own:	
Level 1	-ability to collect and analyze patient complaints, medical history data, interpret the results of the most common functional diagnostic methods used to detect pathology of the blood, heart and blood vessels, lungs, kidneys, liver and other organs and systems; - skills of drawing up a medical history, skills of prescribing the necessary laboratory and instrumental examination methods in order to recognize the condition or establish the fact of the presence or absence of the disease; - skills of examining patients, carrying out the necessary diagnostic measures; - skills in constructing a clinical diagnosis.

PC-5: Able to determine the main pathological conditions, symptoms, syndromes of diseases, nosological forms in patients in accordance with the International Statistical Classification of Diseases and Health-related Problems, X revision.	
Know:	
Level 1	Methods of conducting research to identify the main pathological conditions, symptoms, syndromes of diseases, nosological forms. - The specifics of identifying various types of pathological conditions, symptoms, syndromes of diseases, nosological forms in accordance with ICD X revision. - The main syndromes of organ and system damage and their specifics in the differential diagnosis of various nosological forms in accordance with ICD X revision.
Be able to:	
Level 1	- Comprehend the results obtained from the study of the main nosological forms of diseases; - Analyze various types of pathological conditions, symptoms, syndromes of diseases, nosological forms in accordance with the ICD. - Note the practical value when comparing specific pathological syndromes and symptoms of diseases.
Own:	
Level 1	-Skills in identifying the main pathological conditions, symptoms, and syndromes of diseases. - Methods of search, identification and systematization of the main pathological conditions, symptoms of disease syndromes, nosological forms in accordance with ICD X revision. - Skills of their own justification of combining various symptoms and syndromes into nosological forms in accordance with (ICD X revision).

PC-7: Able to determine the management tactics of patients with various nosological forms	
of cancer:	
Level 1	- : Etiology, pathogenesis, and clinical presentation of diseases. - Main types and methods of treatment of patients with various nosological forms. - main directions and problems in the management of patients with various diseases.
Be able to:	

Level 1	-To reveal the meaning of determining the management tactics of patients with various diseases. - To compare different types and methods of treatment of patients with different nosological forms, to develop a treatment plan for diseases. - Note the practical value of individual management tactics for patients with various nosological forms.
Own:	
Level 1	- Skills in presenting and analyzing the etiology and pathogenesis of various clinical diseases for making a diagnosis. - Methods of searching and comparing different methods of treatment of patients with different nosological forms. - Possess skills in determining the management tactics of patients with diseases.

PC-8: Ready for management and treatment of patients with various nosological forms in outpatient and	
day-care settings.	
Level 1	- Etiology, pathogenesis, and clinic of major diseases with various nosological forms. - Main types and methods of treatment of patients with various nosological forms. - Methods of management and treatment of patients with various nosological forms in outpatient and day hospital
settings Should be able to:	
Level 1	- Correctly identify the disease. - To compare different types and methods of treatment of patients with different nosological forms, to develop a treatment plan for diseases. - Manage and treat patients in outpatient and day-care settings.
Own:	
Level 1	- Skills in analyzing various types of treatment for patients with various nosological forms. - Methods of searching and comparing different methods of treatment of patients with different nosological forms. - Skills in managing and treating patients with various diseases in outpatient and day-care settings.

PC-14: Capable of maintaining medical records.	
Know:	
Level 1	- List and characteristics of accounting and reporting medical documentation in medical organizations of a medical profile; - Regulatory documentation adopted in healthcare, as well as documentation for assessing the quality and efficiency of medical organizations.
Be able to:	
Level 1	- Conduct a medico-statistical analysis of the health indicators of the attached population; - Maintain medical records, including in electronic form.
Own:	
Level 1	- Skills of work and methods of maintaining accounting and reporting documentation of various types in medical institutions; - Skills of comparative characteristics of medical documentation of various types in medical institutions.

As a result of mastering the discipline, the student must:

3.1	**Know:**
3.1.1	Features of collecting complaints and anamnesis in neurological patients.
3.1.2	Methods of neurological examination.
3.1.3	Main clinical symptoms and syndromes of common neurological diseases.
3.1.4	Additional diagnostic methods for frequently occurring neurological diseases.
3.1.5	Risk factors for neurological diseases in the adult population.
3.1.6	Etiopathogenesis, clinical picture and diagnosis of frequently occurring neurological diseases.
3.1.7	Topical diagnostics of nervous system lesions.
3.1.8	Indications and contraindications for additional research methods.
3.1.9	Neurological symptoms, syndromes of diseases, main nosological forms in accordance with the ICD.
3.1.10	Algorithm for making topical and clinical diagnoses.
3.1.11	Additional research methods for diseases of the nervous system.
3.1.12	Management of neurological patients with major diseases.
3.1.13	Features of treatment of major neurological diseases.

3.1.14	Treatment, prevention and rehabilitation of neurological patients, providing assistance in emergency situations.
3.1.15	Features of writing a neurological examination.
3.1.16	Know the regulatory documentation adopted in healthcare (the structure of the medical history of a neurological patient).
3.2	**Be able to:**
3.2.1	Collect complaints and medical history from neurological patients.
3.2.2	Create a pedigree model for families with inherited diseases of the nervous system.
3.2.3	Investigate neurological status.
3.2.4	Identify neurological syndromes in neurological diseases.
3.2.5	Determine indications and contraindications for the selection of additional research methods.
3.2.6	Make a topical diagnosis.
3.2.7	Conduct a comprehensive medical examination to confirm the neurological diagnosis.
3.2.8	Identify neurological symptoms and syndromes in major neurological diseases.
3.2.9	Identify the nosological form of major neurological diseases.
3.2.10	Substantiate the main neurological diseases.
3.2.11	Substantiate the principles of treatment of patients with major neurological diseases.
3.2.12	Determine the main types and methods of treatment of patients with neurological pathology.
3.2.13	Define preventive measures and rehabilitation for neurological diseases.
3.2.14	Describe the neurological examination.
3.2.15	Be able to maintain medical records (medical history of a neurological patient).
3.3	**Own:**
3.3.1	Skills in collecting patient complaints and medical history.
3.3.2	Medical Ethics and deontology.
3.3.3	Methods of neurological examination.
3.3.4	Skills in prescribing the necessary laboratory and instrumental examination methods for
3.3.5	diagnostics of frequently occurring neurological diseases.
3.3.6	Skills of making a topical diagnosis.
3.3.7	Skills in interpreting basic laboratory and radiological examination methods.
3.3.8	Skills in completing the medical history of a neurological patient.
3.3.9	Skills to justify a preliminary neurological diagnosis.
3.3.10	Skills in the formation of neurological syndromes, nosological forms in accordance with the ICD.
3.3.11	Skills of differential diagnosis of major neurological diseases.
3.3.12	Skills in interpreting the results of additional examination methods for major neurological diseases.
3.3.13	Principles of treatment of major neurological diseases.
3.3.14	Algorithm of treatment, prevention and rehabilitation of neurological patients.
3.3.15	Skills of helping patients with neurological pathology in different age groups.
3.3.16	Skills of description neurological examination.
3.3.17	Have the skills to maintain the medical history of a neurological patient.

4. STRUCTURE AND CONTENT OF THE DISCIPLINE (MODULE)

Code Class code	Name of sections and topics /class type/	Semester / Course	of Hours	Competencies- of Competence	Literature	Interakt.	Pr. podg.	Note
	Section 1. General Neurology							
1.1	Subject, methods and structure neuropathology. Some questions of structural-functional organization of the nervous system. /Lek/	7	2	OPK-5 PK-4 pcs-5 pcs-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E1 E2			

1.2	Pyramidal system and its pathology: normal and pathological reflexes; central and peripheral paralysis. Topical diagnostics of motor disorders.Extrapyramidal system, cerebellum, coordination of movements. Lesion syndromes. / Pr /	7	6	OPK-5 PC-4 PC-5 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E1 E2 E15 E16 E17	1		Interactive learning methods. Training with R & D elements.
1.3	Mastering the methodology of motor sphere research. /Sr/	7	4	OPC-5 PC - 4 PC-5	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E1 E15			
1.4	Main types of sensitivity and types of sensitivity disorder. Topical diagnostics of sensitive disorders. Pain points, meningeal signs, and tension symptoms. /Pr /	7	4	OPK-5 PC-4 PC-5 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E1 E2	1		Interactive teaching methods. Training with R & D elements.
1.5	Mastering the methodology of sensitive sphere research. / Sr/	7	2	OPC-5 PC-4 PC-5	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E1 E2			
1.6	Headache. / Lek/	7	2	OPK-5 PC-4 PC-5	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2.5 L2. 20L3. 4 L3. 8 L3. 9 E2			
1.7	Methods of examination of I-XII pairs of craniocerebral- brain nerves. Lesion syndromes. Alternating syndromes. /Pr/	7	7	OPK-5 PC-4 PC-5 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E2 E15	1		Interactive methods training. Training with elements of R & D
1.8	Mastering the craniocerebral nerve research methodology. /Sr/	7	4	OPC-5 PC - 4 PC-5	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E1 E15 E16			

1.9	The autonomic nervous system and current concepts of its functioning. Lesion syndromes: vegetative dystonia, hypothalamic syndrome. / Lek/	7	2	OPK-4 OPK-5 PC-4 PC-14	L1. 1 L1. 2 L1. 3 L1.4L2.1 L2.2 L2.3 L2.4 L2.5 L2.20L3.4 L3.8 L3.9 E2			
1.10	Vegetodystonia syndrome. Hypothalamic syndrome. Peripheral vegetative insufficiency. Pelvic disorders. Survey methods. Higher brain functions. Syndromes of damage to individual lobes of the brain. /Pr /	7	3	OPK-5 PC-4 PC-5 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E3 E5 E15	1		Interactive methods training. Training with R & D elements.
1.11	Mastering the methods of studying the autonomic nervous system and higher nervous activity. /Sr/	7	1	OPC-5 PC-4 PC-5 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E1 E13 E14			
	Section 2. Private neurology. Cerebrovascular, neuroinfectious diseases, diseases of the peripheral nervous system.							
2.1	Pre-stroke forms of cerebrovascular diseases (dyscirculatory encephalopathy, transient cerebral circulatory disorders). Brain strokes, modern concepts of pathogenesis, clinical forms of acute cerebral circulatory disorders. /Lek/	7	4	OPK-7 OPK-4 OPK-5 PC - 4 PC-5 PC-7 PC-8	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 7 L2. 9 L2.11 L2. 14 L2. 20 L2. 21L3. 2 L3. 3 L3. 4 L3. 6 L3. 8 L3. 9 E10 E14			
2.2	Acute and chronic disorders of cerebral circulation. Transient disorders of the cerebral circulation: cerebral hypertensive crises, transient ischemic attacks. Brain strokes. Dyscirculatory encephalopathy. Vascular diseases of the spinal cord. /Pr /	7	6	OPK-5 PC-4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 10 L2. 20 L2. 21L3. 3 L3. 4 L3. 6 L3. 8 L3. 9 E1 E4 E13 E14 E15	1		Interactive learning methods. Training with R & D elements

2.3	Modern approaches to the treatment and prevention of stroke. /Sr/	7	3	OPC-5 PC-4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 10 L2. 19 L2. 20 L2.21L3. 3 L3. 4 L3. 5 L3. 6 L3. 8 L3. 9 E1 E2 E5			
2.4	Meningitis-serous and purulent, current course, diagnosis and treatment tactics. CSF and its diagnostic value. Encephalitis (tick-borne, epidemic, post-vaccination, herpetic). /Lek/	7	2	OPK-7 OPK-4 OPK-5 PC-4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 13 L2.20L3. 4 L3. 8 L3. 9 E4 E13 E14			
2.5	Meningitis (serous and purulent). Myelitis. Polio. Encephalitis (tick-borne, epidemic, post-vaccination). Arachnoidit. / Pr /	7	4	OPK-5 PC -4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 13 L2. 20L3. 4 L3.8 L3. 9 E4 E7 E15 E16 E17	1		Interactive learning methods. Training with elements of R & D
2.6	Features of treatment of serous and purulent meningitis. /Sr/	7	2	OPC-5 PC-4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 13 L2. 19 L2. 20L3. 4 L3. 8 L3. 9 E1 E13 E14			
2.7	Neurosyphilis, neurorheumatism, neurobrucellosis, neuroSPID. / Lek/	7	2	OPK-7 OPK-4 OPK-5 PC-4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2.4 L2. 5 L2. 13 L2. 20 L3. 4 L3. 8 L3. 9 E4 E5 E7			
2.8	Neuro-rheumatism, neurobrucellosis, neuro-AIDS, neurosyphilis. Polyneuropathies in botulism, diphtheria. Acute Guillain-Barre polyneuropathy. /Pr /	7	4	OPK-4 OPK-5 PC -4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 13 L2. 19 L2.20L3. 4 L3. 8 L3. 9 E9 E13 E14 E16 E17	1		Interactive learning methods. Training with R & D elements.

2.9	Principles of treatment of neuroinfectious diseases. / Ср /	7	2	ОРК-7 ОРК-4 ОРК-5 РС - 4 РС-5 РС-7 РС-8	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2.13 L2. 20L3. 4 L3. 8 L3. 9 E2 E13 E14			
2.10	Additional examination methods, indications and contraindications: 1) lumbar puncture and cerebrospinal fluid dynamic tests; 2)fundus; 3) X-ray methods: craniogram, spondylogram, myelography, pneumoencephalography, ventriculography; 4) neuroimaging: CT, MRI, angiography; 5) ultrasound methods: echo-encephalogram, neurosonography, ultrasound of the vessels of the neck and head-duplex examination, transcranial Dopplerography, ultrasound of peripheral nerves; 6) electrophysiological studies: electroencephalogram, electroneuromyography. /Pr/	7	2	ОРС-4 ОРС-5 РС - 4 РС-5 РС-7	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E1 E2 E13 E14			
2.11	Diseases of the peripheral nervous system: tunnel syndromes, neuralgia, neuropathies of the facial, median, radial, ulnar, sciatic, tibial and peroneal nerves. Neurological manifestations of degenerative diseases of the spine (irritative reflex, myofascial, radicular syndromes). Polyneuropathies, especially diabetic, alcoholic, lead /Pr /	7	6	ОРК-4 ОРК-5 РС - 4 РС-5 РС-7 РС-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 6 L2. 17 L2. 20L3. 4 L3.8 L3. 9 E2 E5 E10 E13 E15			
2.12	Diseases of the peripheral nervous system. Neuropathies, neuralgia, polyradiculoneuropathies, modern methods of treatment. Neurological manifestations of degenerative diseases of the spine. /Lek/	7	4	ОРК-4 ОРК-5 РС - 4 РС-7 РС-8	L1. 1 L1. 2 L1. 3 L1. 4 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 6 L2. 7 L2. 17 L2.20L3. 4 L3. 8 L3. 9 E1 E2 E5 E16			

2.13	Diseases of the peripheral nervous system. /Sr/	7	2	OPC-4 OPC-5 PC - 4 PC-5 PC- 7 PC-14	L1. 1 L1. 2 L2. 5 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 6 L2. 17 L2. 19 L2.20L3. 4 L3. 5 L3. 8 L3. 9 E2 E5 E17			
	Section 3. Private neurology. Mastenia, demyelinating diseases of the nervous system. Epilepsy. Perinatal encephalopathy, cerebral palsy.							
3.1	Myasthenia gravis, myasthenic and cholinergic crises. /Lek/	7	2	OPK-4 OPK-5 PC - 4 PC-5 PC- 7	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 1 L3. 4 L3. 8 L3. 9 E2 E16 E17			
3.2	Myasthenia gravis myasthenic and cholinergic crises. /Pr/	7	2	OPK-7 OPK-4 OPK-5 PC-4 PC-5 PC- 7 PC-8 PC- 14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 3 L2. 4 L2. 5 L2. 20L3. 1 L3. 4 L3. 8 L3. 9 E2 E13 E14 E15			
3.3	Demyelinating diseases of the nervous system (multiple sclerosis, leukoencephalitis), modern diagnostic criteria. /Lek/	7	2	OPC-7 OPC-5 PC-4 PC-8	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20L3. 4 L3. 8 L3. 9 E2 E13 E14			
3.4	Demyelinating diseases (multiple sclerosis, leukoencephalitis). /Pr /	7	2	OPK-4 OPK-5 PC - 4 PC-5 PC- 7 PC-8 PC- 14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 19 L2. 20L3. 4 L3. 8 L3. 9 E2 E13 E14 E15 E16 E17			
3.5	Principles of treatment of myasthenia gravis, demyelinating diseases. /Sr/	7	3	OPC-5 PC-4 PC-5 PC- 7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 3 L2. 4 L2. 5 L2. 20L3. 1 L3. 4 L3. 8 L3. 9 E2 E13 E14			

3.6	Epilepsy, classification. Convulsive syndromes. /Lek/	7	2	ОРК-4 ОРК-5 РС - 4 РС-7 РС-8	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 20 L2. 22L3. 4 L3. 7 L3. 8 L3. 9 E2 E3			
3.7	Epilepsy. Epileptic status. Convulsive states in children. Treatment tactics. Eclampsia. Neuroses, types, principles of treatment. /Pr/	7	4	ОРК-7 ОРК-4 ОРК-5 РС - 4 РС-5 РС-7 РС-8 РС-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 3 L2. 4 L2. 11 L2. 12 L2. 16 L2.20 L2. 22L3. 4 L3. 7 L3. 8 L3. 9 E1 E5 E6 E7 E8			
3.8	Epilepsy, principles of diagnosis.Video EEG Monitoring /Sr/	7	2	ОРС-4 ОРС-5 РС-4 РС-5 РС-7 РС-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 16 L2. 20 L2. 22L3. 4 L3. 7 L3. 8 L3. 9 E1 E2 E5			
3.9	General principles of gene diagnostics. Problems of genetic heterogeneity and classification of hereditary diseases of the nervous system. Medical and genetic counseling in neurology. /Lek/	7	2	ОРК-7 ОРК-5 РС-4 РС-5 РС-7 РС-8	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 3 L2. 4 L2. 5 L2. 11 L2. 20L3. 4 L3. 8 L3. 9 E1 E2 E7			
3.10	Perinatal encephalopathy. Children's cerebral palsy. / Pr /	7	4	ОРК-7 ОРК-4 ОРК-5 РС - 4 РС-5 РС-7 РС-8 РС-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 2 L2. 3 L2. 4 L2.5 L2. 11 L2. 15 L2. 16 L2. 20 L3. 4 L3. 8 L3. 9 E1 E2 E15			
3.11	Perinatal encephalopathy. Infantile cerebral palsy. / Cp /	7	2,7	ОРК-4 ОРК-5 РС-4 РС-5 РС-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 3 L2. 4 L2. 5 L2. 11 L2. 16 L2. 19 L2. 20 L2. 23L3. 4 L3. 8 L3. 9 E1 E5 E6			

3.12	/ CrTO/	7	0.3	OPK-7 OPK-4 OPK-5 PC-4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 3 L2. 4 L2. 5 L2. 6 L2. 14 L2.15 L2. 16 L2. 17 L2. 20L3. 4 L3. 7 L3. 8 L3. 9 E1 E2 E3 E5 E14 E15 E16 E17			
	Section 4. Medical Genetics. Clinical and genealogical diagnostic methods. Malformations, hereditary diseases with a predominant lesion of the pyramidal and cerebellar systems.							
4.1	4.1 Patient care. /Pr /	8	2	OPK-5 PC-4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 6 L2. 8 L2. 12 L2.14 L2. 15 L2. 16 L2. 17 L2. 20L3. 4 L3. 6 L3. 8 L3. 9 E1 E13 E14 E15			
4.2	Patient care /Cp /	8	2	OPK-5 PC-4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 6 L2. 8 L2.11 L2. 12 L2. 14 L2. 15 L2. 16 L2. 17 L2. 20L3. 4 L3. 6 L3. 8 L3. 9 E2 E4 E5 E6 E15 E16 E17			
4.3	Malformations of the nervous system (microcephaly, craniostenosis, syringomyelia, spinal hernias, porencephaly), diagnosis, principles treatment options. Chromosomal diseases (Down's disease, Shereshevsky -Turner's disease, Kleinfelter's disease). Diagnostics. /Lek/	8	2	OPK-4 OPK-5 PC -4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2. 20L3. 4 L3.8 L3. 9 E1 E2 E4 E6			

4.4	Clinical and genealogical method. - Collect anamnesis for this proband, make a pedigree, number each individual vertically and horizontally, select individual characteristics of each individual in the archive, enter symbols, select the type of inheritance of the disease, write a conclusion. Written work on pedigree (with protection). Cytogenetic method. - Classification of chromosomes into metacentric, submetacentric and acrocentric. Chromosomes of groups A, B, C, D, E, F, G and sex. Methods of prenatal diagnostics, non-invasive and invasive methods (ultrasound, HCG detection, AFP, chorionic biopsy, amniocentesis, cordocentesis, skin and muscle biopsy). /Pr /	8	4	OPK-5 PC - 4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2. 15 L2. 16 L2. 20L3.4 L3. 8 L3. 9 E1 E13 E15 E17			
4.5	Malformations of the nervous system (microcephaly, craniostenosis, syringomyelia, spinal hernias, porencephaly). Analysis of patients. / Pr /	8	2	OPK-4 OPK-5 PC - 4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2.15 L2. 20L3. 4 L3. 8 L3. 9 E2 E6 E13 E15			
4.6	Hereditary diseases with predominant damage to the pyramidal and cerebellar systems (familial amyotrophic lateral sclerosis, Strumpel's disease, Friedreich's disease), diagnosis, treatment tactics. Hereditary diseases with predominant involvement of the extrapyramidal system: Huntington's chorea, torsion dystonia, hepatocerebral dystrophy (Wilson-Konovalov's disease), Parkinsonism, diagnosis, treatment. /Lek/	8	2	OPK-4 OPK-5 PC - 4 PC-5 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2. 15 L2. 20L3. 4 L3. 8 L3. 9 E1 E2			

4.7	Hereditary diseases with predominant involvement of the pyramidal and cerebellar systems (familial amyotrophic lateral sclerosis, Strumpel's disease, Friedreich's disease). /Pr /	8	2	OPK-4 OPK-5 PC - 4 PC-5 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2. 15 L2. 19 L2.20L3. 4 L3. 8 L3. 9 E1 E2 E10 E13 E15			
4.8	Hereditary diseases with a predominant lesion of the pyramidal and cerebellar systems / Cp /	8	2	OPK-4 OPK-5 PK-4 PK-5 PK-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2.1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2. 15 L2. 20L3. 4 L3. 8 L3. 9 E1 E2 E13 E15			
	Section 5. Medical genetics. Hereditary diseases with a predominant involvement of the extrapyramidal system, neuromuscular diseases, diseases associated with metabolic disorders, phacomatosis.							
5.1	Hereditary neuromuscular diseases (Duchenne disease, Landuzi - Dejerine shoulder - scapular form, myotonic dystrophy, Thomson's disease, Werdnig-Hoffmann's disease, Charcot-Marie neural amyotrophy , etc.). Diagnosis and treatment. Paroxysmal myoplegia. /Lek/	8	2	OPK-5 PC-4 PC-5 PC-7	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2. 15 L2. 20L3. 4 L3. 8 L3. 9 E2 E15			
5.2	Mitochondrial encephalomyopathies. Diagnosis and treatment. /Lek/	8	2	OPK-7 OPK-4 OPK-5 PC - 4 PC-5	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2. 15 L2.20L3. 4 L3. 8 L3. 9 E2 E15 E17			
5.3	Hereditary diseases with predominant involvement of the extrapyramidal system: Huntington's chorea, torsion dystonia, hepatocerebral dystrophy (Wilson Konovalov's disease), Parkinsonism. /Pr /	8	2	OPK-5 PC-4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2.15 L2. 19 L2. 20L3. 4 L3. 8 L3. 9 E1 E2 E5 E13 E15			

5.4	Hereditary neuromuscular diseases (Duchenne disease, Landuzi - Dejerine shoulder - scapular form, myotonic dystrophy, Thomson's disease, Charcot-Marie neural amyotrophy, Werdnig - Hoffmann's disease), paroxysmal myoplegia. Mitochondrial diseases. /Pr /	8	4	OPK-5 PC-4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2.15 L2. 20L3. 4 L3. 8 L3. 9 E5 E13 E15 E16 E17			
5.5	Violation of the metabolism of lipids, carbohydrates, amino acids (lipidoses, galactosemia, phenylketonuria). Diagnostics, treatment. / Lek/	8	2	OPK-7 OPK-4 OPK-5 PC-4 PC-7	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2.15 L2. 20L3. 4 L3. 8 L3. 9 E5 E13 E15			
5.6	Violation of the metabolism of lipids, carbohydrates, amino acids (lipidoses, galactosemia, phenylketonuria). Phacomatosis (neurofibromatosis). /Pr /	8	4	OPK-5 PC-4 PC-5 PC-7 PC-8 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2.15 L2. 20L3. 4 L3. 5 L3. 8 L3. 9 E1 E2 E5 E13 E15			
5.7	Hereditary neuromuscular diseases. Hereditary metabolic diseases. / Sr/	8	2	OPC-4 OPC-5 PC - 4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2.15 L2. 20L3. 4 L3. 8 L3. 9 E1 E13 E15			
5.8	Written work on pedigree (with protection). / Sr/	8	2	OPC-4 OPC-5 PC - 4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2.15 L2. 20L3. 4 L3. 8 L3. 9 E2 E3 E13			
5.9	Phacomatosis (neurofibromatosis, tuberous sclerosis, ataxia-telangiectasia). Diagnostics. Peroxisomal diseases. Diagnostics. /Lek/	8	2	OPK-7 OPK-4 OPK-5 PC - 4 PC-7	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2. 15 L2.20L3. 4 L3. 8 L3. 9 E1 E2 E5 E13			

5.10	Phacomatosis (neurofibromatosis). /Sr/	8	1	OPC-5 PC-4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5 L1. 6L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 8 L2. 15 L2.20L3. 4 L3. 8 L3. 9 E1 E2 E13			
	Section 6. Neurosurgery							
6.1	Subject and tasks of neurosurgery. Methods of examination of neurosurgical patients. Neurosurgical treatment of ONMC. /Lek/	8	2	OPK-5 PC-4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 18 L2. 20L3. 4 L3. 8 L3. 9 E1 E8 E11 E12 E13 E15 E17			
6.2	Traumatic brain injury (concussion, bruise, compression), surgical treatment. /Lek/	8	2	OPK-5 PC-4 PC-5 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 7 L2. 9 L2. 18 L2. 20L3. 4 L3. 8 L3. 9 E12 E13 E15			
6.3	Traumatic brain injury (concussion, bruise, compression). Hydrocephalus. Surgical treatment. /Pr /	8	4	OPK-5 PC-4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 7 L2. 9 L2. 18 L2. 19 L2.20L3. 4 L3. 8 L3. 9 E8 E11 E12 E13 E15 E17			
6.4	Modern methods of treatment of traumatic brain injury. /Sr/	8	2	OPC-5 PC-4 PC-5 PC-7 PC-14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 7 L2. 9 L2. 18 L2. 20L3. 4 L3. 5 L3. 8 L3. 9 E1 E8 E11 E13 E15			
6.5	Diagnosis of brain and spinal cord tumours and tumours. Surgical treatment. /Lek/	8	2	OPC-7 OPC-4 OPC-5 PC-5	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 18 L2. 20L3. 4 L3. 8 L3. 9 E11 E12 E13			

6.6	Diagnosis of brain tumours and tumour-like formations. Surgical treatment. Diagnosis and treatment of spinal cord tumors. Surgical treatment. / Pr /	8	4	OPK-5 PC - 4 PC-5 PC- 7 PC-8 PC- 14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 18 L2. 19 L2.20L3. 4 L3. 8 L3. 9 E8 E11 E12 E13 E15 E17			
6.7	Basic neuroimaging methods for the diagnosis of brain and spinal cord tumors. /Sr/	8	1	OPC-7 OPC-4 OPC-5 PC-4 PC-5 PC- 14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 15 L2. 20L3. 4 L3. 8 L3. 9 E11 E13 E15 E17			
6.8	Registration of the medical history with its protection . / Sr/	8	14	OPK-7 OPK-4 OPK-5 PC-4 PC-5 PC- 7 PC-8 PC- 14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 5L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2.6 L2. 7 L2. 8 L2. 9 L2. 14 L2. 15 L2. 16 L2. 17 L2. 20L3. 1 L3. 2 L3. 3 L3. 4 L3. 6 L3. 8 L3. 9 E11 E13 E15			
6.9	/ Crack/	8	0.5	OPC-7 OPC-4 OPK-5 PC-4 PC-5 PC- 7 PC-8 PC- 14	L1. 1 L1. 2 L1. 3 L1. 4L2. 1 L2. 2 L2. 3 L2. 4 L2. 5 L2. 15 L2. 20L3. 1 L3. 4 L3. 8 L3.9 E5 E8 E12 E13 E15 E16 E17			
6.10	/ Exam/	8	35.5	OPK-7 OPK-4 OPK-5 PC-4 PC-5 PC- 7 PC-8 PC- 14	L1. 1 L1. 2 L1. 3 L1. 4 L1. 6L2. 1 L2. 2 L2.3 L2. 4 L2. 5 L2. 15 L2. 20L3. 4 L3. 8 L3. 9 E13 E15 E16 E17			

5. EVALUATION FUNDS FUND

5.1. Control questions and tasks

In the discipline "Neurology, medical genetics, neurosurgery", intermediate certification in the 7th semester is represented by a test, in the 8th semester by an exam.
Current monitoring and interim certification include:
Questions for checking the "KNOW" level of training.
Intermediate certification is carried out in the form of blank testing, 5 options for 100 questions: see Appendix No.1. Tests for intermediate attestation of LD students (691pcs)

Tasks for checking the level of training "BE ABLE and MASTER":
In the case of a supervised patient, the student must:
1. Collect complaints and medical history of a patient with a nervous system disease.
2. Investigate and evaluate the state of the nervous system.
3. Identify neurological symptoms and syndromes, establish a topical diagnosis, and make a preliminary clinical diagnosis.
4. Interpret the results of clinical and complementary research methods.
5. Make a clinical diagnosis for major diseases of the nervous system, reflecting the etiology, topical diagnosis, course, nature and degree of impaired functions.
6. Provide emergency medical care in case of detection of urgent neurological pathology in patients.
7. Be able to carry out the prevention of major neurological diseases.

5.2. Topics of coursework (projects)

Course work is not provided.

5.3. Test Evaluation Fund

(Appendix No. 1).
Situational tasks (Appendix # 2). Report (Appendix No. 3).
Abstract (Appendix # 4). Test work (Appendix #5). Presentation (Appendix # 3).
Practical skills (Appendix No. 5a). Medical history (Appendix # 8).

5.4. List of types of evaluation tools

Test.
Situational tasks.
Report.
Report.
Control work.
Presentation.
Practical skills.
Medical history.

Assessment scales by types of assessment tools in Appendix No. 6

6. EDUCATIONAL, METHODICAL AND INFORMATIONAL SUPPORT OF THE DISCIPLINE (MODULE)

6.1. Recommended literature

6.1.1. Main literature

	Authors, compilers	Title	Publisher, year
L1.1	Skoromets A. A., Skoromets A. P., Skoromets T. A.	Nervous diseases: textbook	Spb. 2010
L1.2	Odinak M. M.	Nervous diseases: textbook	. Medicine 2014
L1.3	Gusev E. I., Konovalov A. N., Skvortsova V. I.	Neurology and neurosurgery: a textbook	Moscow: GEOTAR-Media 2015
L1.4	Mikhailenko A. A.	Klinicheskaya nevrologiya (semiotika i topicheskaia diagnostika): uchebnoe posobie	SPb.: Foliyant 2014
L1. 5	V. N. Gorbunova [et al.]	Klinicheskaya genetika : uchebnik	SPb. : Foliyant 2015
L1.6	Drozdov A. A.	Nervous diseases: A textbook	Saratov: Nauchnaya kniga 2019

6.1.2. Additional literature

	Authors, compilers	Title	Publisher, year
L2.1	Skoromets A. A., Skoromets A. P., Skoromets T. A., Diakonov M. M.	Neurological status and its interpretation: A textbook for doctors	Moscow: MEDpress-inform 2009
L2.2	Cementis S. A., Gusev E. I.	Differential diagnostics in neurology and neurosurgery: A Guide	Moscow: GEOTAR-Media 2005
L2.3	Skoromets A. A., Skoromets A. P., Skoromets T. A.	Topical diagnostics of diseases of the nervous system: a guide for doctors	Spb. 2010

	Authors, compilers	Title	Publisher, year
L2.4	Triumfov A.	V. Topical diagnostics of diseases of the nervous system: textbook	MEDpress-inform " 2014
L2.5	Mumentaler M.	Differential diagnosis in neurology: textbook	MEDpress-inform 2014
L2.6	Ponomarev V.	V. Neurodegenerative diseases: monograph	Foliant, 2013
L2. 7	Likhterman L. B.	Craniocerebral trauma. Diagnostics and treatment: clinical guidelines	of GEOTAR-MED, 2014
L2. 8	Bochkov, N. P.	Klinicheskaya genetika: uchebnik dlya studentov med.	Moscow: Geotar-med 2012
L2.9	Zakharova N.E., Kornienko V. N., Potapov A. A., Pronin I. N.	Neuroimaging of structural and hemodynamic disorders in brain trauma: monograph	M 2013
L2. 10	Fadeev P. A.	Stroke: monograph	M : Mir i Obrazovanie, Onyx 2012
L2. 11	Lupanova R. I.	Metodicheskoe posobie po detskoi neurologii [Methodological guide on children's neurology]. Development of children of the first year of life: a textbook	St. Petersburg: Institute of Special Pedagogy and Psychology 2009
L2. 12	Bochanova E. V., Geisler D. A., Gitun T. V., Eliseev A. G., Klipina T. Yu., Salyakin A.V., Chapova O. I.	Psychosomatic diseases. Complete reference	book Saratov: Scientific Book 2019
L2. 13	Dolgov A.M., Kadyrmaeva D. R.	Inflammatory (infectious) diseases of the nervous system: A textbook for students of the Faculty	of Medicine Orenburg: Orenburg State Medical Academy 2008
L2.14	Bryantseva V. M., Chichanovskaya L. V.	Chronic brain ischemia: Diagnosis and treatment	Tver: Tver State Medical Academy medical Academy, VNIIT 2008
L2. 15	Electron. text data	for inherited diseases. : Complete reference	book Saratov: Nauchnaya kniga, 2019.
L2.	16 Guzeva V. I., Ivanov D. O., Alexandrovich Yu. S.	Urgent neurology of newborns and young children: monograph	SPb.: SpetsLit 2017
L2. 17	Avdeev A.V., Veshkin A. K., Gladenin V. F., Kabanov A. S., Manyakhin R. S. Mullayarova E. A., Orlov D. N., Kapustin K. M., Shebaldov D. A.	Diseases of the spine. Complete reference	book Saratov: Scientific Book 2019
L2. 18	Latysheva V. Ya., Drivotinov B. V., Olizarovich M. V.	Neurology and neurosurgery: A textbook	Minsk: Vysheyshaya shkola 2013
L2. 19	Ponomarev V. V.	Rare clinical cases in neurology (cases from practice): A guide for doctors	Saint Petersburg: Foliant 2020
L2.20	Markova M. P., Rodina E. A.	Osnovy neurologii: Uchebno-metodicheskoe posobie	Tula: Tula State Pedagogical University named after L. N. Tolstoy 2021
L2. 21	Voznyuk I. A., Chechulov P. V., Zabirov S. Sh., Polyakova A.V., Savello V. E., Kostenikov A. N., Barsukova I. M.	Urgent neurology: early surgical prevention of atherothrombotic stroke in stenoses and occlusions of the carotid arteries (decision-making algorithm): Methodological recommendations	Saint Petersburg: Firm "Stiks" 2019
L2. 22	Lipatova L. V., Alekseeva T. M., Malyshev S. M.	Epilepsy. Etiology, pathomorphology, pathogenesis, clinic, diagnosis, differential diagnosis, principles of therapy. Epileptic status: A textbook	Saint Petersburg: Foliant 2019
L2. 23	Krasilnikova R. G., Usakova N. A.	Methods of physical therapy in the treatment of children with cerebral palsy: A methodological guide	Moscow: Sport Publishing House 2020

6.1.3. Methodological developments			
	Authors, compilers	Title	Publisher, year
L3.1	Ed. Acad. Murzalieva A.M., compiled by Musabekova T. O., Usenova N. Sh.,	Myasthenia gravis: a textbook.	Bishkek 2012
L3.2	Edited by Academician of the National Academy of Sciences, Professor Murzaliev A. M. Comp. T. O. Musabekov, S. G. Shleifer, E. V. Andrianova	Dyscirculatory encephalopathy. : textbook on neurology .	B: KRSU, 2013
L3. 3	Murzaliev A.M., Musabekova T. O., Shleifer S. G.	Diagnostics and treatment of acute disorders of the cerebral circulation (hospital stage, acute and acute periods): Educational and methodical manual. Expanded version.	Bishkek 2015
L3. 4	/ Compiled by Musabekova T. O., Shleifer S. G., Andrianova E. V., Rekaeva M. I., Ibatullin I. F., Rysalieva N. T., Khamzina A. I.	Topical diagnostics. : Textbook on general neurology	B: KRSU, 2014
L3.5	Pesin Ya. M., Lopatkina I. N., Imankulova E. M., Minich L. N.	Experimental and clinical justification of lymphotropic therapy in the clinic of nervous diseases	
L3. 6	Murzaliev A.M., Musabekova T. O., Shleifer S. G.	Clinical guidelines for the diagnosis and treatment of acute cerebral circulatory disorders (hospital stage, acute and acute periods) in the Kyrgyz Republic. : Clinical Guidelines	Bishkek 2014
L3.7	Musabekova T. O., Khamzina A. I.	Epilepsy: a textbook	Bishkek: KRSU Publishing House 2017
L3.8	Musabekova T. O., Shleifer S. G., Vasilenko V. V.	Metodika nevrologicheskogo obsledovaniya: uchebnoe posobie	Bishkek: Izd-vo KRSU 2019
L3. 9	Murzaliev A.M.	Klinicheskie lektsii po neurologii: uchebnoe posobie Bishkek 2020 Clinical lectures on neurology: textbook	Bishkek 2020
6.2. List of resources of the Internet information and telecommunications network			
E1	Institute of the Human Brain of the Russian Academy of Sciences		http://www.ihb.spb.ru
E2	Nervous diseases		http://medvuz.info/load/nervnye_bolezni_nevrologija / 25
E3	Clinic of Headache and autonomic disorders of Academician A.M. Vane		http://www.veinclinic.ru
E4	Research Center for		http://www.stroke-center.ru
E5	State Institution HYPERLINK Scientific Center of Neurology of the Russian Academy		http://www.neurology.ru
E6	HYPERLINK Center for Pediatric Neurology and Epilepsy		
E7	National Stroke Association (NABI)		http://www.nabi.ru
E8	" Issues of neurosurgery named after N. N. Burdenko"		http://www.medlit.ru/medrus/jurbur.htm

E9	"	http://www.medlit.ru/medrus/nj.htm /nj.htm
E10	"	http://www.infamed.com/nb
E11	"Neurosurgery"	http://www.mtu-net.ru/neurosurgery net.ru/neurosurgery
E12	" Russian neurosurgery "	http://www.neuro.neva.ru
E13	NEURONET-HYPERLINK medical information Network	
E14	S. S. Korsakov Journal of Neurology and Psychiatry	https://www.mediasphera.ru /journal/zhurnal-nevrologii-i-
E15	https://www.mediasphera.ru/journal/zhurnal-nevrologii-i-Э15 IPR BOOKS HYPERLINK Electronic Library system	
E16	Medelement (clinical protocols)	https://medelement.com/Э17
E17	HYPERLINK Medical Video Portal	

List of information and educational technologies	
6.3.1 Competence-based educational technologies	
6.3.1.1	Traditional educational technologies – lectures, seminars focused primarily on the communication of knowledge and methods of action, transmitted to students in a ready-made form and intended for reproducing assimilation and analysis of specific samples. The lecture material is provided to students using multimedia equipment and periodic presentation of thematic patients. Use of wards and study rooms for students ' work.
6.3.1.2	Innovative educational technologies-develop systems thinking and the ability to generate ideas when solving various situational problems. These include situational tasks, brainstorming, role-playing games, working in small groups, and scientific and practical conferences.
6.3.1.3	Information educational technologies – independent use of computer equipment and Internet resources by the student to perform practical tasks and independent work. For better assimilation of the material and independent work, students prepare essays, reports and presentations.
6.3.2 List of information reference systems and software	
6.3.2.1	Electronic library system "ZNANIUM.COM"
6.3.2.2	Information system "Single window of access to educational resources"(http://window.edu.ru/)
6.3.2.3	HYPERLINK Medical Video Portal
6.3.2.4	Медицинский портал(http://medvuz.info/load/nervnye_bolezni_nevrologija/25)
6.3.2.5	"Electronic library" KRSU(http://lib.krsu.kg)
6.3.2.6	IPR BOOKS Electronic Library systemhttp://www.iprbookshop.ru/i.

7. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE (MODULE)	
7.1	The discipline is taught on the basis of: the National Hospital of the Ministry of Health of the Kyrgyz Republic (LPU of the tertiary level). It has 8 specialized departments, including 4 neurological, 2 neurosurgical, 2 neurotraumatology, an emergency medical department for neurotraumatology and neurosurgical patients; a bed capacity of 240 beds; 4 operating rooms; 2 intensive care wards; and an intensive care unit.
7.2	There are 6 standard equipped classrooms with 90 seats, with a total area of 180 sq. m. (block desks, couches, blackboards).
7.3	The Department is equipped with a multimedia system (laptop, personal computer, projector). Students have access to information stands (4 pcs.), posters (80 pcs.), an electronic library, educational films (more than 50 videos), including those made by students, a database of clinical material (MRI, CT, craniograms, spondylograms), which are systematically updated.
7.4	Classes are conducted on the basis of the City Clinical Hospital No. 1, the angioedema department with 25 beds and a 12-bed PIT. There is one classroom for 14 seats, the classroom is equipped with a plastic board, educational material in the form of methodological manuals issued by the department's staff, a set of clinical and neuroimaging materials.
7.5	Students have access to the simulation center for integrative and practical training (CIPO-building "Alamedin"). The center is equipped with robotic dummy simulators, modern resuscitation equipment, electronic phantoms, simulators, interactive and medical equipment, tools and consumables;

8. GUIDELINES FOR STUDENTS ON MASTERING THE DISCIPLINE (MODULE)

The TECHNOLOGICAL MAP of THE DISCIPLINE is presented in Appendix No. 7. Technological map.

METHODOLOGICAL RECOMMENDATIONS FOR THE STUDY OF THE DISCIPLINE
Recommendations when using the materials of the educational and methodological complex.
The specificity of studying the section on general neurology is the use of basic teaching methods: students ' work in lectures, practical classes, when studying individual topics, the use of visual aids (posters, dummies, multimedia slides), followed by a demonstration of thematic patients.
Recommendations for studying individual topics of the discipline:
When studying topics No. 1,2, special attention should be paid to the schematic representation of the pathways of the motor and sensory spheres for topical diagnosis of lesion levels.
When studying topic # 3, you should pay attention to the connections between the extrapyramidal and cerebellar systems, learn to identify individual symptoms of the lesion and then group them into syndromes.
When studying topics No. 4,5, attention should be paid to the anatomy of the cranial nerves of the medulla oblongata (IX, X, XI, XII) and Varoli bridge (V, VII, VIII), the midbrain (III, IV), the research methodology and symptoms of their damage. When studying topics from the section of private neurology, you should pay attention to modern approaches to the diagnosis and treatment of neurological diseases according to the ICD and evidence-based medicine. The specifics of studying the sections of private neurology are the use of additional literature (monographs, reference manuals, methodological recommendations), readiness for curation and analysis of thematic patients, writing a medical history of a neurological patient with cerebrovascular pathology, inflammatory, demyelinating diseases of the nervous system, pathology of the peripheral nervous system, and autonomic dysfunctions.
The specifics of the section "Medical Genetics" are mastering the collection of complaints, anamnesis in order to identify congenital or hereditary pathology in a patient, drawing up a pedigree, knowledge of the features of laboratory and instrumental diagnostic methods and additional research methods. The student should gain skills in formulating a presumptive diagnosis of the most common hereditary syndromes and diseases, determine the need for additional examination, and identify families with an increased risk of developing hereditary pathology.
The specifics of studying the section "Neurosurgery" are the peculiarities of examining neurosurgical patients, mastering theoretical and practical skills in the diagnosis of neurosurgical diseases, familiarization with additional research methods(MRI, CT, R-graph, angiography, PEG) and the principles of surgical treatment. Methodological recommendations for independent, extracurricular work of students in the study of the discipline.
The study of the theoretical part of the discipline is designed not only to deepen and consolidate the knowledge gained in classroom classes, but also contributes to the development of students ' creative skills, initiative and organization of their free time.Planning the time required for studying the discipline should be carried out by students throughout the semester, while providing for regular repetition of the material.
Independent work of the student when studying the discipline includes:
- reading recommended literature, Internet sources and mastering the theoretical material of the discipline;
- preparing for various forms of control (situational task, control work, test);
- writing a medical history of the supervised patient.
Working with educational literature is considered as a type of academic work in a discipline within the hours allocated for its study in the SRS section. Each student is provided with access to the library collections of the University and the Department.The initial level of knowledge of students is determined by the cross-section of knowledge, the current control of mastering the discipline, as well as an oral survey during classes, during clinical reviews, when solving typical situational problems. The student's work in a group is aimed at developing a sense of teamwork and sociability. Teaching students the method of neurological examination forms their ethical and deontological skills of communication with patients of a neurological profile.

Typical tasks from the feedback form and their solution:

SITUATIONAL TASK. The tasks are presented in Appendix 2. Sample task.
The patient has a decrease in strength in the arms, a decrease in tendon reflexes and muscle tone, fibrillar and fascicular twitching of the shoulder girdle muscles, and leg movements are not disturbed. What is the name of the motor syndrome? What formations are affected?
Standard response to a situational problem.
Peripheral paraparesis. Lesion of the anterior horns of the spinal cord at the level of segments C4-C6.

REPORT. The topics of the reports are presented in Appendix 3. Preparation of the report for the lesson.
The main stages of preparing the report: choosing a topic; consulting the teacher; preparing the report plan; working with sources and literature, collecting material; writing the report text; preparing the manuscript and providing it to the teacher before the report begins, which determines the student's readiness to speak; making a report, answering questions.

presentation. Topics of presentations in Appendix 3.
Presentations are recommended in the Microsoft Power Point app. The presentation provides an opportunity to visually present innovative ideas, developments and plans, according to the given topic. The training presentation is

the result of independent work of students, with the help of which they clearly demonstrate the materials of a public speech in front of an audience.
A computer presentation is a file with the necessary materials, which consists of a sequence of slides. Each slide contains information that is complete in meaning, since it is not automatically transferred to the next slide, unlike in a text document.
Presentation structure:
You can keep your audience's active attention for no more than 15 minutes, so you should be able to view a slide for no more than 1 minute, and the number of slides should not exceed 15.
The first slide of the presentation should contain the topic of the work, the last name, first name, patronymic of the performer, the number of the study group, as well as the last name, first name, patronymic, position, academic degree of the teacher.
On the second slide, it is advisable to present the purpose and summary of the presentation. Subsequent slides should be divided into sections according to the points of the work plan.
On the final slide, the most important part of the presentation content is displayed. Recommendations for creating presentations in Microsoft Power Point:
For visual perception, the text on the presentation slides must be at least 18 pt, and for titles - at least 24 pt. The presentation layout should be designed in a strict color scheme. The background should not be too bright or colorful. The text should be easy to read. The same elements on different slides should be the same color.
The space of the slide (screen) should be used as much as possible, for example, by zooming in on the drawing. In addition, if possible, it is necessary to occupy the upper three-quarters of the slide (screen) area, since the lower part of the screen is poorly visible from the last rows.
Each slide must contain a title. Don't put a dot at the end of headings. The headings should reflect the output from the information presented on the slide. Only the generally accepted abbreviation can be used when formatting headings in capital letters.
The slide should contain no more than 5-6 lines and no more than 5-7 words per sentence. The text on the slides should be easy to read.
When adding drawings, diagrams, diagrams, and screenshots, you need to check the text of these elements for errors.
You can't overload your slides with animation effects – this distracts listeners from the semantic content of the slide. Use the same animation effect to change slides.

report. The subject of the essays is presented in Appendix 4.
Recommendations for writing an abstract.
1. The topic of the abstract is chosen in accordance with the interests of the student and should correspond to the given sample list (Appendix 4).
2. The abstract should be based on the elaboration of several additional sources to the main literature (monographs, articles).
3. The outline of the abstract must be author's. It shows the author's approach, opinion, and analysis of the problem.
4. All facts and borrowed considerations presented in the abstract should be accompanied by references to the source of information.
5. It is unacceptable to simply compose an abstract from pieces of borrowed text. All citations must be presented in quotation marks, with the source and page indicated in parentheses. The absence of quotation marks and links means plagiarism and, in accordance with established scientific ethics, is considered a gross violation of copyright.
6. The abstract is drawn up in the form of text on sheets of standard format (A - 4) in Times New Roman, 14 font. It begins with the title page, which indicates the name of the university, academic discipline, subject of the abstract, last name and initials of the student, year and geographical location of the university. This is followed by a table of contents indicating the section pages. It is advisable to divide the text of the abstract itself into sections: chapters, sub-chapters and title them. The use of quantitative data and illustrations (graphs, tables, diagrams, figures) in the abstract is encouraged.
7. The abstract is completed by the sections "Conclusion" and "List of references". In conclusion, the main conclusions are presented, clearly formulated in abstract form and usually numbered.
8. The list of references must be compiled in full compliance with the current standard (rules), including special punctuation marks. In general, the most commonly used order of bibliographic references in our country is as follows:
Author Full name of the book. Place of publication: Publisher, Year of publication. Total number of pages in the book.
Author I. O. Title of the article / / Title of the journal. Year of publication. Tom__. № __. Pages from __to _____.
Author Full name of the article / Collection title. Place of publication: Publisher, Year of publication. Pages from __to _____.
Approximate content of the work. Name. It is 13-15 pages long.

CONTROL WORK
is performed in the form of a written answer to the task questions (Appendix 5) or solving a situational problem (Appendix 2), according to the thematic plan of practical classes. The content of general neurology responses should focus on knowledge of pathways, neurological symptoms and syndromes, and topical diagnosis. The content of answers on private neurology should focus on knowledge of the etiology, pathogenesis, criteria for the diagnosis of major neurological diseases and justification of the clinical diagnosis, on the treatment and prevention of major neurological diseases.
The purpose of the control work is to determine the quality of assimilation of the material.
When preparing students for the control work, you should use the lecture material, textbooks indicated in the main literature list of the discipline's work program.

PRACTICAL SKILLS OF NEUROLOGICAL EXAMINATION
Students study the methodology of neurological examination (Appendix No. 5a), work out practical skills in a group, work with patients in the wards of neurological departments under the guidance of a teacher.
For the work, it is recommended to use methodological recommendations for practical training, posters, tables, methodological developments of the department "Methods of neurological examination".
Technical equipment: the department has neurological hammers, tuning fork, tonometer, compasses, centimeter tape.
The final stage of the work is the patient's supervision and registration of the educational medical history.

MEDICAL HISTORY
The scheme of writing a medical history is presented in Appendix No. 8

INTERMEDIATE CERTIFICATION in the 7th semester is carried out according to the results of an oral survey, solving situational problems, demonstrating practical skills (Appendix 5a), a scale for evaluating practical skills in Appendix 6.
INTERMEDIATE CERTIFICATION in the 8th semester using test control (Appendix 1). The proposed tests are monosyllabic, with one correct answer.
To prepare for the intermediate certification, students are recommended to use the following textbooks:
1. In General Neurology:
- Topical diagnostics. Textbook on general neurology / Compiled by: Musabekova T. O., Shleifer S. G., Andrianova E. V., Rekaeva M. I., Ibatullin I. F., Rysalieva N. T., Khamzina A. I. / – B: KRSU, 2014. - 183 p
- . Skoromets A. A., Skoromets A. P., Skoromets T. A. Topicheskaia diagnosis of diseases of the nervous system. Guide for doctors, St. Petersburg, 2010-552s. (additional literature)
2. In private neurology:
- Odinak M. M. Nervnye bolezni : uchebnik [Nervous diseases: textbook], Moscow, Meditsina 2014, 567 p. (in Russian).
- Skoromets A., Skoromets A., Skoromets T. Nervous diseases. Training manual. (4th edition) 2010-552s.
- Drozdov A. A. Nervous diseases: Textbook: Textbook Saratov: Nauchnaya kniga 2019. - 159s.
- Lecture material, publications issued by the department.
3. For the section on medical genetics:
- Gorbunova V. N. Klinicheskaya genetika: uchebnik SPb.: Foliyant 2015. - 408 p.
4. For the neurosurgery section:
- Gusev E. I. Neurology and neurosurgery: in 2 volumes: textbook. Moscow: GEOTAR-Media Publ., 2013, 624 p.

Appendix 1

TESTS FOR INTERMEDIATE CERTIFICATION
(7-8 semester)

1. Choose a sign that is not characteristic of facial nerve damage
1) dysphagia;
2) smoothness of the frontal folds;
3) smoothness of nasolabial folds;
4) Bell's symptom;
5) racket symptom #
2. Weber's syndrome is characterized by:
1) defeat of the XII pair on the side of the focus and central hemiparesis on the opposite side
2) lesion of the VII pair on the side of the focus and central hemiparesis on the opposite side
3) lesion of the VI pair on the side of the focus and central hemiparesis on the opposite side
4) lesion of the third pair on the side of the focus and central hemiparesis on the opposite side
5) there is no correct
answer #
3. What is the characteristic symptom of bulbar palsy?
1) high pharyngeal reflex;
2) There is no pharyngeal reflex.
3) spontaneous crying.
4) symptoms of oral automatism;
5) increased tendon reflexes #
4. A path passes through the upper legs of the cerebellum
1) posterior spinal-cerebellar
2) anterior spinal-cerebellar
3) fronto-mosto-cerebellar
4) occipital-temporal-bridge-cerebellar
5) spinal-thalamic system
#
5. What symptom is not observed when the cerebellum is affected?
1) muscle hypotension
2) myoclonia;
3) intentional tremor.
4) chanted speech.
5) instability in the Romberg sample. #
6. Which of these symptoms is not a sign of hypothalamic damage?
1) violation of thermoregulation;
2) hemiparesis;
3) sleep and wake rhythm disorders;
4) neuroendocrine disorders;
5) eating and sexual disorders #
7. Sensitive ataxia is characterized by:
1) occurs when the Goll and Burdach pathways are affected
2) the patient controls his gait with his vision
3) walks with his legs raised high, feels the ground poorly under his feet
4) the musculoarticular sense is disturbed

5) all of the above #
8. Binasal hemianopsia occurs when a lesion occurs
1) central parts of the optic nerve junction
2) external parts of the optic nerve junction
3) visual radiance
4) visual tracts
5) the optic nerve #
9. Lagophthalmos, smoothness of the frontal and nasolabial folds on the affected side, skew of the mouth to the healthy side are characteristic of
1) brain tumors
2) encephalitis
3) neuritis of the facial nerve
4) acute cerebrovascular accident

5) trigeminal neuralgia #
10. The sciatic nerve is made up of root fibers 1) S1-S2
2) L4 -S3
3) S2-S3
4) L5-S5
5) L3- L5
#
11. Pain on the posterolateral surface of the thigh is characteristic of the root lesion:
1) L2
2) L4
3) L5
4) S1
5) S5
#
12. Weber's syndrome is characterized by:
1) defeat of the XII pair on the side of the focus and central hemiparesis on the opposite side
2) lesion of the VII pair on the side of the focus and central hemiparesis on the opposite side
3) lesion of the VI pair on the side of the focus and central hemiparesis on the opposite side
4) lesion of the third pair on the side of the focus and central hemiparesis on the opposite side
5) there is no correct
answer #
13. Where is the body of the third neuron located for all types of sensitivity:
1) in the spinal ganglion
2) in the posterior horns of the spinal cord
3) in the ventrolateral nucleus of the thalamus
4) in the cerebral cortex, in the postcentral gyrus
5) in the cerebral cortex, in the precentral gyrus #
14. Characteristic of the lesion of the posterior horns of the spinal cord is:
1) muscle atrophy
2) dissociated loss of pain and temperature sensitivity
3) conductor sensitivity disorders
4) muscle fibrillation.
5) areflexia #
15. Hyoid nerve damage (XII) is characterized by:

1) violent crying
2) nausea and vomiting
3) dysphonia
4) language deviation
5) sensory aphasia #

16. To detect a violation of discriminative sensitivity, it is necessary to check whether the patient is able to determine
1) place of contact when applying irritation to various parts of the body
2) numbers, letters, and simple shapes that can be drawn on the skin
3) two simultaneous irritations applied to closely spaced areas of the body surface
4) familiar objects to the touch
5) the direction of movement of the object based on the formation of a crease on the skin. #

17. Millard-Gubler syndrome is characterized by:
1) defeat of the XII pair on the side of the focus and central hemiparesis on the opposite side
2) lesion of the VII pair on the side of the focus and central hemiparesis on the opposite side
3) lesion of the VI pair on the side of the focus and central hemiparesis on the opposite side
4) lesion of the third pair on the side of the focus and central hemiparesis on the opposite side
5) there is no correct answer #

18. For the defeat of half the diameter of the spinal cord is characterized by:
1) alternating type of sensitivity disorder
2) asterognosis
3) conductor sensitivity disorders
4) polyneuritic sensitivity disorders
5) Brown-Sekar syndrome #

19. For neuropathy of the facial nerve, it is typical
1) ptosis
2) hypesthesia of half the face
3) paresis of facial muscles in half of the face
4) divergent strabismus
5) chewing disorder #

20. For the defeat of the vagus nerve are not characteristic
1) dysphonia
2) dysphagia
3) heart rhythm disorder
4) violation of taste
5) change in blood pressure #

21. Which of these symptoms is not typical for peripheral motor neuron damage?
1) spastic tone
2) mouse hypotension
3) reduced tendon reflexes
4) muscle hypotrophy
5) "bioelectric silence" on EMG #

22. Fauville syndrome is characterized by:

1) lesion of the third pair of cranial nerves
2) damage to the VI and VII pairs of cranial nerves
3) damage to the VI, VII, VIII pairs of cranial nerves
4) damage to the VII, VIII pairs of cranial nerves
5) lesion of IX and X pairs of cranial nerves #

23. When the right hemisphere of the brain is affected, right-handed people develop cortical speech disorders in the form of:
1) aphasia
2) alexia
3) they don't occur
4) agraphy
5) dysarthria.
#

24. True urinary incontinence occurs when:
1) precentral gyrus of the frontal lobe
2) the thalamus
3) defeat of the pyramid path from 2 sides
4) damage to the spinal pelvic center
5) defeat of the pyramid path on the 1st side #

25. Damage to the striatal system is characterized by:
1) ataxia
2) the appearance of hyperkinesis
3) hemiparesis
4) parkinsonism syndrome
5) convulsive seizures #

26. What part of the visual pathway is affected by heteronymous hemianopsia?
1) chiasma;
2) external crank body.
3) the optic nerve.
4) the visual tract.
5) occipital cortex. #

27. Select a symptom that is not specific to the parietal lobe:
1) asterognosis.
2) apraxia;
3) acalculia;
4) alexia;
5) visual agnosia. #

28. What syndrome is characteristic of brain stem damage?
1) aphasia;
2) alternating syndrome.
3) visual agnosia.
4) hyperkinesis;
5) Brown-Sekara
syndrome. #

29. Reflexes of oral automatism indicate a lesion of the following tracts:
1) corticospinal diseases.
2) corticonuclear cells;

3) fronto-mosto-cerebellar;
4) rubrospinal diseases.
5) tufts of Turk.
#
30. A pathological flexor reflex is the following:
1) Babinsky district;
2) Oppenheim;
3) Rossolimo;
4) Gordon;
5) Schaeffer.
#
31. Closure of the reflex arc from the biceps tendon of the shoulder muscle occurs at the level of spinal cord segments: 1) C3-C4.
2) C5-C6.
3) C7-C8.
4) C8-Th1;
5) Th1-Th2.
#
32. The segmental parasympathetic apparatus includes:
1) lateral horns of the spinal cord;
2) the paravertebral chain.
3) vegetative nuclei of the thalamus and limbic brain;
4) vegetative nuclei of the brain stem and spinal pelvic center;
5) hypothalamus and vegetative cells of the cerebral cortex. #
33. The clinical picture of Claude-Bernard-Horner syndrome includes:
1) divergent strabismus, mydriasis, ptosis;
2) convergent strabismus.
3) ptosis, miosis, enophthalmos;
4) rotator nystagmus, anisocoria;
5) vertical paresis of the eye, nystagmus.
#
34. True urinary incontinence occurs:
1) if the paracentral lobule is affected;
2) if the thalamus is affected;
3) if the pyramidal path is damaged on one side.
4) if the pyramid path is damaged on both sides.
5) if the spinal pelvic center is affected. #
35. Homonymous hemianopsia is not observed in the lesion
1) the visual tract
2) visual crossroads
3) visual radiance
4) the inner capsule.
5) true 3 and 4
#
36. When does bulbar palsy occur?
1) with damage to the olfactory bulb and optic nerve (I and II pairs),
2) in case of damage to the oculomotor nerves (III, IV and VI pairs) that provide movement of the eyeball,
3) if the VI and VII pairs are affected,

4) if the IX, X, or XII pairs are affected,
5) when the vessels of the motor and respiratory centers located in the medulla oblongata are affected.
#
37. Name the cranial nerves of the medullary angle bridge:
1) I and II,
2) III, IV and VI,
3) IV and V,
4) V, VI, VII and VIII,
5) III, IV and VIII, #
38. Millard-Gubler syndrome is characterized by:
1) defeat of the XII pair on the side of the focus and central hemiparesis on the opposite side
2) lesion of the VII pair on the side of the focus and central hemiparesis on the opposite side
3) lesion of the VI pair on the side of the focus and central hemiparesis on the opposite side
4) lesion of the third pair on the side of the focus and central hemiparesis on the opposite side
5) there is no correct answer #
39. Damage to the frontal lobe is characterized by:
1) ataxia
2) asterognosis
3) hemianopsia
4) autotopagnosia
5) sensetive ataxia #
40. Isolated lesion of the block nerve:
1) causes difficulty descending stairs
2) causes head tilt
3) doesn't break the upward view
4) everything in/out is correct
5) everything in/y is incorrect #
41. When the right visual tract is affected, the following occurs:
1) left-sided homonymous hemianopsia
2) right-sided homonymous hemianopsia
3) blindness in the right eye
4) blindness in the left eye
5) binasal hemianopsia #
42. Clinical manifestations of occipital lobe tumor:
1) hemiparesis;
2) dysarthria.
3) anosmia;
4) hemianopsia.
5) sensitive ataxia. #
43. Which of the following motor symptoms is not characteristic of Parkinsonism:
1) the "gear wheel" phenomenon ;
2) chorea.
3) propulsions.
4) a masked face.

5) shuffling gait. #
44. The knee tendon reflex closes at the level of segments: 1) S1 – S4;
2) S2 – S3;
3) S1 – S2;
4) L4 – L5;
5) L2 – L3.
#
45. Alternating Foville syndrome occurs when:
1) nuclei of the oculomotor nerve (III) and the pyramidal pathway
2) nuclei of the abductor,facial(VI, VII) nerves and pyramidal pathway
3) facial nerve nuclei (VII) and pyramidal pathway
4) hyoid nerve nuclei (XII) and pyramidal pathway
5) nuclei of the glossopharyngeal and vagus (IX,X) nerves and the pyramidal pathway. #
46. The Charcot triad includes:
1) nystagmus, hypotension, shakiness in the Romberg position
2) nystagmus, chanted speech, loss of abdominal reflexes
3) chanted speech, hypotension, shakiness in the Romberg pose
4) hemianesthesia, hemipagenesis, hemianopsia
5) dysphagia, dysarthria, dysphonia
#
47. The periosteal reflex is:
1) knee joint
2) mandibular
3) flexor-ulnar joint
4) kornealny
5) knee joint
#
48. Parkinsonism is characterized by the following syndrome:
1) akinetic-rigid
2) vestibular
3) pyramidal
4) vestibulo-cerebellar
5) hypotonic-hyperkinetic #
49. To detect amnesic aphasia, you should:
1) check your oral invoice
2) ask the patient to name the surrounding objects

3) invite the patient to read the text
4) make sure that the patient understands the addressed speech
5) run the "drawing hours" test #
50. When the trigeminal (V) nerve is affected, the following occurs:
1) prosoparesis
2) violation of the sensitivity of the skin of the face
3) lacrimation and prosoparesis
4) hearing loss
5) hyperacusis
#
51. Anisocaria occurs when:

1) VI of the craniocerebral nerve
2) IV cranial nerve
3) III craniocerebral nerve
4) V cranial nerve
5) II craniocerebral reserve #

52. When the cerebellar worm is affected, ataxia is observed
1) dynamic
2) vestibular
3) static
4) sensitive
5) psychogenic
#

53. Intentional shaking and overshooting when performing a finger-nose test is characteristic of
1) for static ataxia
2) for dynamic ataxia
3) for frontal ataxia
4) for sensitive ataxia
5) for vestibular ataxia #

54. When the optic tract is affected, hemianopsia occurs
1) binazalnaya
2) homonymous
3) bitemporal
4) nizhnekvadrantnaya street
5) amauros
is #

55. Homonymous hemianopsia is not observed in the lesion
1) the visual tract
2) visual crossroads
3) visual radiance
4) internal capsule
5) occipital cortex #

56. A symptom of a peripheral lesion of the facial (VII) nerve is:
1) paresis of the masticatory muscles on the affected side
2) isolated lowering of the corner of the mouth on the affected side
3) isolated lowering of the corner of the mouth on the contralateral side
4) reduced taste on the front 2/3 of the tongue on the affected side
5) paresis of the facial muscles of the upper and lower floors on the affected side #

57. Athetosis is:
1) slow worm-like hyperkinesis of the hand
2) throwing hyperkinesis of limbs
3) torso rotational hyperkinesis
4) stereotypical contraction of individual muscle groups
5) rigidity, slowness of movement #

58. A tumor of the temporal lobe of the dominant hemisphere is characterized by
1) motor, sensory aphasia
2) sensory aphasia

3) motor, semantic aphasia
4) sensory aphasia, autotopognosia
5) motor aphasia, autotopognosia #
59. Jackson's syndrome is characterized by:
1) defeat of the XII pair on the side of the focus and central hemiparesis on the opposite side
2) lesion of the VII pair on the side of the focus and central hemiparesis on the opposite side
3) lesion of the VI pair on the side of the focus and central hemiparesis on the opposite side
4) lesion of the third pair on the side of the focus and central hemiparesis on the opposite side
5) there is no correct
answer #
60. Mild paresis can be detected by testing:
1) Ashner
2) Kwekkenstedt.
3) Stukeya.
4) Barre.
5) Romberg
a #
61. The patient has an attack of paling of the skin, accompanied by tachycardia, increased blood pressure, chills-like tremor, hyperhidrosis. What is the name of the attack?
1) menyerovsky
2) epileptic
3) sympatho-adrenal
4) cardialgic
5) vagoinsular #
62. Patient with sensory aphasia
1) can't speak and can't understand spoken language
2) understands spoken language, but can't speak
3) can speak, but forgets the names of items
4) doesn't understand spoken language, but controls your own speech
5) doesn't understand spoken language and doesn't control your own #
63. In which part of the brain stem does the complete intersection of the pyramidal pathway occur?
1) in the midbrain
2) in varoliev bridge
3) in the lower medulla oblongata
4) in the upper part of the medulla oblongata
5) a complete intersection does not occur at all
#
64. The suprasegmental part of the nervous system includes:
1) Lateral horns of the spinal cord
2) Borderline sympathetic trunk
3) Limbic system
4) Vegetative nuclei of the brain stem
5) All answers are
correct #
65. Incomplete compression leads to a concentric narrowing of the visual fields
1) the visual tract
2) visual crossroads
3) external crank body

4) visual radiance
5) the optic nerve #
66. Bulbar syndrome is not characterized by:
1) atrophy of the tongue muscles
2) dysphagia
3) dysarthria
4) dysphonia
5) increased pharyngeal reflex #
67. Sensitive conductors include:
1) pyramid path
2) the dorsal-thalamic pathway
3) the rubrospinal pathway
4) vestibulospinal pathway
5) olivospinal pathway #
68. Vegetative formations of the spinal cord are located in:
1) front horns
2) side horns
3) rear horns
4) front gray spike
5) rear pillars #
69. When the cerebellum is affected, it does not occur:
1) muscle hypotension
2) myoclonia
3) chanted speech
4) intentional tremor
5) ataxia #
70. Ptosis, miosis and enophthalmos are characteristic of the following lesions:
1) front horns
2) lesions of the lateral horns of the spinal cord C1-C4
3) damage to the lateral horns of the spinal cord C8-D1
4) damage to the lateral horns of the spinal cord D3-D5
5) lesion of the posterior
horns #
71. Lassega's symptom is characteristic of:
1) lumbosacral sciatica
2) intercostal neuralgia
3) cervical-brachial sciatica
4) hemorrhagic stroke
5) facial nerve paralysis #
72. Bulbar syndrome is characterized by everything except:
1) respiratory failure
2) atrophy and fibrillation of the tongue
3) lack of pharyngeal reflex
4) choking
5) symptoms of oral automatism #

73. Damage to the anterior roots of the spinal cord is characterized by:
1) violation of sensitivity by the root type.
2) muscle hypertonicity
3) Babinsky's pathological reflex
4) peripheral paresis
5) klonusy stop #
74. The Wernicke-Mann pose is characteristic of the lesion:
1) anterior horns of the spinal cord
2) occipital lobe of the brain
3) internal capsule
4) lateral pillars of the spinal cord
5) the radiant crown
#
75. With a complete transverse lesion in the upper thoracic segments, the following are not detected:
1) lower spastic paraparesis
2) spastic tetraparesis
3) urinary retention
4) violation of sensitivity by wire type
5) trophic disorders below the lesion site #
76. Damage to the striatal system is characterized by:
1) ataxia
2) the appearance of hyperkinesis
3) hemiparesis
4) parkinsonism syndrome
5) epileptic seizures #
77. Hyperkinetic syndrome is not characterized by:
1) high muscle tone;
2) low muscle tone;
3) reduction of symptoms during sleep and increased excitement;
4) excessive physical activity;
5) emotional lability #
78. Clinical picture of vagus nerve damage:
1) hearing loss, vestibular function;
2) dysarthria, a deviation of the tongue to the side.
3) tachycardia, decreased peristalsis, impaired swallowing, breathing;
4) violation of taste on the back third of the tongue, violation of salivation;
5) loss of brow and corneal reflexes. #
79. Spastic paralysis is characterized by
1) reduced tendon reflexes

2) muscle atrophy
3) presence of pathological reflexes
4) reduced muscle tone
5) fibrillation, fasciculation #
80. Instability in the Romberg position when closing the eyes is significantly increased if ataxia occurs

1) cerebellar
2) sensitive
3) vestibular
4) cortical
5) true 1 and 2
#
81. Instability in the Romberg position when closing the eyes is significantly increased if ataxia occurs
1) cerebellar
2) sensitive
3) vestibular
4) cortical
5) psychogenic
#
82. Damage to the horse's tail of the spinal cord is accompanied by
1) flaccid paresis of the legs and impaired sensitivity to the root type
2) spastic paresis of the legs and pelvic disorders
3) violation of deep sensitivity of the distal legs and urinary retention
4) spastic paraparesis of the legs without sensory disorders and pelvic organ dysfunction
5) spastic paraparesis of the legs #
83. Hemispheric paresis of the gaze (the patient looks at the lesion) is associated with a lesion of the lobe
1) frontal
2) temporal lobe
3) parietal
4) occipital
5) parietal and occipital #
84. Dysphagia occurs when the cranial nerves are affected:
1) IX-X
2) VIII-XII
3) VII-XI
4) VII, X, XII
5) VII, IX-X
#
85. With Kernig's meningeal symptom
1) bend the patient's head forward
2) press on the area of the pubic joint
3) straighten the patient's leg bent at right angles in the knee and hip joints
4) squeeze the quadriceps femoris muscle
5) tap on the zygomatic arch #
86. A combination of impaired swallowing and phonation, dysarthria, soft palate paresis, lack of pharyngeal reflex and tetraparesis indicates a lesion
1) legs of the brain
2) brain bridge nuclei
3) medulla oblongata nuclei
4) midbrain tires
5) spinal cord
injury #

87. To study the patency of the subarachnoid space using the Kwekenstedt test, you should
1) compression of the cervical veins for 5-10 seconds
2) compress the abdominal aorta
3) apply pressure to the anterior abdominal wall
4) tilt the patient's head back
5) any maneuver meets the conditions of this test #
88. The sphincter of the pupil is innervated by the nerve:
1) III
2) IV
3) VI
4) II
5) V
#
89. Highlight the tension symptom:
1) lessage symptom
2) kernig's symptom
3) lassega symptom
4) Brudzinsky's symptom
5) rossolimo symptom
#
90. Violation of understanding of complex logical and grammatical constructions occurs in aphasia:
1) touch screen
2) motorny
3) amnesty International
4) semantic information
5) opticomnestic aphasia #
91. When the internal capsule is affected, it is noted:
1) Hemiparesis
2) Paraparesis
3) Monoplegia
4) Ataxia
5) Tetraparesis
#
92. The polyneuritic type of sensitivity disorder is characterized by:
1) sensitivity disorder in the area of nerve innervation
2) hyposthesia in the distal extremities
3) hemihyposthesia
4) phantom pains
5) dissociated type of sensitivity disorder #
93. Occipital lobe lesions are characterized by:
1) motor aphasia
2) sensory aphasia
3) asterognosis
4) heteronymous hemianopsia
5) homonymous hemianopsia
#
94. Spinal cord injuries do not include:

1) Brown-Sekar syndrome
2) Horner's syndrome
3) trophic disorders
4) pelvic organ dysfunction
5) impaired sensitivity in the distal extremities #

95. Spinal cord injury is characterized by:
1) Argyll-Robertson syndrome
2) violation of sensitivity by wire type
3) sensory disturbances in the distal extremities
4) swallowing disorder
5) all answers are correct #

96. When the Broca's area is affected, there are:
1) motor aphasia.
2) sensory aphasia.
3) amnesia.
4) paresthesia.
5) muscle rigidity. #

97. When the Wernicke area is affected, the following occurs:
1) motor aphasia.
2) sensory aphasia.
3) amnesia.
4) paresthesia.
5) muscle rigidity. #

98. Common brain symptoms include:
1) vomiting, nausea, headache
2) hemiparesis
3) febrile fever, headache
4) neck muscle rigidity
5) Jackson's seizures #

99. Polyneuropathy is:
1) multiple symmetrical peripheral nerve damage
2) multiple lesions of the spinal cord roots
3) peripheral nerve damage caused by two or more infectious agents
4) damage to half of the spinal cord
5) lesion of the posterior
horns #

100. With polyneuropathies, everything develops except:
1) hypo - or areflexia
2) hyperreflexia
3) cranial nerve damage
4) sensitive disorders
5) vegetative disorders #

101. With cerebellar lesions, muscle tone:
1) promoted.
2) reduced.
3) not changed.

4) changed by "folding knife"type
5) changed by "gear wheel" type #
102. Hyperkinesis in the form of involuntary worm-like movements in the fingers, which increases during movement and passes during sleep, is called:
1) chorea.
2) athetosis.
3) torsion dystonia;
4) ticks.
5) all the answers are wrong. #
103. Parkinsonian tremor is characterized by:
1) rest tremor that decreases when moving.
2) intentional tremor that increases in movement.
3) tremor in the form of "counting coins" and "rolling pills";
4) true 1) and 3);
5) all the answers are wrong.
#
104. When the facial nerve is affected, paralysis occurs in all of the listed facial muscles, except:
1) circular eye muscle.
2) circular muscle of the mouth;
3) the muscle that lifts the upper eyelid.
4) cheek muscles;
5) laugh muscles.
#
105. Parkinson's disease can manifest itself in the following syndromes:
1) choreoathetoid;
2) akinetic-rigid;
3) vestibulo-cerebellar.
4) dentorubral;
5) all the answers are correct. #
106. When the abductor nerve is affected, muscle paralysis occurs
1) upper straight line
2) external straight line
3) lower straight line
4) lower oblique
5) upper oblique
#
107. Choose a sign that is not typical for oculomotor nerve damage:
1) convergent strabismus.
2) mydriasis;
3) restriction of movement of the eyeball up and inside;
4) divergent strabismus.
5) ptosis. #
108. What symptom does not occur when the pallido-nigral system is affected?
1) amimia
2) plastic muscle rigidity;
3) spastic muscle rigidity;
4) bradykinesia;

5) rest tremor. #
109. What type of aphasia occurs when the frontal lobe of the dominant hemisphere is affected?
1) motor aphasia
2) sensory aphasia;
3) amnesic aphasia;
4) semantic aphasia.
5) none of the above types. #
110. The femoral nerve is formed by roots
1) L3
2) L2-L4
3) L1-L2
4) L1-L4
5) L4-L5 #
111. Strabismus is observed when a pair of cranial nerves is affected:
1) III
2) XII
3) VII
4) V
5) II
#
112. Ptosis occurs when the cranial nerve is affected:
1) IV
2) VI
3) III
4) V
5) III, VII
#
113. The masticatory muscles are innervated by the cranial nerve:
1) VII
2) X
3) XII
4) V
5) III
#
114. Pathological reflex detected on the upper limb:
1) Babinsky
2) Oppenheim
3) Rossolimo
4) Schaeffer
5) Gordon's
#
115. The rate of active movements in case of damage to the pallido-nigral system:
1) slowing down
2) speeding up
3) hyperkinesis appears
4) doesn't change
5) correct 2 and 3 #
116. When the intermediate brain is affected, there are:
1) sleep disorders

2) lack of coordination
3) pains
4) sensitivity disorders
5) loss of visual fields #
117. When the hypothalamus is affected, there are:
1) vegetative paroxysms
2) segmental vegetative disorders
3) sensitive disorders
4) motor disorders
5) sensory, motor and vegetative disorders #
118. When the striatal extrapyramidal system is affected, the following occurs:
1) hyperkineses
2) apraxia
3) paresis
4) postural tremor
5) rigidity #
119. Normal hearing is the perception of whispers from a distance
1) 1 meter
2) 2-3 meters
3) 3-4 meters
4) 6-7 meters
5) 10 meters or more
#
120. The main sign of phantom pain syndrome is
1) hypesthesia in the limb stump
2) sensation of pain in a nonexistent part of the removed limb
3) swelling, cyanosis of the limb stump
4) all of the above
5) none of the above #
121. The combination of increasing muscle tone in the flexor muscles of the arm and extensor muscles of the leg on one side is called the pose:
1) Kushilevsky
2) Romberga
3) Wernicke-Mann
4) A wax doll
5) Barre
sample #
122. The ciliospinal center is located in the lateral horns of the spinal cord at the level of segments 1) C6-C7
2) C7-C8
3) C8-D1
4) D3- D4
5) D5- D6
#
123. A symptom of a central lesion of the facial (VII) nerve is:
1) paresis of the masticatory muscles on the affected side
2) paresis of facial muscles on the affected side
3) isolated lowering of the corner of the mouth on the affected side

4) isolated lowering of the corner of the mouth on the contralateral side
5) paresis of the muscle that lifts the upper
eyelid #
124. Olfactory hallucinations are observed with the lesion
1) olfactory tubercle
2) the olfactory bulb
3) temporal lobe cortex
4) nasal mucosa
5) olfactory tract #
125. The bodies of central motor neurons are located:
1) in the posterior horns of the spinal cord;
2) in the fifth layer of cortical cells;
3) in the white matter of the brain;
4) in the anterior horns of the spinal cord;
5) in the inner capsule #
126. To identify constructive apraxia, the patient should be offered
1) raise your hand
2) touch your left ear with your right hand
3) fold a given shape from matches
4) perform various imitation moves
5) touch your index finger to the tip of your nose with your eyes closed #
127. Patient with visual agnosia
1) he doesn't see the surrounding objects well, but he recognizes them
2) sees objects well, but the shape seems distorted
3) does not see objects on the periphery of the visual fields
4) sees objects, but doesn't recognize them
5) doesn't see the surrounding objects well and doesn't
recognize them #
128. Patient with motor aphasia
1) understands spoken language, but can't speak
2) doesn't understand spoken language and can't speak
3) can speak, but doesn't understand spoken language
4) can speak, but the speech is chanted
5) doesn't understand spoken
language #
129. Upper orbital fissure syndrome includes a lesion
1) III pairs of PMN
2) VI and VI pairs of PMN
3) III, IV and VI pairs of PMN
4) III, IV, VI, and 1 branches of the V PMN pair
5) II, III, IV, V and VI pairs of
PMN #
130. Wire-type sensitivity disorders, central tetraplegia are characteristic of spinal cord
damage at the level of:
1) cervical thickening
2) upper chest department
3) upper neck department
4) lumbar thickening
5) lower thoracic department

#
131. If the trigeminal nerve is affected, it can be:
1) swallowing disorder
2) paresis of facial muscles
3) mydriaz
4) chewing disorder
5) there is no correct
answer #
132. Damage to the trigeminal nerve nucleus is characterized by:
1) paresis of facial muscles
2) swallowing disorder
3) rhinolalia
4) violation of sensitivity in the Selder brackets (zones)
5) all answers are correct #
133. The pallidary system does not include:
1) red core
2) black substance
3) lewis's body
4) caudate nucleus
5) pale ball #
134. Symptoms of visual cortex irritation include the following symptoms, except:
1) macropsy.
2) micropsy.
3) metamorphopsy.
4) amaurosis.
5) photopsies
. #
135. The patient has converging strabismus on the right and diplopia when looking to the right. What nerve is affected?
1) right visual.
2) right diverter.
3) right oculomotor.
4) right ad block.
5) right trigeminal. #
136. Does sensitive ataxia occur with a lesion?
1) if the anterior roots are affected.
2) if the posterior roots are affected.
3) side posts.
4) rear pillars.
5) peripheral nerves. #
137. Damage to the anterior roots of the spinal cord is characterized by:
1) spastic lower paraplegia.
2) central tetraplegia.
3) peripheral paralysis.
4) mixed paralysis.
5) hemiparesis.
#
138. Pseudobulbar palsy is characterized by everything except:

1) violent laughter and crying.
2) symptoms of oral automatism.
3) dysphagia.
4) high pharyngeal reflex.
5) respiratory disorders.
#
139. Polyneuropathy is not characterized by:
1) distal flaccid paresis
2) abnormal foot reflexes
3) reduced tendon reflexes
4) decreased sensitivity in the distal extremities
5) vegetative trophic disorders #
140. Alternating syndromes include:
1) Horner's syndrome
2) Brown-Sekar syndrome
3) upper orbital fissure syndrome
4) Weber's syndrome
5) Argyll-Robertson syndrome #
141. The Lessage meningeal symptom is defined by:
1) at any age
2) at early and preschool age
3) in preschool and primary school age
4) in infancy and early childhood
5) only in infancy #
142. What pair of cranial nerves innervate the facial muscles
1) V;
2) VI;
3) VII.
4) VIII;
5) H.
#
143. Hyperreflexia indicates a lesion:
1) the peripheral nerve
2) spinal root
3) pyramid road
4) a sensitive neuron.
5) anterior horns of the spinal cord #
144. Hyperkinesis does not include:
1) ballism
2) ticks
3) lateropulsions
4) athetosis
5) myoclonia
#
145. Peripheral hyoid nerve lesion (XII) is characterized by:
1) violent crying
2) aphasia
3) hemianopsia
4) dysphagia

5) atrophy of the muscles of half of
the tongue #
146. The optic nerve exits the cranial cavity through:
1) large occipital foramen
2) oval hole
3) round hole
4) optic nerve canal
5) upper orbital fissure #
147. With Parkinsonism, handwriting in patients
1) changes by macrography type
2) changes by type of micrography
3) doesn't change
4) patients can't write
5) become zigzagged #
148. Vestibular syndrome does not include:
1) nausea
2) vomiting
3) systemic vertigo
4) ataxia
5) reduced muscle strength #
149. To stop the epileptic status, the following methods are used:
1) Seduxenum
2) sodium oxybutyrate
3) hexenal, sodium thiopental,
4) all of the above
5) none of the above #
150. An epileptic seizure can cause diseases other than:
1) subarachnoid hemorrhage
2) purulent meningitis
3) brain tumor
4) tuberculosis meningitis
5) polyneuropathy #
151. Polyneuropathy is:
1) multiple symmetrical lesions of peripheral nerves.
2) multiple lesions of the spinal cord roots.
3) peripheral nerve damage caused by two or more infectious agents.
4) damage to half of the spinal cord.
5) damage to the posterior
horns. #
152. The main etiological factors of polyneuropathy:
1) toxic substances
2) infectious and allergic diseases
3) dysmetabolic(endocrine)diseases
4) for genetic enzyme defects
5) all of the above #
153. Diabetic polyneuropathy is characterized by:

1) pre-essential lesion of the upper extremities
2) predominant lesion of the lower extremities
3) predominant damage to the cranial nerves
4) all answers are correct
5) no correct answers #
154. Cancellation of antiepileptic therapy is carried out
1) only after complete normalization of the EEG
2) 3 months after EEG normalization
3) 6 months after clinical remission
4) 2 years after clinical remission with EEG normalization
5) 5 years after clinical remission #
155. The patient developed twitching of the left hand with a rapid spread to the entire arm, and then to the entire left half of the trunk. name the type of seizure.
1) generalized tonic
2) atonic
3) jackson
4) absence
5) myoclonic. #
156. Bulbar syndrome is characterized by:
1) increased pharyngeal reflexes
2) violent laughter and crying
3) dysphagia, dysarthria, dysphonia, decreased pharyngeal reflex
4) manifestation of oral automatism reflexes
5) oral apraxia #
157. Demyelinating diseases include polyneuropathy:
1) Guillain-Barre
2) diabetic
3) porphyriasis
4) hypothyroidism
5) all answers are correct #
158. With polyneuropathies, everything develops except
1) hypo-or areflexia.
2) hyperreflexia.
3) cranial nerve damage.
4) sensitive disorders.
5) vegetative disorders. #
159. A complete traumatic rupture of the peripheral nerve is characterized by
1) pain during percussion along the nerve path below the injury site
2) paresthesia in the area of innervation of the damaged nerve
3) flaccid paralysis and anesthesia in the area of innervation of the damaged nerve
4) all of the above
5) there are no clinical
manifestations #
160. In the treatment of polyradiculoneuropathy, Guillain-Barre uses everything except:
1) appointment of muscle relaxants
2) plasmapheresis

3) corticosteroid prescribing
4) prescribing nonsteroidal anti-inflammatory drugs
5) prescribing anticholinesterase drugs #
161. Polyneuropathy syndrome is manifested by:
1) weakness of the distal extremities;
2) sensitivity disorder in the distal parts of the extremities;
3) vegetative disorders in the hands and feet;
4) all of the above;
5) all answers are incorrect #
162. Note the most characteristic signs of neuritis of the facial nerve:
1) sharp shooting pain.
2) lagophthalmos, paralysis of facial muscles;
3) amaurosis;
4) hearing loss;
5) analgesia of half the face. #
163. With trigeminal neuralgia, patients complain
1) on constant aching pains that cover half of the face
2) on short paroxysms of intense pain for 1-2 minutes, provoked by a light touch to the face
3) attacks of increasing intensity of pain in the eye, jaw, teeth, accompanied by increased lacrimation and salivation
4) for prolonged pain in the area of the orbit, corner of the eye, accompanied by impaired visual acuity
5) all answers are correct #
164. Acute disorders of cerebral circulation include:
1) cerebral vascular crisis
2) hemorrhagic stroke
3) ischemic stroke
4) transient cerebral circulatory disorders
5) all listed #
165. Epileptic seizures include everything except:
1) Jackson's attack.
2) myoclonia.
3) generalized tonic-clonic attack.
4) drop attack.
5) an
absence. #
166. For neuropathy of the facial nerve, it is typical
1) ptosis
2) hypesthesia of half the face
3) paresis of facial muscles in half of the face
4) divergent strabismus
5) chewing disorder #
167. Simple absences are characterized by:
1) patient's fall
2) clonic twitching of the limbs

3) fading events
4) disabling consciousness for long periods of time
5) involuntary urination #
168. Myoclonic seizures are:
1) short-term blackouts of consciousness
2) unilateral clonic twitching
3) sudden decrease in muscle tone
4) sudden short-term involuntary muscle contractions
5) generalized clonic twitches #
169. The patient periodically had a blank look, at this time did not react to others, there were no falls or convulsions. Name the type of seizure:
1) generalized tonic
2) atonic
3) jackson
4) absence
5) myoclonic. #
170. The etiological factors of idiopathic epilepsy are
1) a gene mutation
2) birth trauma
3) hemolytic disease of newborns
4) traumatic brain injury
5) electrolyte imbalance #
171. For the treatment of convulsive seizures, the following principles are followed, except:
1) duration
2) continuity
3) continuity
4) discontinuity
5) personality #
172. For the treatment of generalized seizures, the first-line drug is:
1) carbamazepine
2) valproates (depakin, convulex)
3) Seduxenum
4) sodium oxybutyrate
5) phenobarbital
#
173. The tonic phase of a generalized epileptic seizure is accompanied by:
1) spilled cyanosis
2) twitching of the eyeballs
3) lasts up to 10 minutes
4) paleness of the face
5) hypersalivation #
174. In the cerebrospinal fluid: protein 2.5 g / l, cytosis 1000, lymphocytes-30%, neutrophils-70% are characteristic of:
1) meningitis
2) serous meningitis
3) purulent meningitis

4) subarachnoid hemorrhage
5) normal indicators #
175. In the cerebrospinal fluid: protein 1.2 g / l, cytosis 150, lymphocytes-70%, neutrophils-30%, leached red blood cells are characteristic of:
1) meningitis
2) serous meningitis
3) purulent meningitis
4) subarachnoid hemorrhage
5) normal indicators #
176. Generalized epileptic seizures include:
1) the Jacksonian ones
2) vegetative-visceral diseases
3) somatosensory systems
4) with impaired mental functions
5) absences
#
177. Non-epileptic seizures include all but: e1b) rilnyf seizures.
2) affective-respiratory attacks.
3) carpo-pedal spasms.
4) absence.
5) ticks.
#
178. The pathogenesis of primary viral encephalitis is based on
1) vascular reaction
2) interaction of a virus and a neuron
3) regional edema
4) circulatory hypoxia
5) infectious and allergic process #
179. The pathogenesis of secondary encephalitis is based on
1) vascular reaction
2) interaction of a virus and a neuron
3) regional edema
4) circulatory hypoxia
5) infectious and allergic process #
180. Meningeal symptoms do not include:
1) Brudzinsky's symptom.
2) rigidity of the occipital muscles.
3) lessage symptom
4) Kernig's symptom.
5) Neri's
symptom. #
181. Brain hemorrhage develops, as a rule:
1) at night during sleep
2) in the morning after sleep
3) during the day during the active activity period
4) during the day in peace
5) doesn't depend on the time of
day #

182. Transient disorders of the cerebral circulation include
1) transient ischemic attacks
2) subarachnoid hemorrhage
3) hemorrhagic stroke
4) minor stroke
5) ischemic stroke #
183. The cause of stroke in children is
1) abnormal development of brain vessels
2) persistent arterial hypertension
3) blood diseases
4) rheumatism
5) all of the above #
184. Damage to the nervous system by HIV infection is manifested in
1) reversible encephalopathy
2) acute recurrent meningitis
3) myelopathy
4) all of the above
5) true 1 and 3
#
185. In the classification of traumatic brain injury, there are:
1) mild concussion
2) moderate concussion
3) severe concussion
4) diffuse axonal brain damage
5) all answers are correct #
186. Anticonvulsants do not include:
1) phenobarbital
2) petrol station
3) dopamine
4) Finlepsinum
5) diphenin
#
187. With the introduction of sodium oxybutyrate, there is a danger:
1) hypertensive crisis
2) reducing blood pressure
3) respiratory depression
4) gastrointestinal disorders
5) cardiac arrhythmias #
188. Epileptiform patterns include everything except:
1) sharp waves.
2) spike waves.
3) acute-slow wave.
4) polyps.
5) alpha waves.
#
189. The child began to turn his head and eyes to the left, and then tonic tension with loss of consciousness. Name the type of seizure.
1) generalized tonic-clonic

2) atonic
3) reverse
4) absence
5) myoclonic. #

190. Primary purulent meningitis is caused by
1) staphylococcus
2) hemophilic bacillus
3) streptococcus and klebsiella
4) meningococcus
5) Pneumococcus and Pseudomonas
aeruginosa #

191. To determine the etiology of purulent meningitis, the pathogen is isolated from:
1) blood and nasopharynx
2) nasopharynx
3) only blood
4) of cerebrospinal fluid
5) nasopharynx and
feces #

192. In the cerebrospinal fluid: protein 1.2 g / l, cytosis 250, lymphocytes-70%, neutrophils-30%
are characteristic of:
1) meningitis
2) serous meningitis
3) purulent meningitis
4) subarachnoid hemorrhage
5) normal indicators #

193. In the cerebrospinal fluid: protein 0.4 g / l, cytosis 10, lymphocytes-85%, neutrophils -15%, flows out in a stream:
1) meningism
2) serous meningitis
3) purulent meningitis
4) subarachnoid hemorrhage
5) normal indicators #

194. Minor chorea is possible:
1) for tick-borne encephalitis
2) for rheumatism in children
3) with epidemic cerebrospinal meningitis
4) for post-operative encephalitis
5) for parkinsonism #

195. In the treatment of chorea use:
1) prednisone
2) penicillins
3) aspirin.
4) True 1 and 3
5) All answers are correct #

196. The patient had twitching of the left half of the face, hands, and then spread to the
entire torso. Name the type of seizure.
1) primary generalized
2) secondary-generalized

3) atonic
4) reverse
5) myoclonic. #
197. The patient periodically had short-term seizures with loss of consciousness and a sudden fall. Name the type of seizure.
1) primary generalized
2) secondary-generalized
3) atonic
4) reverse
5) myoclonic. #
198. First aid for an epileptic seizure at the prehospital stage is as follows
1) put the patient on the bed.
2) intubate the patient.
3) turn your head and torso to the side.
4) indirect heart massage.
5) artificial respiration. #
199. Primary serous meningitis is caused by
1) microbes
2) viruses
3) the simplest ones
4) mushrooms
5) etiology unknown #
200. Clinical symptoms of purulent meningitis include
1) rigidity of occipital muscles
2) kernig's symptom
3) Brudzinsky's symptom
4) none of the above
5) all of the above #
201. Meningeal syndrome includes all symptoms except:
1) painful ones.
2) general hyperesthesia.
3) kernig's symptom
4) symptom of lessage.
5) pathological reflexes. #
202. Cerebrospinal fluid is clear, colorless, pressure 190 mmHg, reaction Pandi +++, protein 1.67 g / l, cytosis 179, lymphocytes 70%, Wasserman reaction +++. What is the nature of the lesion?
1) neurobrucellosis.
2) neurosyphilis.
3) viral meningitis.
4) ischemic stroke.
5) myelitis
. #
203. Tick-borne encephalitis
1) it has autumn seasonality

2) it has an autumn-winter seasonality
3) it has summer seasonality
4) it has spring-summer seasonality
5) it doesn't have
seasonality #
204. The presence of tetraparesis, coarser expressed in the hands, a pronounced delay in psycho-speech development is characteristic of the form of cerebral palsy:
1) double hemiplegia
2) spastic diplegia
3) hemiplegic
4) hyperkinetitis.
5) atonic-astatic #
205. In children with cerebral palsy, the following forms are not distinguished:
1) hemiplegic
2) myopathic
3) hyperkinetic
4) atonic-astatic
5) double hemiplegic #
206. Clonic phase of generalized epileptic seizure:
1) it lasts 1-5 minutes
2) it is combined with a clear consciousness of the patient
3) accompanied by a sharp narrowing of the pupil
4) never accompanied by involuntary urination
5) accompanied by a loud cry or groan #
207. Signs of a generalized epileptic seizure are all but:
1) psycho-motor arousal
2) tonic-clonic seizures
3) miosis
4) loss of consciousness
5) postprincipal amnesia #
208. Anticonvulsants include the following drugs, except:
1) convulex
2) rivotril
3) depakin
4) iman
5) carbamazepine
#
209. The main criteria for the withdrawal of antibiotics for purulent meningitis are:
1) Normalizing the temperature
2) Rehabilitation of the CSF system
3) Blood normalization
4) Disappearance of meningeal syndrome
5) Patient's well-being #
210. What diseases can cause lymphocytic pleocytosis in the cerebrospinal fluid, except:
1) serous meningitis.
2) brain abscess.
3) encephalitis

4) brucellosis meningitis.
5) tuberculosis meningitis. #
211. The clinical picture of migraine is characterized by the following symptoms:
1) hereditary character
2) one-sidedness
3) throbbing pains
4) all answers are correct
5) all answers are incorrect #
212. In the hyperkinetic form of infantile cerebral palsy:
1) tic hyperkinesis prevails
2) tremor prevails
3) athetosis and torsion dystonia predominate
4) a combination of all the listed types
5) myoclonia prevails #
213. The presence of low muscle tone, delayed speech development, tremor is characteristic of the form of cerebral palsy:
1) double hemiplegia
2) spastic diplegia
3) hemiplegic
4) hyperkinetic
5) atonic-astatic #
214. Classical trigeminal neuralgia is characterized by
1) permanent pain syndrome
2) hypalgesia on the face in the area of innervation of the II and III branches of the V nerve
3) trigger points on the face
4) psychomotor agitation during an attack
5) all answers are correct #
215. What are the signs of a brain stem hemorrhage:
1) convulsions.
2) amaurosis.
3) pseudobulbar syndrome.
4) rigidity of the occipital muscles.
5) respiratory and heart rhythm disorders. #
216. When purulent meningitis of unknown etiology is used:
1) two broad-spectrum antibiotics
2) one antibiotic and sulfonamides
3) the amount of antibiotics used depends on your age
4) one antibiotic and gamma-globulin l5yu) cocorticoids #
217. Cerebrospinal fluid is clear, colorless, pressure 260 mm water, Pandey reaction++++, protein 3.75 g / l, cytosis
200. What syndrome is this characteristic of?
1) cell-protein dissociation
2) protein-cell dissociation
3) standard
4) intracranial hypertension

5) hydrocephalus
#
218. The most persistent syndrome in chorea is
1) hyperkinesis
2) coordination disorder
3) psychomotor agitation
4) dysarthria
5) muscle hypertonia #
219. Please indicate which of the following symptoms are characteristic of the chorea clinic:
1) frequent sore throats
2) headaches
3) horner's symptom
4) hyperkineses
5) paralysis
#
220. Migraine attacks are triggered by:
1) emotional and physical stress
2) sleep disturbance
3) some products
4) all of the above
5) none of the above #
221. In case of subarachnoid hemorrhage, the following is mandatory:
1) loss of consciousness
2) bloody CSF
3) mid-echo offset
4) contralateral hemiparesis
5) all answers are correct #
222. Characteristic diagnostic signs of subdural hematoma are obtained
1) with computed tomography
2) for electroencephalography
3) for spondylography
4) for rheoencephalography
5) for craniography #
223. Damage to the posterior cerebral artery is characterized by the presence of
1) homonymous hemianopsia
2) bitemporal hemianopsia
3) binasal hemianopsia
4) concentric narrowing of the visual fields
5) amaurosi
s #
224. The "light gap" is typical for:
1) subarachnoid hemorrhage
2) intraventricular hemorrhage
3) small-point parenchymal hemorrhage
4) epidural hematoma
5) intracerebral hematoma #
225. Contraindication to surgical treatment of hydrocephalus is:

1) hydroanencephaly
2) severe exhaustion
3) current inflammatory process
4) high protein content (more than 2 g / l) in the cerebrospinal fluid
5) all of the above #

226. A closed craniocerebral injury is:
1) skull base fracture with liquorrhea
2) skull base fracture with bleeding
3) soft tissue injuries prior to aponeurosis
4) tissue damage to the dura mater
5) there is no correct
answer #

227. A traumatic brain injury is considered penetrating if there are:
1) soft tissue damage before aponeurosis
2) linear fracture of the bones of the cranial vault
3) violation of the integrity of the dura mater
4) all answers are correct
5) all answers are incorrect #

228. Concussion is characterized by everything but
1) loss of consciousness
2) repeated vomiting
3) microfocal neurological symptoms
4) persistent focal symptoms
5) drowsiness in the first hours after injury #

229. For the treatment of myasthenic crisis are used
1) artificial ventilation of lungs
2) plasmapheresis
3) corticosteroids
4) anticholinesterase agents
5) all answers are correct #

230. For the treatment of cholinergic crisis, the following methods are used:
1) proserine
2) atropine
3) potassium preparations
4) Seduxenum
5) all answers are correct #

231. Classic migraines are characterized by everything except:
1) photophobia
2) hemicrania
3) nausea and vomiting
4) heredity is not burdened
5) frequency of occurrence. #

232. The appearance of photopsies in the form of luminous dots, sparks, lines at the beginning of a migraine attack indicates a lesion:
1) the retina
2) the optic nerve
3) the visual tract

4) visual crossroads
5) occipital cortex. #
233. Infantile cerebral palsy is:
1) hereditary disease
2) chromosomal pathology
3) a consequence of neuroinfection
4) outcome of perinatal encephalopathy
5) subcortical degeneration #
234. The presence of tetraparesis, coarser expressed in the legs, moderate delay of psycho-speech development is characteristic of the form of cerebral palsy:
1) double hemiplegia
2) spastic diplegia
3) hemiplegic
4) hyperkinetic
5) atonic-astatic #
235. With a small stroke, the clinical symptoms are:
1) saved for up to 6 hours
2) saved for up to 24 hours
3) disappear completely from 2 days to 3 weeks
4) disappear after 1 month
5) disappear after 3 months
#
236. Clinical signs of myasthenia gravis include:
1) Muscle atrophy
2) Pseudohypertrophy
3) Central paresis
4) Pathological muscle fatigue
5) Slowing down muscle relaxation after contraction #
237. In the treatment of myasthenia gravis, pathogenetic therapy is possible in the form of:
1) nephrectomy
2) splenectomies.
3) thyroidectomy.
4) thymectomy.
5) appendectomies.
#
238. Brain contusion is most characteristic of:
1) brain-wide symptoms
2) violation of vital functions
3) focal neurological symptoms
4) all answers are incorrect
5) all answers are correct #
239. For brain compression, it is typical:
1) the presence of a light gap
2) prolonged comatose state
3) presence of spastic tetraparesis
4) skull base fracture
5) linear fracture of the bones of the cranial vault.

#
240. The causative agents of AIDS-associated infections of the nervous system are
1) Mycobacterium tuberculosis
2) adenoviruses
3) candida
4) herpes simplex viruses
5) all of the above #
241. In case of transient ischemic attacks, the clinical symptoms are:
1) saved for up to 6 hours
2) saved for up to 24 hours
3) disappear completely from 2 days to 3 weeks
4) disappear after 1 month
5) disappear after 3 months
#
242. To diagnose vascular malformations of the brain, the following methods are used:
1) x-ray of the skull
2) ultrasound doppler imaging
3) electroencephalography
4) angiography
5) rheoencephalography
#
243. When a brain contusion is clinically present:
1) short-term loss of consciousness
2) there is no violation of vital functions
3) no meningeal symptoms
4) focal symptoms of brain damage
5) hypothermia
#
244. In case of concussion of the brain, the mandatory research method is:
1) general blood test, protein, electrolytes
2) computed tomography of the brain
3) magnetic resonance imaging
4) x-ray of the skull
5) lumbar puncture #
245. Myasthenia gravis affects:
1) central motor neuron
2) anterior horn motor neuron
3) peripheral nerve
4) neuromuscular synapse
5) muscles
#
246. To confirm the diagnosis of myasthenia gravis, it is necessary to conduct:
1) EEG
2) EMG
3) P-graph of the spine
4) Echo-EG
5) Prozerin test #
247. The gradual increase in muscle weakness of a particular muscle group during the day is characteristic of:

1) meningitis
2) myasthenia gravis
3) myotonia
4) amyotrophy
5) myositis
#
248. Anticholinesterase drugs include:
1) heparin
2) diacarb
3) proserine
4) aspirin
5) midocalm
#
249. Neuropathy of the first branch of the trigeminal nerve is characterized by:
1) reduced corneal reflex
2) taste disorder on the back third of the tongue
3) hypalgesia in the inner zone of the Seehlder
4) hypertrophy of the masticatory muscles
5) paralysis of facial muscles #
250. Anatomical area that is affected by myasthenia gravis:
1) central motor neuron
2) anterior horn motor neuron
3) peripheral nerve
4) neuromuscular synapse
5) muscles
#
251. Paroxysmal pain in one side of the face, sometimes with lacrimation, mucus discharge from the nose, salivation, occur when
1) neuritis of the facial nerve
2) trigeminal neuralgia
3) neuralgia of the glossopharyngeal nerve
4) nasolabial node neuralgia
5) neuralgia of the auricotemporal
nerve #
252. Increasing, persistent headaches of a bursting nature and the phenomenon of stagnation on the fundus are characteristic of
1) encephalitis
2) meningitis
3) brain tumors
4) multiple sclerosis
5) all answers are correct #
253. It does not lead to the development of cerebral artery thrombosis:
1) lowering blood pressure and slowing blood flow;
2) increased viscosity and aggregation;
3) increased blood coagulation activity;
4) increased blood fibrinolytic activity;
5) all the answers are wrong.
#
254. Foster-Kennedy syndrome is characterized by
1) atrophy and stagnation of the disc on the side of the tumor

2) atrophy and stagnation of the disc on both sides
3) disc atrophy on the tumor side
4) disc atrophy on the tumor side and stagnation on the opposite side
5) all the answers are not
correct #
255. Sciatic nerve neuropathy is characterized by:
1) Wasserman's symptom;
2) loss of the Achilles reflex;
3) loss of the knee reflex;
4) all of the above;
5) true 1) and 2
#
256. Lingual pharyngeal nerve neuralgia is characterized by:
1) attacks of shooting pains in the root of the tongue;
2) attacks of shooting pains in the tonsils;
3) presence of trigger zones in the root of the tongue.
4) all of the above;
5) all answers are incorrect #
257. Neurochemical changes in the subcortical nuclei in Parkinson's disease are characterized by:
1) reduced dopamine;
2) reduction of acetylcholine;
3) increased norepinephrine levels;
4) all of the above;
5) true 1) and 3).
#
258. Hyperkinesis in the form of involuntary worm-like movements in the fingers, which increases during movement and passes during sleep, is called:
1) chorea.
2) athetosis.
3) torsion dystonia;
4) ticks.
5) all the answers are wrong. #
259. For the defeat of the roots of the horse's tail is not typical:
1) severe root pain.
2) peripheral paralysis of the legs.
3) fecal incontinence.
4) urinary incontinence.
5) pathological reflexes #
260. When the tibial nerve is affected, the following occurs:
1) a "clawed" foot.
2) atrophy of the calf muscle;
3) lack of Achilles reflex;
4) when walking, the patient stands on his heels and cannot stand on his toes;
5) all of the above. #
261. Transient disorders of the cerebral circulation include
1) transient ischemic attacks
2) subarachnoid hemorrhage

3) hemorrhagic stroke
4) minor stroke
5) ischemic stroke #
262. Late forms of neurosyphilis occur in the form of:
1) gummas of the brain;
2) dorsal dryness;
3) progressive paralysis.
4) all of the above;
5) all the answers are wrong.
#
263. Mental disorders in AIDS are represented by the following symptoms:
1) reduced memory and criticism.
2) disorientation and hallucinations;
3) progressive dementia.
4) all of the above;
5) all the answers are wrong.
#
264. The most common cause of unilateral facial pain, accompanied by pronounced vegetative symptoms, is
1) pterygopalatine neuralgia
2) neuralgia of the glossopharyngeal nerve
3) cluster headaches
4) trigeminal neuralgia
5) true 1, 3, 4 #
265. The diagnosis of transient cerebrovascular accident is established if the focal symptoms undergo complete regression no later than:
1) 1 day.
2) 1 week;
3) 2 weeks.
4) 3 weeks.
5) 1 month
#
266. Acute tick-borne encephalitis is not characterized by
1) disease in the autumn-winter period
2) meningoencephalitic syndrome
3) increased intracranial pressure
4) flaccid paresis and paralysis of the shoulder girdle muscles
5) fever at the beginning of the disease #
267. Back pain can be caused by the following organic lesions:
1) ankylosing spondylitis
2) metabolic bone damage
3) metastases of tumors
4) tuberculosis spondylitis
5) all answers are correct #
268. Parkinson's disease can manifest itself in the following syndromes:
1) choreoathetoid;
2) akinetic-rigid;
3) vestibulo-cerebellar.

4) dentorubral;
5) all the answers are
correct. #
269. Compression neuropathy of the ulnar nerve (pinching syndrome in the elbow joint) is characterized by
1) weakness of II, III fingers of the hand
2) atrophy of the little finger elevation muscles
3) pain on the radial surface of the hand
4) pterygoid scapula
5) all the answers are not
correct #
270. Trigeminal neuralgia is characterized by:
1) pain in the root of the tongue
2) trigger and trigger zones
3) pain in the orbit and nasal cavity on one side
4) masticatory muscle atrophy
5) all answers are
correct #
271. Sagging of the foot down and inwards, step-like gait, inability to walk on the floor.
sensitive disorders on the outer surface of the lower leg and back of the foot, indistinct pain syndrome are observed when the nerve is affected:
1) femoral;
2) peroneal joint.
3) tibial region.
4) external skin femur;
5) true to 1
and 2. #
272. Note, what structures of the nervous system are affected by spinal dryness?
1) optic nerves and pyramidal pathways.
2) optic nerves and posterior pillars;
3) pyramidal and spinothalamic pathways;
4) posterior and anterior horns of the spinal cord;
5) basal ganglia. #
273. Please indicate which part of the nervous system is most often affected by polio?
1) subcortical nodes.
2) posterior horns of the spinal cord;
3) anterior horns of the spinal cord;
4) anterior roots of the spinal cord;
5) posterior roots of the spinal cord.
#
274. The most characteristic of the acute stage of epidemic encephalitis is the syndrome
1) ataxic
2) hyperkinetic
3) hypersomnia-ophthalmoplegic
4) convulsive
5) comatose #
275. Please indicate the following studies to confirm the diagnosis of subarachnoid hemorrhage:
1) CT scan.
2) EEG;
3) coagulogram.

4) CSF examination;
5) true 1) and 4)
#
276. Classic migraines are not characterized by:
1) photophobia
2) hemicrania
3) nausea and vomiting
4) absence of a hereditary factor
5) frequency of occurrence. #
277. To assess the effectiveness of epilepsy treatment, the following methods are used:
1) craniography;
2) computer tomography;
3) EEG;
4) Echo-EG.
5) angiography. #
278. The child periodically had a blank look. During the brief
No one answered to his name. There were no falls or cramps. Name the type of seizures:
1) generalized tonic-clonic;
2) absence;
3) complex partial;
4) jacksonian;
5) myoclonic. #
279. Clinical manifestations of occipital lobe tumor:
1) hemiparesis;
2) dysarthria.
3) anosmia;
4) hemianopsia.
5) sensitive ataxia. #
280. The diagnosis of neurosyphilis is confirmed by the following methods of studying
the cerebrospinal fluid, with the exception of
1) Wasserman reactions with three dilutions of CSF
2) THE REEF
3) the Takata-Ara colloid reaction
4) pale treponema immobilization reactions
5) there is no correct
answer #
281. Serous meningitis can cause the following pathogens with the exception of
1) Enteroviruses
2) lymphocytic choriomeningitis virus
3) pneumococcus
4) Mycobacterium tuberculosis
5) pale treponema #
282. The differential diagnosis of bacterial purulent meningitis and spontaneous subarachnoid hemorrhage is based primarily on
1) the presence of meningeal syndrome
2) increased cerebrospinal fluid pressure
3) the nature of changes in the cerebrospinal fluid

4) echo-encephaloscopy
5) rate of development of
symptoms #
283. A significant decrease in the level of sugar in the cerebrospinal fluid is characteristic of meningitis
1) flu-related
2) pneumococcal
3) mumps
4) tuberculosis
5) syphilitic #
284. The syndrome of pinching of the peroneal nerve in the popliteal fossa is characterized by
1) weakness of the plantar flexors of the foot
2) hypotrophy of the peroneal muscle group
3) hypalgesia of the inner surface of the lower leg
4) weakness of the quadriceps femoris
5) true 3 and 4
#
285. For the defeat of the vagus nerve are not characteristic
1) dysphonia
2) dysphagia
3) heart rhythm disorder
4) violation of taste
5) change in blood pressure #
286. Clinical signs of fibular nerve damage are
1) extensor paresis of the foot
2) hypesthesia on the inner surface of the lower leg
3) loss of the Achilles reflex
4) lapse of the knee reflex
5) true 3 and 4
#
287. Tibial nerve neuropathy is characterized by:
1) loss of the Achilles reflex
2) violation of sensitivity on the anterior surface of the lower leg
3) quadriceps paresis
4) extensor paresis of the foot
5) lapse of the knee reflex #
288. Where are the sympathetic neurons involved in the sympathetic innervation of the eye:
1) in the side horns C2-C4
2) in the side horns C4-C6
3) in the side horns of C8-Th1
4) in the side horns D3-D5
5) in the side horns S3-S5
#
289. What are the symptoms of Brown-Secard syndrome?
1) hemianesthesia of superficial sensitivity in the extremities opposite to the focus, segmental sensitivity disorder on the side of the focus
2) violation of deep sensitivity and motor disorders on the side of the lesion and superficial sensitivity – on the opposite side

3) violation of deep sensitivity while maintaining a superficial, sensitive ataxia.
4) pain and sensitivity disorders such as "socks" and "gloves"
5) violation of deep sensitivity and motor disorders on the opposite side of the lesion
#
290. Central paresis of the muscles of half of the tongue occurs when:
1) knee of the internal capsule on the affected side
2) posterior longitudinal bundle of the corticonuclear pathway on the contralateral side
3) medial loop
4) knee of the inner capsule on the contralateral side
5) flexig paths #
291. When tick-borne encephalitis is most often affected
1) subcortical nodes
2) the midbrain
3) midbrain
4) the cerebellum and its connections
5) cervical segments of the spinal cord and medulla oblongata #
292. Is Argyll Robertson's syndrome present?
1) for multiple sclerosis
2) for Parino's syndrome
3) for neurosyphilis
4) for alzheimer's disease
5) for alcoholism #
293. Lingual pharyngeal nerve neuralgia is characterized by
1) attacks of shooting pains in the root of the tongue and tonsils
2) bouts of shooting pains in the ear
3) presence of trigger zones on the face
4) swallowing disorder
5) dysarthria
#
294. For neuropathy of the facial nerve, it is typical
1) ptosis
2) hypesthesia of half the face
3) paresis of facial muscles in half of the face
4) divergent strabismus
5) chewing disorder

295. When the trigeminal (V) nerve is affected, the following occurs:
1) prosoparesis
2) violation of the sensitivity of the skin of the face
3) lacrimation
4) hearing loss
5) hyperacusis
#
296. Acute focal transverse myelitis at the lower thoracic level is not characterized by the presence of
1) lower paraplegia
2) wire-type sensitivity disorders

3) pelvic organ dysfunction
4) flaccid paraparesis
5) true 2 and 3
#
297. The most common picture of the fundus in ischemic stroke:
1) standard
2) retinal hemorrhages
3) retinal angiosclerosis
4) paling of the temporal halves of the optic nerve discs
5) true 2 and 4
#
298. Tumors that occur in AIDS patients but are extremely rare in the general population:
1) lymphocytic leukemia
2) metastatic lymphoma
3) primary sarcoma
4) Kaposi's sarcoma
5) lymphosarcoma
#
299. When meningitis and encephalitis is absolutely contraindicated administration
1) mannitol
2) glycerol
3) sodium oxybutyrate
4) actovegina
5) glucose solutions #
300. Clonic phase of generalized epileptic seizure:
1) lasts 1-2 minutes
2) it is combined with a clear consciousness of the patient
3) accompanied by a sharp narrowing of the pupil
4) never accompanied by involuntary urination
5) accompanied by a loud cry or groan #
301. The chronic form of lethargic encephalitis Economo is characterized by:
2) blindness.
3) hemiplegia;
4) paraplegia.
5) parkinsonism;
6) convulsive attacks. #
302. Myasthenia gravis affects:
2) cells of the anterior horns;
3) neuromuscular synapses.
4) sensitive ganglia;
5) cranial nerve nuclei;
6) sympathetic ganglia. #
303. Crucial in the diagnosis of meningitis is
1) acute onset of the disease with fever
2) acute onset of the disease with meningeal syndrome
3) changes in cerebrospinal fluid
4) infectious and toxic shock syndrome
5) all answers are correct

#
304. The term "diabetic crises" in patients with spinal dryness refers to
1) paroxysms of tachycardia
2) fluctuating blood pressure
3) paroxysms of pain of a tearing, shooting nature
4) episodes of profuse sweating and general weakness
5) all of the above #
305. Samples used for EEG testing to detect epiactivity:
1) taking nitroglycerin;
2) orthostatic test;
3) photostimulation, hyperventilation;
4) electric shock;
5) physical activity. #
306. In the case of ECHO-EG, the following are investigated:
1) total resistance of brain tissue to electric current;
2) bioelectric activity of the brain;
3) reflected ultrasound signal from the median structures of the brain;
4) bioelectric activity of muscle tissue;
5) evoked brain potentials. #
307. Clinical symptom of lumbosacral sciatica
1) rigidity of occipital muscles
2) Lasega symptom
3) horner's symptom
4) Brudzinsky's symptom
5) all listed #
308. The aura is characteristic of
1) hemorrhagic stroke
2) meningitis
3) encephalitis
4) epilepsy
5) all of the above #
309. Which of the following motor symptoms is not characteristic of Parkinsonism:
1) the "gear wheel" phenomenon ;
2) chorea.
3) propulsions.
4) a masked face.
5) shuffling gait. #
310. Choose from the following symptoms that are not typical for multiple sclerosis:
1) repeated tonic-clonic seizures;
2) multi-focal neurological symptoms;
3) relapses of retrobulbar neuritis of the optic nerves;
4) progressive bladder dysfunction;
5) remitting course of the disease.

#
311. The factor determining nerve damage in diphtheria polyneuropathy is
1) infectious and toxic
2) genetic
3) vascular
4) metabolic
5) all of the above #
312. Select symptoms that are not typical for myasthenia gravis:
1) weakness of the diaphragm and intercostal muscles;
2) dysphagia, dysphonia;
3) weakness of the oculomotor muscles;
4) muscle weakness;
5) drooping hands and feet. #
313. Violation of statics and gait in spinal dryness is caused by
1) flaccid leg paralysis
2) cerebellar ataxia
3) sensitive ataxia
4) reduced vision in diabetic atrophy of the optic nerves
5) diabetic arthropathy #
314. In the treatment of polyradiculoneuropathy, Guillain-Barre uses everything except:
1) muscle relaxants
2) plasmapheresis
3) corticosteroids
4) nonsteroidal anti-inflammatory drugs
5) anticholinesterase drugs #
315. Guillain-Barre polyneuropathy is characterized by all but
1) cranial nerve damage
2) sensitivity disorders
3) persistent bilateral pyramidal symptoms of the central type
4) ascending type of development of symptoms
5) true 1 and 2
#
316. Athetosis is:
1) slow worm-like hyperkinesis of the hand
2) throwing hyperkinesis of limbs
3) torso rotational hyperkinesis
4) stereotypical contraction of individual muscle groups
5) a type of epileptic seizure #
317. Signs of damage to the radial nerve are
1) "clawed brush"
2) inability to extend the hand
3) inability to remove the little finger
4) inability to bend the hand
5) causalgia
#
318. To confirm the diagnosis of hydrocephalus, we recommend:
1) electromyography

2) magnetic resonance imaging
3) electroencephalography
4) angiography
5) Doppler imaging
#
319. "Mosaic" of peripheral paralysis occurs when:
1) neurobrucellosis.
2) Neuro-aids.
3) neurosyphilis.
4) multiple sclerosis.
5) polio. #
320. Contraindication for magnetic resonance imaging is:
1) allergy to iodine
2) open traumatic brain injury
3) severe intracranial hypertension
4) presence of foreign metal bodies
5) true 3 and 4
#
321. In the diagnosis of neuromuscular diseases, it does not matter
1) electrophysiological examination
2) biochemical studies
3) otoneurological examination
4) muscle biopsy
5) true 1 and 2
#
322. The treatment of hypertensive encephalopathy does not include the appointment of:
1) central antihypertensive agents
2) anticholinesterase drugs
3) calcium antagonists
4) a-blockers
5) ACE inhibitors #
323. The most suitable remedy for the treatment of herpetic encephalitis:
1) cyclophosphamide
2) Amphotericin B
3) gamma-globulin
4) methotrexate
5) acyclovir #
324. Demyelinating diseases include polyneuropathy
1) Guillain-Barre
2) diabetic
3) porphyriasis
4) hypothyroidism
5) that's
right #
325. In the pathogenesis of Parkinson's disease, degeneration occurs:
1) eggshells
2) caudate nucleus
3) of the black substance
4) the cerebellum

5) true 3 and 4
#
326. For subarachnoid hemorrhage, do not use
1) analgesics
2) antifibrinolytics
3) calcium channel blockers
4) fibrinolytics
5) antihypertensive drugs #
327. Patients with trigeminal neuralgia complain
1) on constant aching pains that cover half of the face
2) on short paroxysms of intense pain, provoked by a light touch on the face
3) attacks of increasing intensity of pain in the eye, jaw, teeth, accompanied by increased lacrimation and salivation
4) for prolonged pain in the area of the orbit, corner of the eye, accompanied by impaired visual acuity
5) all answers are incorrect #
328. The rapid rate of loss of consciousness, severe respiratory disorders, increased blood pressure, bradycardia, purplish-cyanotic complexion, gormetonia are most characteristic of
1) embolic ischemic stroke
2) subarachnoid hemorrhage
3) parenchymal hemorrhage
4) brain abscess
5) ventricular hemorrhage #
329. Purulent meningitis is not caused
1) staphylococci
2) meningococci
3) pneumococci
4) koch sticks
5) streptococci #
330. The Marburg Pentad includes all of the above, except
1) nystagmus
2) chanted speech
3) muscle hypertension
4) intentional jitter
5) loss of abdominal reflexes and decoloration of temporal halves of optic nerve discs #
331. The pathogenesis of secondary encephalitis is based on
1) vascular reaction
2) interaction of a virus and a neuron
3) regional edema
4) circulatory hypoxia
5) infectious and allergic process #
332. It is not typical for a comatose state
1) reduced tendon reflexes
2) bilateral Babinsky's symptom
3) suppression of abdominal reflexes

4) inhibition of pupillary responses
5) targeted defensive responses #
333. Cholinergic crisis is not characterized by the presence of
1) mydriaza
2) hypersalivation
3) increased intestinal motility
4) myofibrillation
5) paroxysmal increase in muscle weakness #
334. In the pathogenesis of ischemic stroke plays a role
1) rupture of a brain vessel
2) occlusion of the cerebral vessel
3) changes in the composition of blood electrolytes
4) increased vascular wall permeability
5) all of the above #
335. For the treatment of multiple sclerosis, it is advisable to prescribe:
1) interferons;
2) corticosteroids;
3) plasmapheresis;
4) all of the above;
5) true 2) and 3).
#
336. What drug is used during a myasthenic crisis?
1) lasix
2) dibazol
3) cordiamine
4) proserine
5) eufillin #
337. The main sign of phantom pain syndrome is
1) hypesthesia in the limb stump
2) sensation of pain in a nonexistent part of the removed limb
3) swelling, cyanosis of the limb stump
4) all of the above
5) true 1 and 2
#
338. Which of the signs is characteristic of an ischemic stroke?
1) gradual ("flickering") appearance of symptoms;
2) the predominance of focal symptoms over general cerebral ones;
3) reduced blood flow through one of the brain arteries according to transcranial Dopplerography;
4) violation of the heart rhythm.
5) All answers are correct #
339. What remedy is not used to treat subarachnoid hemorrhage in case of aneurysm rupture?
1) surgical treatment;
2) coagulants and antifibrinolytic drugs;
3) sodium ethamzylate (dicinone);
4) heparin;

5) epsilon-aminocaproic acid. #
340. Research method confirming the diagnosis of multiple sclerosis:
1) Lange's reaction
2) hot bath test
3) evoked potentials
4) MRI in T2 mode
5) blinking reflex #
341. With meningovascular syphilis, the following is observed:
1) cognitive impairment
2) acute disorders of cerebral circulation
3) loss of deep sensitivity
4) all answers are correct
5) all answers are
incorrect #
342. Jackson's motor seizures are observed when the pathological focus is localized
1) frontal lobe
2) parietal lobe
3) central gyrus
4) gyrus of the Geshl
5) temporal lobe #
343. When tick-borne encephalitis is most often affected
1) subcortical nodes
2) the midbrain
3) midbrain
4) the cerebellum and its connections
5) cervical segments of the spinal cord and medulla oblongata #
344. Objective symptoms of meningeal syndrome include all of the following, except:
1) Kernig's symptom.
2) Babinsky's symptom;
3) rigidity of the occipital muscles;
4) symptoms of Brudzinsky (upper, middle, lower);
5) everythin
g is correct #
345. The causative agents of purulent meningitis can be:
1) meningococci;
2) pneumococci;
3) Mycobacterium tuberculosis;
4) enteroviruses;
5) true for 1)
and 2). #
346. Criteria for the diagnosis of multiple sclerosis:
2) young age of onset of the disease;
3) multi-focal CNS lesion;
4) remitting current;
5) on MRI, foci of demyelination;
6) all of the above. #

347. Movement disorders in multiple sclerosis can manifest themselves in the following syndromes, except:
2) Jackson's epilepsy;
3) central lower paraparesis.
4) central hemiparesis;
5) central tetraparesis.
6) all of the above. #
348. Compression neuropathy of the median nerve (carpal tunnel syndrome) is characterized by
1) weakness of IV, V fingers
2) "hanging" brush
3) atrophy of the thumb elevation muscles
4) inability to extend the hand
5) forearm muscle atrophy #
349. Clinical manifestations of myasthenia gravis include:
1) severe pain syndrome;
2) stiffness in the muscles;
3) lack of coordination;
4) pathological muscle fatigue
5) all of the above. #
350. Diphtheria polyneuropathy is not characterized by the presence of:
1) bulbar disorders
2) pelvic disorders
3) sensitivity disorders
4) accommodation violations
5) all of the above #
351. The main signs of subarachnoid hemorrhage are all but
1) brain-wide symptoms
2) protein-cell dissociation
3) meningeal symptoms
4) blood in the cerebrospinal fluid
5) there is no correct answer #
352. Computed tomography of the brain is contraindicated if a patient with brain damage
1) diagnosed with a myocardial infarction
2) there were signs of damage to the trunk
3) unconsciousness
4) pregnancy
5) metal prostheses are available #
353. A half-width lesion of the spinal cord (Brown-Secard syndrome) is characterized by central paralysis on the side of the focus in combination with:
1) with a violation of all types of sensitivity - on the opposite side.
2) with a violation of pain and temperature sensitivity on the side of the focus;
3) with a violation of deep sensitivity on the side of the focus and pain and temperature sensitivity-on the opposite side;
4) with violation of all types of sensitivity on the side of the hearth;

5) correct answers are 1 and
2. #
354. Cholinergic crisis is relieved by the introduction of:
1) mydocalma
2) proserina
3) atropine;
4) adrenaline rush.
5) norepinephrine.
#
355. Stages of dyscirculatory encephalopathy are distinguished on the basis of, except
1) degree of disability
2) changes in EEG and REG parameters
3) severity of mental disorders
4) degrees of increased blood pressure
5) severity of neurological and mental defect #
356. Lumbar puncture is performed between the spinous processes of the vertebrae: 2) L1-L2;
3) L2 – L3;
4) L3 – L4;
5) Th1-L1;
6) all the answers are
correct. #
357. The most effective method of pathogenetic therapy of trigeminal neuralgia is the appointment of:
2) analgesics;
3) antispasmodics;
4) anticonvulsants;
5) all of the above;
6) none of the above. #
358. Data are absolutely essential for the instrumental diagnosis of spontaneous subarachnoid hemorrhage
1) angiography
2) lumbar puncture
3) ultrasound doppler imaging
4) computed tomography
5) true 1, 2, 4 #
359. Duration of the "therapeutic window" for ischemic stroke
1) 12 hours
2) 24 hours
3) 5-10 hours
4) 3-6 hours
5) 2
hours #
360. According to CT scans of the brain, the definition of ischemic stroke is difficult:
1) in the first day after the development of a stroke
2) one week after stroke development
3) 1 month after stroke development
4) 6 months after stroke development
5) one year after the stroke #

361. The cause of pathological disorders in botulism is:
1) muscle tissue damage
2) neuromuscular transmission disorder
3) demyelination
4) inflammatory changes in the nerves
5) all of the above #
362. When settling the cerebrospinal fluid of a patient with tuberculous meningitis in 12-24 hours, it is possible to detect
1) opalescence
2) xanthochromia
3) fibrin film
4) yellow precipitation
5) the CSF does not change #
363. Severe myasthenia gravis affects:
1) cells of the anterior horns
2) neuromuscular synapses
3) sensitive ganglia
4) parasympathetic ganglia
5) sympathetic ganglia #
364. The clinical picture of dorsal dryness is characterized by all of the above, except
1) pain syndrome
2) sensitive ataxia
3) abnormal stop signs
4) reduced tendon reflexes
5) all answers are correct
#
365. Neuritis of the auditory and facial nerves, cerebellar symptoms on the affected side and hemiparesis on the opposite side are observed:
1) with a tumor of the cerebellum;
2) syringobulbia;
3) with a tumor of the frontal lobe;
4) with a tumor of the mosto-cerebellar angle;
5) with a tumor of the temporal lobe. #
366. Choose an anticonvulsant medication:
1) valproic acid;
2) cavinton;
3) stugeron;
4) prednisone;
5) proserine.
#
367. What tests are used to diagnose myasthenia gravis:
1) muscle biopsy;
2) ECG
3) proserin test;
4) CT scan of the brain;
5) fundus examination. #
368. Liquorodynamic tests include the following diagnostic tests, except

1) Kwekkenstedt
2) Poussepat
3) Stukeya
4) McClure-Aldrich
5) true 3 and 4
#
369. Pathogenetic therapy of trigeminal neuralgia is the appointment of
1) analgesics
2) antispasmodics
3) anticonvulsants
4) neuroleptics
5) none of the above #
370. Characteristic signs of causalgia are
1) intense burning pains that do not correspond to the innervation zone of the injured nerve
2) hypalgesia and paresthesia in the area of innervation of the injured nerve
3) unbearable pain with pressure on the nerve trunk
4) all listed above
5) none of the above #
371. The etiological factors of idiopathic epilepsy are
1) a gene mutation
2) birth trauma
3) hemolytic disease of newborns
4) traumatic brain injury
5) electrolyte imbalance #
372. To confirm the diagnosis of hydrocephalus, we recommend:
1) electromyography
2) magnetic resonance imaging
3) electroencephalography
4) angiography
5) Doppler imaging
#
373. In children with cerebral palsy, the following forms are not distinguished:
1) hemiplegic
2) myopathic
3) hyperkinetic
4) atonic-astatic
5) double hemiplegic #
374. Pathogenetic treatment of Guillain-Barre polyradiculoneuropathy includes:
1) appointment of cytostatics
2) plasmapheresis and corticosteroids
3) prescribing vitamins
4) prescribing nonsteroidal anti-inflammatory drugs
5) prescribing anticholinesterase drugs #
375. Echo-encephaloscopy is informative for tumor localization
1) in the temporal lobe
2) in the posterior cranial fossa
3) in the brain stem

4) in the occipital lobe
5) true 3 and 4
#
376. With an increase in the subarachnoid space, hydrocephalus is:
1) internal
2) external
3) reporting company
4) mixed
5) convexity system
#
377. Primary damage to the nervous system in AIDS is manifested by:
1) encephalopathy
2) myelopathy
3) acute circulatory disorders
4) true 1 and 2
5) all answers are
correct #
378. Myasthenic crisis is not accompanied by
1) paroxysmal increase in muscle weakness
2) inhibition of swallowing
3) hypersalivation, bradycardia
4) violation of vital functions
5) no correct answer #
379. The need for artificial ventilation of the lungs may occur in all of the listed neurological diseases, except
1) paroxysmal myoplegia
2) Guillain-Barre polyneuropathies
3) amyotrophic lateral sclerosis
4) myasthenia gravis
5) true 3 and 4
#
380. Damage to the posterior cerebral artery is characterized by the presence of
1) homonymous hemianopsia
2) bitemporal hemianopsia
3) binasal hemianopsia
4) concentric narrowing of the visual fields
5) amaurosi
s #
381. In the development of insufficient blood supply to the brain in atherosclerosis, all these factors play a role, except
1) stenosis of the main vessels in the neck
2) reducing perfusion pressure
3) reducing the elasticity of red blood cells
4) reducing the activity of the coagulation system
5) true 1 and 2
#
382. When performing computed tomography diagnostics of multiple sclerosis, it should be taken into account that plaques, as a rule, are not localized
1) in the periventricular white matter
2) in the subcortical white matter
3) in the brain bridge

4) in the cerebellum
5) true 1 and 2
#
383. Repeated subarachnoid hemorrhages occur:
1) With aneurysms of the brain vessels
2) With CSF hypertension
3) For rheumatic heart disease
4) When the tumor is deep localization
5) With arterial hypotension #
384. With amyotrophic lateral sclerosis, all of the listed formations are affected, except
1) neurons of the anterior horns of the gray matter of the spinal cord
2) neurons of the lateral horns of the gray matter of the spinal cord
3) pyramidal conductors in side ropes
4) nuclei of motor cranial nerves
5) neurons of the anterior central gyrus cortex #
385. Clinical forms of tick-borne encephalitis include all but
1) meningeal
2) polio prevention system
3) lethargic
4) polio-encephalitic
5) feverish #
386. Encephalitis is characterized by a combination of the following symptoms, except:
1) general infectious diseases
2) neurotic
3) general brain problems
4) focal areas
5) inflammatory changes in the cerebrospinal fluid #
387. Serous meningitis can cause the following pathogens with the exception of
1) enteroviruses
2) lymphocytic choriomeningitis virus
3) pneumococcus
4) Mycobacterium tuberculosis
5) pale treponema #
388. Characteristic diagnostic signs of subdural hematoma are obtained
1) with computed tomography
2) for electroencephalography
3) for spondylography
4) for rheoencephalography
5) for craniography #
389. For the treatment of post-traumatic headache caused by intracranial hypertension, all but
1) central antihypertensive agents
2) osmotic diuretics
3) glycerin
4) saluretics

5) true 3 and 4
#
390. In case of trigeminal neuralgia, which drug should be used to stop an attack?
1) Analgin
2) Carbamazepine
3) Vitamin B12
4) Sulfademitoxin
5) Tempalgin
#
391. Reverse convulsive seizures with a violent turn of the head in a healthy direction occur when the tumor is located in the next lobe of the brain
1) frontal
2) parietal
3) temporal lobe
4) occipital
5) equally often in any of the following #
392. The following symptoms: psychomotor agitation, paralysis of accommodation, tachycardia, increased salivary gland secretion are manifestations of overdose
1) atropine
2) proserina
3) acetylcholine
4) pilocarpine
5) nitroglycerin #
393. The source of infection in poliomyelitis is
6) only the patient
7) patient or virus carrier
8) small rodents infecting food
9) cows and sheep
10) pets allowed #
394. The symptom of "wedging" during lumbar puncture in a patient with a volumetric spinal process is characterized by
1) increased radicular pain with compression of the cervical veins
2) reduction of neurological symptoms with pressure on the anterior abdominal wall
3) increased radicular pain when bending the head to the chest
4) increased neurological symptoms after puncture
5) addition of infectious and toxic shock #
395. Primary damage to the nervous system in AIDS is manifested by:
1) encephalopathy
2) myelopathy
3) acute circulatory disorders
4) true 1 and 2
5) all answers are correct #
396. A symptom of a central lesion of the facial (VII) nerve is:
1) paresis of the masticatory muscles on the affected side
2) paresis of facial muscles on the affected side
3) isolated lowering of the corner of the mouth on the affected side

4) isolated lowering of the corner of the mouth on the contralateral side
5) paresis of the muscle that lifts the upper
eyelid #
397. There are the following variants of the course of multiple sclerosis, except:
1) remitting time
2) primary-progressive
3) secondary-progressive
4) subacute
5) progressive-recurrent #
398. What are the typical symptoms of cerebellar tumors:
1) total aphasia.
2) jackson's epileptic seizures.
3) hallucinations.
4) hemiparesis
5) static and dynamic ataxia. #
399. Lassega's symptom is characteristic of:
1) lumbosacral sciatica.
2) intercostal neuralgia.
3) cervical-brachial sciatica.
4) hemorrhagic stroke.
5) intramedullary tumor of the spinal cord #
400. The following causes can lead to an increase in intracranial pressure, except:
1) increased cerebrospinal fluid secretion
2) reduction of cerebrospinal fluid reabsorption
3) brain edema
4) volumetric intracranial processes
5) degeneration of subcortical structures
#
401. For spinal cord tumors, the following is typical for diagnosis:
1) presence of protein-cell dissociation in the cerebrospinal fluid
2) presence of cell-protein dissociation in the cerebrospinal fluid
3) the Foster-Kennedy symptom
4) all of the above is true
5) all of the above is not true #
402. With an increase in the subarachnoid space, hydrocephalus is:
1) internal
2) external
3) reporting company
4) mixed
5) convexity system
#
403. In case of concussion of the brain, bed rest is prescribed for:
1) 2-3 days
2) 3-5 days
3) 5-7 days
4) 8-10 days
5) up to 3
weeks #

404. If the brain is bruised, it is not typical:
1) the disturbance of consciousness is long and deep
2) convulsive seizures
3) pronounced focal symptoms
4) transient focal disorders
5) fractures of the skull
bones #
405. In case of concussion of the brain, a mandatory method of investigation is:
1) general blood test, protein, electrolytes
2) computed tomography of the brain
3) magnetic resonance imaging
4) x-ray of the skull
5) lumbar puncture #
406. For the instrumental diagnosis of spontaneous subarachnoid hemorrhage, the following data are absolutely necessary:
1) angiography
2) rheoencephalography
3) ultrasound doppler imaging
4) computed tomography
5) radioisotope scintigraphy #
407. Intracranial hypertension is characterized by a headache:
1) bursting character
2) stabbing nature in the occipital region
3) throbbing all over the head
4) pulsating character on one side
5) of a shooting nature #
408. Brain contusion is most characteristic of:
1) brain-wide symptoms
2) violation of vital functions
3) focal neurological symptoms
4) all answers are incorrect
5) all answers are correct #
409. One of the first symptoms of organic brain damage in decompensated hydrocephalus is:
1) hemiparesis
2) bulbar syndrome
3) paraparesis of the legs
4) ataxia
5) tetraparesis
#
410. To diagnose vascular malformations of the brain, the following methods are used:
1) x-ray of the skull
2) ultrasound doppler imaging
3) electroencephalography
4) angiography
5) rheoencephalography
#
411. When parenchymal neurosyphilis is observed

1) cognitive impairment
2) acute disorders of cerebral circulation
3) basal meningitis
4) hydrocephalus
5) all answers are correct #

412. With a small stroke, the clinical symptoms are:
1) saved for up to 6 hours
2) saved for up to 24 hours
3) disappear completely from 2 days to 3 weeks
4) disappear after 1 month
5) disappear after 3 months
#

413. What are the signs of a brain stem hemorrhage:
1) convulsions.
2) amaurosis.
3) pseudobulbar syndrome.
4) rigidity of the occipital muscles.
5) respiratory and heart rhythm disorders. #

414. Ophthalmoplegic migraines are not characterized by:
1) Photo sessions
2) Oculomotor nerve paresis
3) Hemianopsia
4) Paresis of facial muscles
5) Scotomas
#

415. Tuberculosis meningitis is not characterized by:
1) muddy cerebrospinal fluid.
2) subacute onset of the disease.
3) reducing the level of sugar in the cerebrospinal fluid.
4) increased blood sugar levels in the cerebrospinal fluid.
5) loss of fibrin film in the cerebrospinal fluid
#

416. A traumatic brain injury is considered penetrating if there are:
1) soft tissue damage before aponeurosis
2) linear fracture of the bones of the cranial vault
3) violation of the integrity of the dura mater
4) all answers are correct
5) all answers are incorrect #

417. Concussion is characterized by everything but
1) loss of consciousness
2) repeated vomiting
3) microfocal neurological symptoms
4) persistent focal symptoms
5) drowsiness in the first hours after injury #

418. A brain injury is not characterized by:
1) brain-wide symptoms;
2) focal neurological symptoms;
3) absence of focal neurological symptoms;

4) offset M-echo signal.
5) the presence of blood in
the cerebrospinal fluid. #
419. Identify the main cause of brain compression:
1) intracranial hematomas
2) closed brain injuries
3) fractured skull bones
4) open brain injuries
5) all of the above #
420. When the brain lobe is damaged, what sensitivity disorder is observed?
1) parietal
2) occipital
3) the cerebellum
4) frontal
5) temporal
lobe #
421. What type of fractures of the skull bones show signs of compression of the brain?
1) with an impression fracture
2) linear fracture
3) open fracture
4) closed fracture
5) for all of the above #
422. When and with what spinal cord injuries does tetraplegia and tetraanesthesia
develop?
1) if the cervical region is damaged
2) if the lumbar region is damaged
3) if the sacral region is damaged
4) if the thoracic region is damaged
5) if the coccygeal region is damaged #
423. What segments form the brachial plexus ?
1) C5-C8, segments
2) C1-C6, segments
3) C7-C8-D5, segments
4) D 5 - D 6 segments
5) D 7-D 12segments
#
424. What morphological changes occur at the peripheral end of the nerve after its cutting?
1) Wallerian Rebirth
2) hypertrophy of the nerve trunk
3) nerve trunk hemorrhage
4) nerve trunk growth
5) all listed #
425. Determine what morphological changes occur with a concussion?
1) small-point hemorrhages in the brain substance
2) hemorrhage in the substance of the brain
3) crushing of the brain substance

4) destruction of the structure of the brain substance
5) all of the above #
426. In what pathology is protein-cell dissociation observed?
1) for spinal cord tumors
2) for meningoencephalomyelitis
3) with a concussion of the brain
4) with a spinal cord injury
5) with a brain contusion #
427. In what pathology of the brain are changes in the Turkish saddle observed?
1) for pituitary tumors
2) for hydrocephalus
3) with tumors of the cerebellum
4) with a concussion of the brain
5) for frontal lobe tumors #
428. What tumors develop from the roots of the spinal cord?
1) neurinomas
2) angioreticulomas
3) astrocytomas
4) meningiomas
5) oligodendromes
#
429. When fractures of which bones of the skull are observed liquorrhea from the nose and ears?
1) temporal and ethmoid
2) parietal
3) frontal and parietal areas
4) palatine and maxillary
5) occipital #
430. What is a contraindication to lumbar puncture?
1) cerebellar hematoma
2) subarachnoid hemorrhage
3) concussion of the brain
4) mild brain contusion
5) all of the above #
431. Neuritis of the auditory and facial nerves, cerebellar symptoms on the affected side and hemiparesis on the opposite side are observed:
1) with a cerebellar tumor
2) syringobulbia
3) with a frontal lobe tumor
4) with a tumor of the bridge-cerebellar angle
5) with a temporal lobe tumor #
432. A complete traumatic rupture of the peripheral nerve is characterized by
1) pain during percussion along the nerve path below the injury site
2) paresthesia in the area of innervation of the damaged nerve
3) flaccid paralysis and anesthesia in the area of innervation of the damaged nerve
4) true 1 and 2
5) all of the above is true

#
433. The development of hemiparesis in traumatic brain injury indicates
1) about concussion of the brain
2) about a brain injury
3) about intracranial hypertension
4) all the answers are not correct
5) true 2, 3, and
4 #
434. Cerebral complications of an epidural hematoma are
1) brain edema
2) brain compression
3) brain dislocation
4) violation of the blood-brain barrier
5) all of the above #
435. Syndrome characteristic of multiple sclerosis:
1) retrobulbar neuritis
2) sympathoadrenal crisis
3) Kozhevnikovskaya epilepsy
4) Jackson's epilepsy
5) true 3 and 4
#
436. Post-traumatic syndrome of normotensive hydrocephalus (Hakim-Adams) is manifested by a triad of symptoms
1) headache, memory loss, disorientation
2) headache, decreased vision. Ataxia
3) gait disorder, urinary incontinence, dementia
4) dizziness, astasia-abasia, sensory ataxia.
5) headache, dizziness, memory loss #
437. What is not a characteristic sign of a cerebellar tumor?
1) static ataxia.
2) chanted speech.
3) intentional tremor.
4) adiadochokinesis;
5) apraxia #
438. What symptom is not typical for a concussion?
1) loss of consciousness;
2) vomiting;
3) aphasia;
4) dizziness;
5) headache. #
439. For brain injuries, bed rest is prescribed:
1) 3-5 days
2) 7-10 days 3) 10-15 days 4) 15-20 days
5) for 30 days
#
440. In what type of traumatic brain injury is there a "light" gap?
1) subarachnoid hemorrhage;
2) concussion of the brain;

3) brain contusion;
4) epidural hematoma;
5) intracerebral hemorrhage. #
441. The acute period of concussion is not characterized by:
1) nausea, vomiting
2) headache
3) dizziness
4) persistent loss of consciousness
5) vegetative-vascular disorders #
442. A patient with a hemorrhagic stroke is recommended for urgent consultation:
1) a vascular surgeon.
2) a neurosurgeon.
3) a cardiologist.
4) a rehabilitation specialist.
5) the
therapist. #
443. With the expansion of the cerebral ventricles and subarachnoid space, hydrocephalus is:
1) internal
2) external
3) reporting company
4) mixed
5) convexity system
#
444. With an intramedullary tumor, it is noted (according to the law of the eccentric arrangement of nerve fibers):
1) radicular pain and paresthesia.
2) violation of deep sensitivity on the side of the tumor.
3) ascending type of sensitivity disorder on the affected side.
4) descending type of sensory impairment on the affected side.
5) impaired sensitivity on the opposite side of the tumor. #
445. Indications for surgical treatment of a herniated disc are the following, except for:
1) persistent pain syndrome.
2) paresis of the extremities.
3) pelvic organ dysfunction.
4) MRI-diagnosed disc prolapse without clinical manifestations
5) paresis of the extremities, loss of pain, temperature and deep sensitivity. #
446. Neurosurgeon's tactics for acute subdural intracranial hematoma:
1) cranial trepanation with removal of intracranial hematoma.
2) active dehydration therapy.
3) vasodilator and hormone therapy.
4) dynamic monitoring of neurological status.
5) true 2 and 3
#
447. An intramedular tumor is characterized by:
1) there is a simptomalikvornogolochka.
2) lack of symptomalikornogolochka.

3) radicular pain and paresthesia.
4) violation of deep sensitivity on the side
5) true 2, 3, and
4 #
448. What research methods are indicated for spinal cord injuries?
1) pneumoencephalography.
2) spondylography.
3) cerebral angiography.
4) ECHO-EG.
5) electromyoneurography #
449. In a patient with compression of the jugular veins, radicular pain increases and paresthesias occur in the lower thoracic region on the right. What is the name of this symptom?
1) Brudzinsky district.
2) Neri.
3) Lermitta.
4) Liquor pump.
5) Lessage
#
450. A 40 - year-old patient's behavior changed over the course of a year-she became sluggish, indifferent to others, made mistakes at work, and started all household chores. Over the past 2 - 3 months, she became untidy, did not control the function of the pelvic organs sufficiently. What localization of the process are we talking about?
1) parietal lobe.
2) the frontal lobe.
3) occipital lobe.
4) the temporal lobe.
5) temporal-occipital region #
451. Nasal and ear liquorrhea is evidence of:
1) brain abscess.
2) fractured skull base.
3) supratentorial tumors.
4) herniated lumbar discs.
5) fractured cranial vault #
452. Pathoanatomical changes in diffuse axonal brain damage:
1) axon breaks
2) microscopic breaks in the area of the corpus callosum
3) rupture in the area of the brainstem-spinal cord junction
4) contusion of the frontal lobe
5) crushing of brain matter #
453. All factors lead to compression, displacement, and deformity of the brain, except for:
1) intracranial hematomas.
2) areas of contusion.
3) pneumocephaly.
4) fractures of the base of the skull.
5) brain tumors #
454. Unilateral deafness occurs in:
1) with tumors of the cerebellum.

2) for midbrain tumors.
3) for cranio-vertebral tumors.
4) with neurinoma of the VIII nerve.
5) for frontal lobe tumors #

455. Compression neuropathy of the ulnar nerve (pinching syndrome in the elbow joint) is characterized by
1) weakness of II, III fingers of the hand
2) atrophy of the little finger elevation muscles
3) pain on the radial surface of the hand
4) pterygoid scapula
5) atrophy of the thumb elevation muscles #

456. Spinal cord injury is characterized by:
1) Argyll-Robertson syndrome
2) violation of sensitivity by wire type
3) sensory disturbances in the distal extremities
4) swallowing disorder
5) all answers are correct #

457. Open craniocerebral injury refers to trauma
1) with a bruised soft tissue wound without aponeurosis damage
2) with fractured skull bones, aponeurosis damage
3) with a fracture of the bones of the cranial vault without damage to the aponeurosis
4) with a fracture of the bones of the base of the skull without liquorrhea
5) with a fractured skull #

458. Characteristic diagnostic signs of subdural hematoma are obtained
1) with computed tomography
2) for electroencephalography
3) for spondylography
4) for rheoencephalography
5) for craniography #

459. When only the cerebral ventricles are dilated, hydrocephalus is:
1) internal
2) external
3) reporting company
4) basal
5) convexity system
#

460. What research method is most informative in the acute stage of traumatic brain injury?
1) Computed tomography
2) EEG
3) angiography
4) fundus examination
5) RE
G #

461. Spondylography is not informative if the spinal cord tumor is localized
1) intramedullary
2) subdural

3) an epidural
4) epidural-extravertebral
5) true 2 and 3
#
462. Which of the paraclinical methods are important for the diagnosis of brain tumors:
1) electroencephalography
2) magnetic resonance imaging
3) lumbar puncture.
4) Echo-encephaloscopy
5) R-gram of the
skull. #
463. Spinal cord tumors are characterized by:
1) presence of protein-cell dissociation in the cerebrospinal fluid
2) presence of cell-protein dissociation in the cerebrospinal fluid
3) the Foster-Kennedy symptom
4) all of the above is true
5) all of the above is not true #
464. The most likely complication of posterior cranial fossa ependymoma is:
1) pinching of the brain in the large occipital foramen.
2) embolism originating from the tumor.
3) occlusion of the vessel by a tumor.
4) hemorrhagic necrosis of the tumor.
5) all of the above #
465. Positive diagnostic signs of subarachnoid hemorrhage can be obtained:
1) for lumbar puncture
2) for angiography
3) for electroencephalography
4) for rheoencephalography
5) for echo-encephalography
#
466. The main signs of subarachnoid hemorrhage are all but
1) sudden start
2) brain-wide symptoms
3) protein-cell dissociation
4) meningeal symptoms
5) blood in the
cerebrospinal fluid #
467. In occlusal hydrocephalus, the following is contraindicated:
1) bone-plastic surgery of the skull.
2) decompression trepanation of the skull.
3) puncture of the lateral ventricles.
4) lumbar puncture.
5) true 1 and 2
#
468. To detect pathological processes in the posterior cranial fossa, it is advisable to apply
1) computer tomography
2) contrast-enhanced computed tomography
3) magnetic resonance imaging

4) positron emission tomography
5) all methods are equally informative #
469. Intracranial hypertension is not characterized by:
1) diffuse bursting headache
2) non-relieving vomiting
3) amaurosis
4) edema of the optic nerve discs
5) vertigo #
470. Which of the listed types of traumatic brain injury does not detect an admixture of blood in the cerebrospinal fluid?
1) epidural hematoma;
2) subarachnoid hemorrhage;
3) concussion of the brain;
4) subdural hematoma.
5) brain contusion. #
471. In the treatment of concussion in the acute period, the following methods are used:
1) antihistamines
2) hemostatic drugs
3) dehydrating drugs
4) biostimulants
5) true 1 and 3
#
472. A closed craniocerebral injury is:
1) skull base fracture with liquorrhea
2) skull base fracture with bleeding
3) soft tissue injuries prior to aponeurosis
4) tissue damage to the dura mater
5) there is no correct
answer #
473. Brain contusion is most characteristic of:
1) brain-wide symptoms
2) violation of vital functions
3) focal neurological symptoms
4) all answers are incorrect
5) all answers are correct #
474. For brain compression, it is typical:
1) the presence of a light gap
2) prolonged comatose state
3) presence of spastic tetraparesis
4) skull base fracture
5) linear fracture of the bones of the cranial
vault #
475. Acute disorders of cerebral circulation include:
1) cerebral vascular crisis
2) hemorrhagic stroke
3) ischemic stroke
4) transient cerebral circulatory disorders
5) all listed above

#
476. Focal symptoms characteristic of right middle cerebral artery thrombosis:
1) sensory aphasia
2) left-sided central hemiparesis
3) swallowing disorders
4) right-sided hemihypesthesia
5) vomit
ing #
477. Diffuse axonal brain damage in traumatic brain injury is characterized by
1) prolonged comatose state from the moment of injury
2) development of coma after the "light" period
3) no loss of consciousness
4) short-term loss of consciousness
5) sleep disorders #
478. Etiology of intracerebral hemorrhage:
1) arterial hypotension;
2) occlusion of the internal carotid artery;
3) aneurysm of the brain vessels;
4) atrial fibrillation;
5) cardioembolism
#
479. Foster-Kennedy syndrome is characterized by
1) atrophy and stagnation of the disc on the side of the tumor
2) atrophy and stagnation of the disc on both sides
3) disc atrophy on the tumor side
4) disc atrophy on the tumor side and stagnation on the opposite side
5) disk stagnation on both sides
#
480. An intramedullary spinal tumor is characterized by the presence of
1) segmental dissociated sensitivity disorder
2) radicular position pains
3) early blockage of the subarachnoid space
4) x-ray symptom of Elsberg-Dyke
5) all of the above #
481. Muscle relaxants include:
1) Mildronate.
2) Mukaltin.
3) Mannitol.
4) Mydocalm.
5) Melepsin.
#
482. A concussion diagnosis cannot be made if you have:
1) short-term loss of consciousness
2) nausea, vomiting
3) antegrade amnesia
4) headache
5) persistent hemiparesis
#
483. On angiography, vascular-free zones are noted in the following diseases:

1) hydrocephalus
2) brain tumors
3) intracerebral hematoma
4) concussion of the brain
5) The arnold chiari anomaly #

484. Spinal tumor of epidural localization is characterized by
1) radicular syndrome
2) CSF push symptom
3) wedge symptom
4) Brudzinsky's symptom
5) meningeal syndrome #

485. Characteristic diagnostic signs of subdural hematoma are obtained
1) with computed tomography
2) for electroencephalography
3) for spondylography
4) for rheoencephalography
5) for craniography #

486. In the case of ECHO-EG, the following are investigated:
1) total resistance of brain tissue to electric current;
2) bioelectric activity of the brain;
3) reflected ultrasound signal from the median structures of the brain;
4) bioelectric activity of muscle tissue;
5) evoked brain potentials. #

487. The most common cause of Horner's syndrome is?
1) brain stem damage
2) spinal cord injury
3) peripheral involvement of sympathetic pathways from C8-D1 segments
4) peripheral involvement of sympathetic pathways from D8-D10 segments
5) lesion of the spinal cord roots #

488. With a tumor of the right hemisphere of the cerebellum, the patient deviates when walking:
1) towards the hearth
2) in the opposite direction
3) evenly in both directions
4) not rejected
5) leans forward, backward #

489. Pituitary tumor, squeezing the chiasm, causes the development of:
1) binasal hemianopsia
2) bitemporal hemianopsia
3) homonymous hemianopsia
4) blindness in one eye
5) all of the above is not correct #

490. Penetrating is called a traumatic brain injury
1) with a bruised soft tissue wound
2) if the aponeurosis is damaged
3) with a fracture of the bones of the cranial vault

4) if the dura mater is damaged
5) in case of soft tissue damage and fractured skull bones #
491. When a concussion occurs, the following does not occur:
1) dilation or constriction of the pupils
2) long sopor
3) transient oculomotor disorders
4) nystagmus
5) tendon hyperanisoreflexia #
492. The development of hemiparesis in traumatic brain injury indicates
1) about concussion of the brain
2) about a brain injury
3) about intracranial hypertension
4) about subarachnoid hemorrhage
5) about diffuse axonal damage #
493. Focal symptoms of an epidural hematoma are
1) constriction of the pupil on the side of the hematoma
2) dilation of the pupil on the opposite side
3) hemiparesis on the side of the hematoma
4) dilation of the pupil on the side of the hematoma and hemiparesis on the opposite side
5) dilation of the pupil on the side of the hematoma, hemiparesis on the side of
the hematoma #
494. If after a traumatic brain injury, rigidity of the occipital muscles and photophobia develop in the absence of focal symptoms, then the diagnosis is most likely
1) concussion of the brain
2) subarachnoid hemorrhage
3) brain contusion
4) intracranial hematoma
5) skull base fracture #
495. What lipids accumulate in cells in Niemann-Pick disease:
1) Sphingolipids.
2) Cerebrolizides.
3) Gangliosides
4) LDL. #
496. Autosomal recessive inheritance differs in that
1) The ratio of healthy and sick family members is 1: 1
2) The disease is not related to blood relations
3) Parents of the first identified patient are clinically healthy
4) True a) and b)
5) True b) and
c) #
497. Trisomy of 21 pairs of chromosomes:
1) Down syndrome.
2) Shershevsky-Turner syndrome.
3) Klinefelter syndrome
4) Takayasu's
disease. #

498. Tremor prevails in the tremulous and tremor-rigid forms of Wilson - Konovalov hepatocerebral dystrophy
1) Rest in the hands
2) Intentional in the hands
3) Clapping in the hands
4) Statodynamic in the torso
5) True c) and
d) #
499. Siblings are:
1) All relatives of proband
2) Uncle probanda
3) Proband's parents
4) Brothers and sisters of
Probanda #
500. Duplication is:
1) Loss of a section of the chromosome.
2) A copy of a section of the chromosome.
3) Doubling a section of the chromosome
4) A change in a section of the
chromosome. #
501. Indications for prenatal karyotyping of the fetus are:
1) the presence of phenylketonuria in one of the parents
2) carrier of a balanced chromosomal rearrangement in one of the parents
3) high levels of alpha-fetoprotein in the mother's blood
4) the presence of diabetes in one of the
parents #
502. Clinical manifestations of Niemann-Pick disease:
1) Cardiomegaly, amaurosis, psychosis.
2) Parkinsonism.
3) Hepatosplenomegaly, central paralysis.
4) Hepatosplenomegaly, oculomotor and cerebellar disorders, catalepsy. #
503. Programmed cell death is called:
1) Apoptosis
2) Necrosis
3) Degeneration
4) Chromatolysis
5) Mutation
#
504. What is the probability of giving birth to a sick child by a woman who has a sick son and brother with hemophilia:
1) 25%
2) 50%
3) 100%
4) Close to 0%
#
505. The most typical location of telangiectasias in Louis-Barre syndrome:
1) Eye mucosa.
2) Skin of the palms.
3) Skin of the feet.
4) Inner thigh skin #

506. The phenomenon of anticipation is:
1) Inheritance of the disease from the grandfather.
2) Covert manifestation of the disease.
3) Manifestation of the disease at a younger age.
4) Manifestation of the disease at a later age. #
507. The haploid set contains the following cells:
1) Neurons
2) Hepatocytes
3) Zygotes
4) Gametes
5) Epithelial cells #
508. The diagnosis of Duchenne muscular dystrophy is based on:
1) Characteristic neurological symptoms, ultrasound of internal organs
2) Characteristic neurological symptoms, time of onset and nature of the course, determination of serum creatine phosphokinase levels
3) Examination by an optometrist, neurologist, and ultrasound data
4) Results of histological examination #
509. The 1960 Denver Classification is based on the following chromosome parameters:
1) Size, shape, and centromeric index.
2) Ability to stain with fluorescent substances.
3) Telomere and mRNA size.
4) The shape of the" X "and" Y " chromosomes. #
510. Which of the following is considered disraphy:
1) Changes in the shape of the skull, facial asymmetry, chest and spine abnormalities.
2) Hair and eye discoloration, skin depigmentation (vitiligo).
3) Abnormalities in the development of the intestines, and the genitourinary system, urachus.
4) Tall, tetrad and pentadaFallo. #
511. Penetrance is:
1) Frequency of gene expression in traits.
2) Frequency of manifestations of recessive genes
3) Frequency of manifestations of dominant genes.
4) Frequency of manifestations of X-linked genes. #
512. Where the Kaiser-Fleischer rings are discovered.
1) On the oral mucosa.
2) In the cornea of the eye.
3) In the liver at autopsy.
4) On the fundus of the eye #
513. In the treatment of a typical form of Huntington's chorea, it is usually used:
1) Dopamine-containing drugs
2) Neuroleptics
3) Dopamine agonists
4) Anticholinergic drugs
5) True 1) and 4) #

514. Characteristic brain damage in tuberous sclerosis:
1) Cystic degeneration, atrophy, and subatrophy of the frontal lobes.
2) Hydrocephalus, porencephaly, pachygyria.
3) Tubers of the brain gyrus, tubers of the ependyma.
4) Astrocytomas and neurinomas of cranial nerves V and VIII. #
515. Duchenne myopathy is associated with a mutation of the gene responsible for the synthesis of the enzyme:
1) Galactokinases
2) Dehydropteridine Reductase
3) Dystrophin
4) Ceruloplasmin #
516. Cordocentesis is:
1) Umbilical cord tissue biopsy
2) Method for obtaining amniotic fluid
3) Method of obtaining chordal tissue
4) Method of obtaining umbilical cord blood from the fetus #
517. What accumulates in parenchymal organs in hepatocerebral dystrophy:
1) Zinc.
2) Ceruloplasmin.
3) Copper.
4) Bilirubin. #
518. Type of inheritance of Reglinghausen's disease-neurofibromatosis I:
1) Autosomal dominant
2) Autosomal recessive
3) Linked to the X chromosome.
4) Linked to the Y chromosome. #
519. A sporadic case of a hereditary disease is:
1) First-time patient seeking medical advice
2) First case of an autosomal dominant or chromosomal disease in the family tree
3) The only case of this hereditary disease in the pedigree
4) All answers are correct
5) No correct answer #
520. Pseudohypertrophy is observed in the following forms of progressive muscular dystrophy
1) duchenne type
2) the Becker-Kinnear type
3) Landuzi-Dejerina type
4) all listed #
521. What disease belongs to spinal amyotrophy:
1) Kugelberg-Welander disease
2) Takayasu's disease.
3) Duchenne's disease.
4) Gaucher's disease. #
522. The most common craniofacial dysmorphia in Zellweger syndrome:
1) Macrognathia, tower skull, "wolf's mouth", slanted eyes.

2) Protruding forehead, hypoplasia of the brow arches, epicanthus, wide and low back of the nose, micrognathia .
3) Prognathia, craniostenosis, skin folds on the ears.
4) Craniofacial dysmorphia does not occur in this pathology. #

523. A karyotype is a set of features of a chromosome set(complex) cells defined by:
1) The number of sex chromosomes
2) The shape of the chromosomes
3) The structure of chromosomes
4) All of the above
5) True a) and b) #

524. Most familial forms of amyotrophic lateral sclerosis are inherited by:
1) Autosomal dominant type.
2) Autosomal recessive type.
3) Heterogeneous type.
4) Linked to the X chromosome. #

525. What products belong to the red list of "food traffic lights" for the treatment of phenylketonuria :
1) Red bell pepper, tomatoes, beets.
2) fruit salad, butter, sugar, eggplant.
3) Nuts, eggs, meat, fish, cottage cheese.
4) Milk, kefir, rice, potatoes. #

526. Parkinson's disease affects:
1) Palidar system nuclei
2) Striar system nuclei
3) Inner capsule
4) The cerebellum
5) Posterior pillars of the spinal cord #

527. Neurofibromas in Recklinghausen's disease can be localized:
1) Along the course of the peripheral nerves
2) In the spinal canal along the course of the roots
3) Intracranial along the cranial nerves
4) On any of the specified sections #

528. The type of inheritance in Thomson's myopathy is characterized as
1) autosomal dominant
2) autosomal recessive
3) sex-linked (via the X chromosome)
4) true a) and b)
5) none of the above #

529. Phacomatosis complex diseases affecting:
1) Reproductive system, exocrine glands.
2) Musculoskeletal system, lungs, genitourinary system.
3) Bones, muscles, and the blood system.
4) Skin, eyes, nervous system, and internal organs. #

530. Diagnostic method for chromosomal diseases:
1) Mapping.
2) Karyotyping.
3) Chrome plating.
4) Gene modification. #
531. An epicant is:
1) Fused eyebrows
2) Wide-set eyes
3) Vertical skin fold at the inner corner of the eye
4) Narrowing of the ocular
fissure #
532. A study of the blood serum of a patient with hepatocerebral dystrophy reveals:
1) Increased ceruloplasmin levels and hypercupremia
2) Decreased ceruloplasmin levels and hypercupremia
3) Increased ceruloplasmin levels and hypocupremia
4) Decreased ceruloplasmin levels and hypocupremia #
533. Clinical signs of ataxia-telangiectasia (Louis-Bar syndrome):
1) Paraparesis, pelvic disorders, intestinal dyskinesia .
2) Vestibular ataxia, telangiectasia, hyperkeratosis.
3) Sensitive ataxia, telangiectasia, hyperthyroidism.
4) Cerebellar ataxia, telangiectasia, tendency to infections. #
534. People with Robertson translocations:
1) Phenotypically healthy
2) They have the Down syndrome phenotype.
3) They have the Virchow syndrome phenotype.
4) They have the Transconi syndrome
phenotype. #
535. An important protective property of peroxisomes is the ability to:
1) Neutralize toxins and free radicals.
2) Dispose of glucose
3) Synthesize T cells.
4) Dispose of follats. #
536. A sporadic case of a hereditary disease is:
1) First-time patient seeking medical advice
2) First case of an autosomal dominant or chromosomal disease in the family tree
3) The only case of this hereditary disease in the pedigree
4) All answers are correct
5) No correct answer #
537. What form of syringomyelia is characterized by motor disorders:
1) Posterior-horn shape.
2) Anterior-horn shape.
3) Vegetative-trophic form.
4) Pyramid shape. #
538. Among spinocerebellar ataxias, Friedreich's disease is distinguished by the presence of
1) Deformities of the foot
2) Disraphic status

3) Damage to the heart muscle
4) Reduced or lost reflexes
5) All of the above #
539. Whether osteoarticular disorders are characteristic of progressive muscular dystrophies.
1) No, only the muscles are affected.
2) Yes, as primary changes.
3) Rare disorders in small joints.
4) Yes, as secondary changes. #
540. Clinical signs of ataxia-telangiectasia (Louis-Bar syndrome):
1) Paraparesis, pelvic disorders, intestinal dyskinesia .
2) Vestibular ataxia, telangiectasia, hyperkeratosis.
3) Sensitive ataxia, telangiectasia, hyperthyroidism.
4) Cerebellar ataxia, telangiectasia, tendency to infections. #
541. What form of muscular dystrophy is characterized by facial muscle involvement:
1) Duchenne
2) Becker
3) Landuzi-Dejerina
4) Form-Erba. #
542. Duchenne muscular dystrophy is inherited by type:
1) Autosomal-dominant;
2) X-concatenated recessive.
3) Autosomal recessive behavior.
4) X-linked dominant #
543. A proband is:
1) Patient who went to the doctor
2) A healthy person who applied to a medical and genetic consultation
3) A person who first came under the supervision of a geneticist
4) The person who starts collecting the pedigree #
544. Phenotypic features of chromosomal diseases are
1) Disorders of mental development
2) Physical development disorders
3) Multiple malformations
4) All listed #
545. Exclude the wrong answer. Hereditary diseases are characterized by:
1) Early manifestation of clinical manifestations,
2) Involvement of many organs and systems in the clinical process
3) Progressive nature of the disease course
4) Acute onset of the disease #
546. The diagnosis of Duchenne muscular dystrophy is based on:
1) Characteristic neurological symptoms, ultrasound of internal organs
2) Characteristic neurological symptoms, time of onset and nature of the course, determination of serum creatinine phosphokinase levels
3) Examination by an optometrist, neurologist, and ultrasound data

4) Results of histological examination #
547. An epicant is:
1) Fused eyebrows
2) Wide-set eyes
3) Vertical skin fold at the inner corner of the eye
4) Narrowing of the ocular
fissure #
548. Gait of patients with lower Strumpel paraplegia:
1) Utynaya Street
2) Steppage
3) Spasticoparetic.
4) Antalgic . #
549. Clinical signs of Kleinfelter syndrome:
1) Primary amenorrhea
2) Microorchism
3) Dolichocephaly, arachnodactyly
4) All of the above #
550. Clinical manifestations of phenylketonuria are not characterized by:
1) Mental retardation
2) Pathology of the musculoskeletal system
3) Eczematous manifestations
4) Convulsions
5) Correct answers 2,3 #
551. Duchenne myopathy is associated with a mutation of the gene responsible for the synthesis of the enzyme:
1) Galactokinases
2) Dehydropteridine Reductase
3) Dystrophin
4) Ceruloplasmin #
552. Indications for a chorionic biopsy are
1) Birth of a child with chromosomal abnormalities
2) Miscarriage of early pregnancy
3) Family carriers of chromosomal rearrangements or gene mutations
4) All of the above #
553. Shereshevsky-Turner syndrome is characterized by:
1) Primary amenorrhea
2) Monosomy on the X chromosome
3) Detecting symptoms from birth
4) Low growth
5) All of the above #
554. Craniostenosis is :
1) Early closure of cranial sutures.
2) Narrowing of the ventricular cavity of the brain.
3) Narrowing of the spinal canal.
4) Narrowing of the large occipital foramen. #

555. Indicate the probability of having a sick child again in a couple who have a sick girl with phenylketonuria:
1) 50%.
2) Close to 0%.
3) 75%.
4) 25%
#
556. The haploid set contains the following cells:
1) Neurons
2) Hepatocytes
3) Zygotes
4) Gametes
5) Epithelial cells #
557. Type of inheritance in Kennedy's amyotrophy:
1) Linked to the Y chromosome.
2) autosomal dominant type.
3) Linked to the X chromosome.
4) autosomal recessive type #
558. Phenylketonuria type I (classic form) is caused by a deficiency of the enzyme:
1) Phenylalanine Mutase (FAM)
2) Phenylalanine kinases (FA)
3) Phenylalanine Phase (FAT)
4) Phenylalanine Hydroxylase (PHAG)
#
559. The most severe form of spinal hernias:
1) Meningocele
2) Meningoradiculocele
3) Meningomyelocele
4) Myelocystocele. #
560. Debut of the hyperkinetic form of Gentincton's disease.
1) 1-2 dozen years of life
2) 3 dozen lives.
3) 4-7 dozen of life.
4) In the first years of life.
#
561. The clinical picture of typical Huntington's chorea, in addition to choreic hyperkinesis, includes
1) Plastic extrapyramidal rigidity
2) The "gear wheel" symptom
3) Akinesia
4) Hypomimia
5) Dementia #
562. The teratogenic termination period (TTP) is :
1) Duration of teratogenic factor exposure in the intra-natal period.
2) Duration of teratogenic factor exposure after organogenesis.
3) Duration of teratogenic factor exposure.
4) The time period during which a teratogenic factor leads to a malformation #

563. False porencephaly:
1) The cystic defect is pore-shaped and communicates with the third ventricle.
2) Cystic defect formed only at the expense of the meninges.
3) The cystic defect communicates with the ventricle and reaches the surface of the brain.
4) The cystic defect does not communicate with the ventricle and does not reach the surface of the brain. #
564. Pseudoporencephaly usually develops:
1) In the postnatal period
2) In the prenatal period
3) In the intra-natal period.
4) In the antenatal period. #
565. Treatment of galactosemia:
1) Medical treatment
2) Diet therapy.
3) Substitution therapy.
4) Chemotherapy.
#
566. The main biochemical sign of mitochondrial pathology is:
1) Lactate acidosis.
2) Metabolic alacalosis.
3) Mitochondrial alkalosis.
4) Respiratory alkalosis. #
567. Type of sensitive disorders in syringomyelia:
1) Conduction
2) Segmentally dissociated
3) Polyradicular
4) Sensitivity is not affected #
568. Pathomorphologicalistinaporencephaly has the form:
1) Ball, with localization within the frontal lobe.
2) Funnels, the top is directed deep into the brain, and the base to the surface.
3) Irregular shape, communicates with the subarachnoid space.
4) It has a saucer-like shape, with the convex part facing the skull bones. #
569. The most common localizations of angiofibromas in tuberous sclerosis are:
1) Symmetrical areas of the face.
2) The ear canal.
3) Underarm area.
4) Along the course of large vascular trunks #
570. Down's disease is characterized by a combination of the following symptoms:
1) rounded skull, gothic palate, syndactyly, muscle hypotension
2) dolichocephaly, cleft palate, arachnodactyly, muscle hypertonus
3) craniostenotic skull, cleft lip, presence of the 6th finger, choreoathetosis
4) there is a combination of any of the listed signs #
571. Gender inheritance occurs as follows:
1) Equally from my father and mother.
2) Only from my mother.
3) Only from my father.

4) from the father in 75% and the mother in
25% of cases. #
572. Dolichocephaly is:
1) A long narrow skull with a prominent forehead and nape
2) Increase in the longitudinal size of the skull relative to the transverse one
3) An increase in the transverse size of the skull with a relative decrease in the longitudinal size
4) Expansion of the skull in the occipital part and narrowing in the
frontal part #
573. What form of syringomyelia is characterized by motor disorders:
1) Posterior-cornered shape
2) Anterior-horn shape.
3) Vegetative-trophic form.
4) Pyramid shape. #
574. Type of inheritance of hyperkalemic paroxysmal myoplegia:
1) Autosomal dominant.
2) Linked to the X chromosome.
3) Autosomal recessive.
4) Linked to the Y chromosome #
575. A disease in which it is advisable to study sexual chromatin:
1) Down Syndrome
2) Cat's cry syndrome
3) Kleinfelter syndrome
4) Marfan Syndrome #
576. Friedreich's ataxia inheritance type:
1) autosomal recessive.
2) autosomal dominant.
3) Linked to the X chromosome.
4) Linked to the Y chromosome. #
577. Inheritance of MERRF syndrome occurs:
1) By autosomal dominant inheritance
2) By X-linked from the mother to boys only.
3) From mother to child, both boys and girls.
4) From the mother only to the
girls. #
578. What hereditary diseases are diagnosed by cytogenetic examination?
1) Autosomal dominant diseases
2) Chromosomal diseases
3) Multifactorial diseases
4) Hereditary metabolic diseases
5) X-linked diseases #
579. The type of inheritance in Charcot-Marie-Tooth amyotrophy is characterized as:
1) Autosomal dominant
2) Autosomal recessive
3) Sex-linked (via the X chromosome)
4) True 1) and 2)

5) None of the above #
580. Pseudohypertrophy is observed in the following forms of progressive muscular dystrophy
1) Duchenne type
2) The Becker-Kinnear type
3) Landuzi-Dejerina Type
4) True 1) and 2)
5) All of the above #
581. When microcephaly is most affected
1) Subcortical nuclei
2) Cerebral cortex
3) The spinal cord
4) The
cerebellum #
582. Parkinson's disease is characterized by everything except:
1) slowness of movement, tremor
2) hypotonic hyperkinetic syndrome
3) increase of muscle tone by plastic type
4) pill-rolling tremor
5) muscle rigidity #
583. Clinically, microcephaly manifests itself
1) spastic paresis, mental retardation, convulsions
2) paresthesia, peripheral paresis in the extremities
3) violation of sensitivity by polyneuritic type
4) Horner's syndrome #
584. Treatment of craniostenosis in children.
1) Physiotherapy
2) Chemotherapy
3) Medical treatment
4) Surgical
treatment #
585. Pathogenesis of Friedreich's ataxia:
1) Degeneration of the motor roots.
2) Degeneration of the posterior and lateral pillars.
3) Lesion of the basal nuclei.
4) Degeneration of the anterior horns of the spinal
cord. #
586. What doesn't apply to phacomatosis:
1) Tuberous sclerosis.
2) Louis-Bar ataxia-telangiectasia
3) Neurofibromatosis of Recklinghausen.
4) Niemann - Pick disease #
587. The translocation is:
1) Loss of a section of the chromosome.
2) Transfer of a section of the chromosome.
3) Rotation of a section of the chromosome.
4) Changes in a section of the chromosome

#
588. The change in the contour of the legs like an "overturned bottle" is due to a change in muscle mass:
1) With Charcot-Marie-Tooth amyotrophy
2) With hypertrophic neuropathy of Dejerine
3) For Erb muscular dystrophy
4) With Becker-Kinnear muscular dystrophy #
589. The diagnosis of neurofibromatosis is made on the basis of:
1) Characteristic clinical picture and biochemical analysis;
2) The clinical picture.
3) Clinical picture, hormonal profile studies, biochemical analysis, and pathomorphological studies.
4) Medical history and biochemical analysis #
590. Phenylketonuria Clinic:
1) Delayed psychomotor development, hypopigmentation, epileptic syndrome.
2) Delayed psychomotor development, hyperpigmentation, diarrhea.
3) Delayed motor development, ataxia.
4) Delayed motor development, hyperpigmentation, coloboma of the iris. #
591. If the shoulder "p" and "q" are equal, then such a chromosome is called:
1) Acrocentric
2) Metacentric.
3) Submetacentric.
4) Centric. #
592. The duration of dietary treatment for a patient with phenylketonuria is:
1) From 2 to 6 months
2) From 2 months to 1 year
3) From 2 months to 3 years
4) From 2 months to 5-6 years
5) All my life
#
593. Huntington's chorea affects:
1) Black substance
2) Thalamus
3) Cerebellum
4) The striar system #
594. Shereshevsky-Turner syndrome is not characterized by:
1) Short stature
2) High growth
3) Mental retardation
4) Pterygoid folds of skin on the neck
5) Correct 2 and 3 #
595. Amyotrophic lateral sclerosis affects:
1) Betz cells, motor neurons of the anterior horns of the spinal cord, motor nuclei of the brain stem.
2) Neurons of the posterior horns of the spinal cord
3) Axons of the dentate nucleus.
4) Skeletal muscles.

#
596. Clinical symptoms - "Tapir lips"," transverse smile " occur when:
1) Progressive Becker's myodistraphia.
2) Progressive myodistration of Duchenne
3) Progressive GERB myodistration.
4) Progressive myodistrafilanduzi-Dejerine. #
597. What is affected in amyotrophic lateral sclerosis:
1) Degeneration of Betz cells, motor neurons of the anterior horns, motor nuclei of the brain stem.
2) Degeneration of neurons in the posterior horns of the spinal cord
3) Damage to the dentate nucleus axon
4) Lack of dystrophin protein #
598. Clinical manifestations of MERRF syndrome.
1) Torn red fibers, myoclonus-epilepsy, dementia.
2) Myoclonus, ataxia, dementia.
3) Epilepsy, ataxia, lower paraplegia.
4) Dementia, left-sided hemiplegia, decreased visual acuity. #
599. Type of inheritance of Strumpel's disease:
1) autosomal dominant type.
2) autosomal recessive type
3) Heterogeneous type
4) Linked to the X chromosome. #
600. Screening test for determining phenylketonuria in newborns:
1) The Stewart test.
2) PKU Test
3) The Guthrie test.
4) Tinnel's test. #
601. The pathogenesis of neurofibromatosis I is characterized by:
1) Defect of the fibroneuramine protein.
2) Violation of ceruloplasmin protein synthesis.
3) Defect in neurolysin synthesis.
4) Violation of neurofibromin protein synthesis. #
602. A study of the blood plasma of a patient with hepatocerebral dystrophy reveals:
1) Increased ceruloplasmin levels and hypercupremia
2) Decreased ceruloplasmin levels and hypercupremia
3) Increased ceruloplasmin levels and hypocupremia
4) Decreased ceruloplasmin levels and hypocupremia #
603. Diagnostic criteria for neurofibromatosis:
1) Congenital heart disease and malformation of the radius and its derivatives;
2) Multiple pigmented spots on the skin, tumors of the skin, subcutaneous and along the nerve fibers, scoliosis, gliomas of the optic nerve;
3) Seborrheic adenoma on the cheeks, depigmented spots, "coffee" spots, seizures, mental retardation;
4) Anemia, hepatosplenomegaly, tower skull, fetal dropsy. #
604. The inversion is:

1) Loss of a section of the chromosome
2) Rotation of a section of chromosomes
3) Doubling of a section of the chromosome.
4) Changing a section of the
chromosome #
605. Type of inheritance of Niemann-Pick disease:
1) Autosomal dominant
2) Autosomal recessive
3) Linked to the X chromosome.
4) Linked to the Y chromosome.
5) Heterogeneous inheritance. #
606. Clinical manifestations of Strumpel's disease:
1) Lower spastic paraparesis.
2) Hemiplegia, hemianetsesia.
3) Ataxia, dysarthria.
4) Alternating syndromes. #
607. Thomson's myotonia is characterized by all but
1) Muscle spasms
2) Symptoms of "roller" and "pit"
3) Bell's Symptom
4) Slow motion #
608. Friedreich's ataxia causes:
1) Degeneration of the anterior and lateral pillars.
2) Degeneration of the posterior and lateral pillars.
3) Lesion of the basal nuclei.
4) Degeneration of the anterior horns of the spinal
cord. #
609. Indicate the probability of having a sick child again in a couple who have a sick girl with phenylketonuria:
1) 50%;
2) 75%;
3) close to 0%; 4) 25%. #
610. Shereshevsky-Turner syndrome is not characterized by dysembryogenesis stigmas:
1) Short neck with wing-shaped skin folds;
2) Low growth;
3) Cleft upper palate.
4) Lack of gonads. #
611. Type of inheritance of Konovalov-Wilson's disease.
1) Autosomal dominant
2) Autosomal recessive
3) Linked to the X chromosome.
4) Linked to the Y chromosome. #
612. What is affected in Parkinson's disease:
1) Peripheral nerve fibers.
2) Basal nuclei of the palidar system
3) Basal nuclei of the striatal system

4) Reticular formation #
613. Louis-Bar syndrome is characterized by:
1) Colitis and ulcerative colitis
2) Sinusitis and pneumonia
3) Cystitis, urethritis.
4) Encephalitis and meningitis.
#
614. Clinical signs of syringomyelia include:
1) Segmental dissociated sensitivity disorders
2) Presence of disraphic features of the musculoskeletal system structure
3) Progressive muscle atrophy in areas corresponding to segmental sensitivity disorders
4) Lower spastic paraparesis
5) True 1 and
2 #
615. Type of inheritance in galactosemia:
1) Autosomal dominant
2) Autosomal recessive
3) Linked to the X chromosome.
4) Linked to the Y chromosome. #
616. Fetal skin biopsy makes it possible to diagnose
1) Down Syndrome
2) Ichthyosis, epidermolysis
3) Hemophilia, phenylketonuria
4) Craniostenosis, microcephaly #
617. Pathology of what protein is detected in Duchenne and Becker myodystrophies.
1) Dystrophin
2) Plasmina
3) Ceruloplasmin.
4) Frataxine. #
618. Characteristic osteoarticular changes in Friedreich's ataxia:
1) Hollow foot, scoliosis
2) Charcot joint, scoliosis
3) "Shoemaker's chest", flat feet
4) Kyphosis, lordosis, "chicken
breast". #
619. Contents of the hernial sac in meningoradiculocele :
1) Spinal cord, CSF, and brain membranes.
2) Roots, CSF, and brain membranes.
3) CSF, brain membranes.
4) Spinal cord, CSF. #
620. Specify the indications for cytogenetic analysis:
1) Habitual miscarriage and a history of stillbirths;
2) Hepatosplenomegaly, cataracts, mental retardation;
3) Mental retardation, developmental microanomaly, or congenital malformations.
4) Intolerance to certain foods, hemolytic crises.
5) Correct 1 and 3

#
621. Werdnig-Hoffmann disease is characterized by:
1) autosomal recessive type of inheritance, debut from the intrauterine period, diffuse muscle weakness, rapid progression, poor prognosis.
2) autosomal recessive type of inheritance, debut from the age of 15, paroxysmal muscle weakness, slow progression, favorable prognosis.
3) autosomal dominant type of inheritance, onset at 2-3 years of age, slow progression, relatively favorable prognosis.
4) autosomal dominant inheritance type, debut at 2-3 years of age, diffuse muscle weakness, rapid progression, poor prognosis.
#
622. Galactosemia accumulates:
1) Cerruloplasmin
2) Glucose and its metabolites
3) Galactose and its metabolites
4) Fructose and its metabolites.
#
623. Monosomy on the X chromosome is characteristic of:
1) Down syndrome.
2) Klinefelter syndrome
3) Shershevsky-Turner syndrome.
4) Takayasu's
disease. #
624. Typical clinical signs of galactosemia:
1) Glucose intolerance, diarrhea, dehydration.
2) Glucose intolerance, delayed psychomotor development.
3) Milk intolerance, constipation, and urinary retention.
4) Milk intolerance, jaundice, delayed psychomotor development, cataracts. #
625. A characteristic feature of lower paraparesis in Strumpel's disease is:
1) prevalence of weakness over spasticity
2) prevalence of spasticity over weakness
3) prevalence of cerebellar symptoms over pyramidal ones
4) combination of pyramidal symptoms with muscle fibrillation
5) combination of pyramidal symptoms with sensitive ataxia #
626. What products are included in the green list of "food traffic lights" for the treatment of phenylketonuria:
1) Red bell pepper, tomatoes, beets.
2) Fruit salad, butter, sugar, eggplant.
3) Nuts, eggs, meat, fish, cottage cheese.
4) Milk, kefir, rice, potatoes. #
627. What clinical form does not belong to hepatolenticular degeneration?
1) Abdominal.
2) Hemolytic.
3) Tremulous.
4) Cortical-extrapyramidal
system. #
628. The hypocalemic form of paroxysmal myoplegia is characterized by:
1) Hyperkalemia during an attack
2) Hypocalemia outside the attack

3) Hyperkalemia outside of an attack
4) Hypocalemia during an attack #
629. Clinically, Friedreich's ataxia is characterized by the presence of:
1) Deformities of the foot
2) Disraphic status
3) Damage to the heart muscle
4) Reduced or lost reflexes
5) All of the above #
630. What is the amount of protein that decreases in Wilson-Konovalov disease?
1) Ceruloplasmin.
2) Albumin.
3) Gamma-globulin.
4) Myoglobin. #
631. What studies are conducted for progressive muscular dystrophy
1) ALT, AST, EEG
2) KFK. Electroneuromyography
3) MRI, CT SCAN
4) UZDG, lipid spectrum. #
632. The highest concentrations of hCG are observed:
1) At 11-12 weeks of pregnancy.
2) At 1-2 weeks of pregnancy.
3) At 20-22 weeks of pregnancy.
4) In the first 10 days after
conception. #
633. At what stage of pregnancy can a fetal tissue biopsy be performed?
1) 1-2 months
2) 2-3 months
3) 4-6 months
4) In any trimester #
634. Degeneration of which tracts leads to Strumpel's disease:
1) Spinothalamic diseases.
2) Corticospinal diseases.
3) Flexig and Govers bundles.
4) Bunches of Golya and
Burdakh. #
635. Wilson-Konovalov disease affects
1) liver and brain
2) heart and kidneys
3) kidneys and lungs
4) liver and
kidneys #
636. Most often, compression of the spinal cord occurs
1) loss of appetite
2) vomiting
3) pain
4) sleep
disturbance #

637. An absolute contraindication for systemic thrombolytic therapy is
1) history of stomach ulcers
2) hemorrhagic vasculitis
3) history of hemorrhagic stroke
4) arterial hypertension #

638. Pregnant women, adolescents, people receiving long-term anticonvulsant medications, alcohol abusers, in the treatment of iron deficiency anemia, it is advisable to prescribe drugs containing
1) folic acid
2) vitamin B12
3) microelements
4) Vitamin C
#

639. In Wilson's disease, the blood content is reduced
1) gamma-globulin
2) alphafetoprotein
3) alpha1-antitrypsin
4) ceruloplasmin #

640. High height, high waist and signs of gynecomastia, hypogonadism in men typical for the syndrome_____with the most likely karyotype
1) Klinefelter, 47 KHU
2) Shereshevsky-Turner, 45 HO
3) Downa, 47 XX or XY, 21+
4) Patau, 47 XX or HU, 13 + #

641. Short stature, a short neck with pterygoid skin folds with a low hairline on the back of the head, and the presence of gonadal dysgynesia are characteristic of the syndrome_with the most likely karyotype_____
1) Klinefelter, 47 KHU
2) Downa, 47 XX or XY, 21+
3) Shereshevsky-Turner, 45 HO
4) Patau, 47 XX or HU, 13 + #

642. The diagnosis of "diabetic foot syndrome" is made when it is detected in a patient with diabetes mellitus
1) dryness of the skin of the feet
2) severe finger deformity
3) reduced sensitivity in the foot area
4) ulcerative defect of the sole of the foot and sensory-motor neuropathy #

643. Patients who have had a menigococcal infection are monitored at a dispensary
1) therapist for 3 months
2) pediatrician for 6 months
3) neurologist for 2 years
4) epidemiologist for 7
days #

644. A sign of a skull base fracture is
1) symptom of glasses
2) anisocoria
3) red dermography
4) mobility of the skull bones #
645. Initial therapy of convulsive syndrome is carried out
1) anticonvulsants
2) with benzodiazepamesedit
3) holinoblorami
4) barbiturates #
646. According to the characteristics of the cerebrospinal fluid, tuberculosis meningitis should be differentiated from
____meningitis
1) pneumococcal
2) neurotoxic
3) meningococcal diseases
4) serous-viral #
647. Hemorrhagic rash of irregular shape with necrosis in the center is characteristic of
1) meningococcal infection
2) enterovirus infection
3) streptoderms
4) herpes zoster infection #
648. Angioprotectors are prescribed for the following purposes:
1) improve the patency of the lacrimal tract
2) eliminate inflammatory processes
3) strengthen the vascular wall
4) accelerate the healing of the wound channel in the
cornea #
649. The causative agent of primary purulent meningitis is
1) meningococcus
2) streptococcus
3) staphylococcus aureus
4) enterococcu
s #
650. In the treatment of ischemic stroke in the acute period, the following drugs are used:
1) hormonal drugs
2) antibiotics
3) antiplatelet agents
4) hemostatic agents #
651. The leading place in the treatment of tick-borne encephalitis is occupied by
1) immunoglobulin against tick-borne encephalitis
2) RNA-aza in combination with corticosteroid drugs
3) antibacterial therapy
4) gammaglobulin in therapeutic
doses #
652. The disappearance of focal neurological symptoms during the day is characteristic of
1) external carotid artery thrombosis
2) spontaneous subarachnoid hemorrhage

3) ischemic stroke
4) transient cerebrovascular accident #
653. Medical and genetic offices and consultations perform the following functions:
1) risk group surveys for this disease
2) prognosis of offspring
3) treatment options
4) study of the epidemiology of this disease #
654. Transient symptoms of neurological dysfunction associated with brain tissue ischemia, but not leading to the development of an ischemic infarction, are characteristic of
1) transient ischemic attack
2) intracerebral hemorrhage
3) subarachnoid hemorrhage
4) ischemic stroke #
655. Acute onset of stroke with sudden onset of neurological symptoms in an awake patient with a history of atrial fibrillation is characteristic of
1) lacunar subtype of ischemic stroke
2) atherothrombotic subtype of ischemic stroke
3) non-traumatic subarachnoid hemorrhage
4) cardioembolic subtype of ischemic stroke #
656. Bilateral headaches, compressing the head in the form of a "hoop", decreasing after rest are characteristic of
1) tension headaches
2) migraine attack with aura
3) hypertension headaches
4) drug-induced headaches #
657. To diagnose Wilson-Konovalov disease, the following definition is used:
1) creatine phosphokinase in the blood
2) bence-Jones protein levels in the urine
3) ceruloplasmin serum
4) the level of cyancobolamine in the blood #
658. The most acute development of intense headache with impaired consciousness, psychomotor agitation, epileptic seizures, and severe meningeal syndrome is characteristic of
1) cardioembolic subtype of ischemic stroke
2) acute multiple encephalomyelitis
3) acute course of tick-borne encephalitis
4) subarachnoid hemorrhage #
659. The therapeutic window for ischemic stroke is_____one hour.
1) 6
2) 24
3) 8
4) 12
#
660. Special methods of treating acute ischemic stroke include_therapy
1) anticoagulant therapy

2) neuroprotective
3) thrombolytic system
4) immunosuppressive #

661. Treatment of migraine attacks begins with the use of
1) NSAIDs or analgesics
2) neuroprotective drugs
3) anticonvulsants
4) narcotic analgesics #

662. The basis for completing antibacterial therapy for purulent meningitis is
1) rehabilitation of the CSF system
2) improvement of the patient's condition
3) normalization of the blood picture
4) normalization of the neuroimaging pattern #

663. The most common complication of thrombolytic therapy in ischemic stroke is the development of
1) acute renal failure
2) acute liver failure
3) hemorrhagic complications
4) secondary vasospasm and stealing syndrome #

664. For secondary prevention of the atherothrombotic subtype of ischemic stroke in a patient with arterial hypertension, it is necessary to prescribe
1) clopidogrel
2) acetylsalicylic acid
3) warfarin
4) rivoroxabana #

665. Primary stroke prevention is aimed at preventing
1) stroke development and correction of stroke risk factors
2) recurrent stroke and correction of risk factors taking into account the pathogenesis of the previous stroke
3) hemorrhagic complications of an ischemic stroke
4) secondary vasospasm and stealing syndrome in hemorrhagic stroke #

666. Risk factors for acute cerebrovascular accident include
1) chronic hepatitis
2) diabetes mellitus
3) chronic pyelonephritis
4) multiple sclerosis #

667. Contraindication for the use of heparin is
1) myocardial infarction
2) glaucoma
3) hemorrhagic stroke less than 6 months ago
4) bronchial asthma #

668. Hemorrhagic stroke is characterized by
1) severe cerebral, focal, and meningeal symptoms

2) conductor-type sensitivity disorders
3) gradual onset of the disease
4) previous transient symptoms #
669. Target organs mainly affected by Wilson-Konovalov disease are:
1) kidneys and lungs
2) liver and lungs
3) heart and kidneys
4) liver and brain
#
670. The leading link in the pathogenesis of meningococcemia is
1) vascular endothelial damage
2) swelling and swelling of the brain
3) myocardial and pericardial damage
4) upper respiratory tract epithelial damage #
671. The most common sign of meningococcemia is
1) meningeal syndrome
2) hepatolienal syndrome
3) hemorrhagic stellate rash
4) maculopapular stellate rash #
672. A complication of meningococcal meningitis is
1) brain edema
2) infectious and toxic shock
3) thrombo-hemorrhagic syndrome
4) hyperproduction of CSF #
673. The onset of meningococcal meningitis is characterized by
1) gradual onset, headache, vomiting, loose stools
2) high fever, vomiting, abdominal pain
3) high fever, headache, visual impairment
4) rapid fever, headache, vomiting without abdominal pain #
674. The drug of choice in the treatment of Wilson-Konovalov disease is
1) D-penicylamine (cuprenyl)
2) roferon
3) prednisone
4) essentiale #
675. The most characteristic elements of skin rashes in meningococcemia are
1) roseolous-papular rashes
2) elements in the form of bubbles with hemorrhagic contents
3) elements similar to erythema nodosum
4) stellate hemorrhagic rash #
676. Changes in the cerebrospinal fluid characteristic of acute meningococcal meningitis are
1) a large number of red blood cells
2) neutrophilosis (up to 80-90%)
3) lymphocytosis (up to 80%)
4) approximately the same number of neutrophils and lymphocytes

#
677. With meningococcal meningitis in the cerebrospinal fluid is detected
1) xanthochromia
2) high glucose levels
3) neutrophilic pleocytosis
4) opalescence #
678. The drug of choice for the treatment of meningococcal meningitis is
1) benzylpenicillin
2) ampicillin
3) ampiox
4) erythromycin
#
679. When meningococcal meningitis is used
1) benzylpenicillin
2) ciprofloxacin
3) azithromycin
4) kanamycin
#
680. The main cause of diabetic gangrene is
1) microtraumas
2) frostbite
3) hypoglycemia
4) impaired blood flow #
681. Peripheral diabetic neuropathy manifests itself
1) reduced muscle strength in the hands and feet
2) varicose veins
3) reduced sensitivity
4) vertigo #
682. Autonomic diabetic neuropathy is characterized by
1) pain syndrome
2) limb tremor
3) radiculopathy
4) cardiac arrhythmia #
683. Diabetic foot syndrome develops
1) charcot joint
2) varicose ulcer
3) fracture
4) trophic disorders of the skin #
684. The appearance of pain, burning, numbness, "crawling goosebumps" in the distal parts of the lower extremities, often in the fingers, a decrease in Achilles and knee reflexes, weakening tactile and pain sensitivity in diabetes mellitus indicates that
1) peripheral polyneuropathy
2) microangiopathies
3) damage to the central nervous system
4) "intermittent limp" #
685. Meningococcemia is characterized by a rash

1) urticarnaya street
2) papular area
3) hemorrhagic with necrosis
4) vesicular #

686. The criterion for the end of etiotropic therapy for meningococcal meningitis is
1) rehabilitation of the CSF system
2) Day 10 of normal temperature
3) Day 21 of normal temperature
4) normalization of hemodynamics #

687. Peripheral paralysis is characteristic of
1) rabies
2) poliomyelitis
3) the plague
4) tetanus #

688. For the meningoencephalitic form of tick-borne encephalitis, the most characteristic are
1) erythema annulosa, headache, vomiting
2) gradual onset, parastesias, headache, vomiting
3) headache, high fever, impaired consciousness
4) acute onset, high fever, headache #

689. To confirm Ankylosing spondylitis, it is advisable to make radiographs
1) the spine
2) ankle joints
3) hip joints
4) hands #

690. Side effect of statin therapy
1) thyroid dysfunction
2) headaches
3) impotence
4) myopathies #

691. The most reliable criterion for meningococcal meningitis is the following change in the cerebrospinal fluid:
1) pathogen detection
2) pleocytosis
3) glucose reduction
4) lymphocytic pleocytosis #

Appendix 2

SITUATIONAL TASKS

General Neurology (7th semester)

1. The patient has the phenomena of irritation of the posterior roots associated with lumbosacral radiculitis at the level of L2-L4. Describe your neurological symptoms.

2. The disease began with athetosis in the right leg, and after a few months, violent movements in the torso joined, making it difficult to walk. Name neurological syndromes and a topical diagnosis.

3. There is a degeneration of the Goll and Burdach pathways in the lumbosacral region. Describe neurological symptoms.

4. The patient has Brown-Secard syndrome caused by a knife wound to the spinal cord D8 on the right.

5. After a spinal cord injury, the patient developed peripheral paralysis of both legs, a disorder of all types of sensitivity according to the conductor type from the L1 level, and urinary retention. Specify the pathological focus and pathogenesis of neurological disorders.

6. The patient suffered damage to the anterior, posterior, and lateral corneal segments C4-D1 due to spinal cord injury, draw a diagram, and describe neurological symptoms.

7. There is a lesion of the anterior horns of the spinal cord and lateral pillars at the level of L1-L5. Describe your neurological symptoms.

8. A 50-year-old patient suffering from amyotrophic lateral sclerosis showed a decrease in muscle strength with diffuse atrophy and fibrillar twitching of the muscles of the arms, shoulder girdle, and legs. Tendon and periosteal reflexes on the hands and feet are increased, and abnormal reflexes from the hands and feet are caused. The nature of paresis?

9. A patient with syrinogomyelia has a segmental-dissociated type of sensitivity disorder in the C5-D3 range of dermatomes on the left. Draw the anesthesia area on the diagram and indicate the lesion site.

10. Due to the rheumatic process, the patient has striated bodies (caudate nucleus, shell) on both sides. Name the syndrome. Describe the clinical picture.

11. A patient with an intramedullary process has a loss of sensitivity in the segmental-dissociated type on both sides, C4-D10. Describe neurological symptoms.

12. A patient with syrinogomyelia has a segmental-dissociated type of sensitivity disorder in the C5-D3 range of dermatomes on the left. Draw the anesthesia area on the diagram and indicate the lesion site.

13. The patient has atrophy of the tongue muscles on the right, fibrillar twitching of the tongue muscles on the right, deviation of the tongue to the right. Where is the lesion?

14. The patient can not close the eye on the left, when trying to close the eye, the eyeball turns up and a white strip of sclera is visible. What kind of TBI is affected, what is the name of the symptom.

15. Damage to what structures causes the appearance of Claude-Bernard-Horner syndrome? Describe your neurological symptoms.

16. The patient has restricted movement of the right eyeball, divergent strabismus due to the right eye, drooping of the upper eyelid on the right, mydriasis. What nerve damage is this characteristic of?

17. The patient has a decrease in strength in the arms, a decrease in tendon reflexes and muscle tone, fibrillar and fascicular twitching of the shoulder girdle muscles, and leg movements are not disturbed. What is the name of the motor syndrome? What formations are affected?

18. The patient developed hematomyelia as a result of the injury: as a result, the anterior, posterior, and lateral horns of C4-D4 on the left, as well as the right pyramidal path were damaged. Describe the clinical picture. Draw a diagram.

19. After a spinal cord injury, the patient developed peripheral paralysis of both legs, a disorder of all types of sensitivity according to the conductor type from the L1 level, and urinary retention. Specify the pathological focus, pathogenesis of neurological disorders.

20. What is the reason for the patient's bilateral intentional tremor, bilateral adiadochokinesis, chanted speech, and drunken gait?

Private Neurology (7-8 semesters)

1. A 49-year-old man who suffered encephalitis during the 1918 epidemic was treated for 20 years for slowly progressing Parkinsonism. Neurological examination revealed dilated pupils, lack of pupillary response, convergence paralysis, masked face, generalized rigidity, and rough trembling of the eyes, tongue, and hands. What kind of disease can you think about in this case?

2. CSF is transparent, pressure 250 mm. water column, protein 0.96 g / l, cytosis 786x10/l, lymphocytes predominate. What diseases are characterized by such changes?

3. A 62-year-old man with a history of atrial fibrillation woke up with right-sided hemiplegia, blood pressure 200/110 mm Hg. Sensitivity was preserved. Speech is unintelligible,

it can't reproduce simple phrases. Executes instructions. Specify the location and nature of the process?

4. A 10-year-old girl after a prolonged sore throat developed involuntary, violent movements in the distal parts of the limbs, which increase with excitement, eating, talking, and disappear in her sleep. What disease can be assumed?

5. A 14-year-old boy developed diarrhea against the background of malaise and a temperature of 39C, which lasted for 2 days. Then the condition improved somewhat, the temperature decreased. But there were pronounced headaches, back pain. He developed asymmetric peripheral paralysis in his legs. CSF pressure is high, pleocytosis is 250 in 1 µl. What disease are we talking about?

6. A 15-year-old patient complained of periodic dry cough for six months, general weakness, lost 5 kg of weight, in the last 2-3 weeks headache, sweating, emotional lability joined. Objectively: the temperature is 38C, photophobia, noise phobia, rigidity of occipital muscles, positive symptoms of Kernig, Brudzinsky are expressed. CSF is transparent, after standing in the thermostat, a fibrin film appeared. Presumptive diagnosis?

7. A 32-year-old man experienced severe pain in the lumbar spine after lifting weights. The pain increases dramatically when moving in the lumbar spine. The examination revealed marked tension of the back muscles, scoliosis with a bulge to the right in the lumbar region, and smoothness of the lumbar spine. Movements in the lumbar region are sharply limited, the torso cannot be tilted forward due to a sharp increase in pain. Paresis, sensitivity disorders, and other neurological disorders were not detected. Clinical diagnosis. Additional surveys. Treatment

8. A 70-year-old woman complains of severe pain in the right side of her face. Considers himself ill for about 10 years. The pain occurs suddenly, lasts for several seconds and is sharp, cutting in nature. Attacks of pain are provoked by talking, chewing, touching the skin near the wing of the nose on the right. The pain starts in the upper lip area and spreads to the upper teeth and zygomatic bone on the right. Between attacks in the neurological status, there is pain on palpation of the infraorbital point on the right, hyperesthesia in the upper jaw area on the right. Clinical diagnosis. Whether additional research is needed . Treatment.

9. A 16-year-old girl was admitted to the hospital with complaints of weakness in her legs and arms, numbness in her feet ("feeling of foam rubber under her feet"). She became ill four days before being admitted to the hospital, when she noticed numbness and pain in her legs, which she gradually joined

weakness first in the legs, then in the arms and facial muscles. Two weeks before admission, there were signs of acute respiratory viral infection. Upon admission, there was weakness of facial muscles on the left side, weakness in the legs up to two points, in the hands up to three points, muscle hypotension, lack of tendon reflexes from the legs and hands, positive symptoms of nerve root tension, and a decrease in all types of sensitivity in the legs like "socks". Neurological syndromes. Localization of the lesion. Clinical diagnosis. Additional surveys and their likely results. Treatment.

10. A 35-year-old woman after lifting a weight felt a sharp pain in the lumbar region radiating to the left leg along the posterior surface of the thigh and lower leg. For the first time, low back pain occurred 2 years ago after physical exertion and disappeared within a few days. Real aggravation within two days. On examination: lumbar lordosis is smoothed, scoliosis in the lumbar region to the left, tension in the back muscles, movements in the lumbar region are sharply limited, pain in the paravertebral points is noted. The Lasega symptom on the left is 40°. There is a decrease in all types of sensitivity in the form of a strip along the posterior surface of the left thigh, lower leg and outer edge of the foot, the absence of the Achilles reflex. Neurological syndromes. Localization of the lesion. Clinical diagnosis. Additional surveys. Treatment.

11. A 43-year-old man, a plumber, noticed weakness in his right hand in the morning after sleeping. On the eve of drinking alcohol in large quantities and fell asleep immediately at the end of the feast. On examination, weakness of the extensors of the hand and fingers ("hanging hand"), the brachioradial muscle, weakness of extension and abduction of the thumb, a decrease in all types of sensitivity in the anatomical snuffbox, a decrease in the reflex from the triceps brachii muscle are noted. Neurological syndromes. Preliminary clinical diagnosis. Additional surveys and their likely results. Treatment.

12. A 43-year-old man, a plumber, noticed weakness in his right hand in the morning after sleeping. On the eve of drinking alcohol in large quantities and fell asleep immediately at the end of the feast. On examination, weakness of the extensors of the hand and fingers ("hanging hand"), the brachioradial muscle, weakness of extension and abduction of the thumb, a decrease in all types of sensitivity in the anatomical snuffbox, a decrease in the reflex from the triceps brachii muscle are noted. Neurological syndromes. Preliminary clinical diagnosis. Additional surveys and their likely results. Treatment.

13. A 32-year-old woman complains of facial asymmetry, lacrimation from the left eye, pain in the left ear region. I got sick the day before admission, and the day before I spent a long time on the street without a headdress at an air temperature of-5 degrees. The examination reveals an asymmetry

faces: left lagophthalmus, smoothed left nasolabial fold, lowered corner of the mouth. When performing facial tests, weakness of all the facial muscles of the left half of the face, Bell's symptom on the left, is noted. Reduced taste sensitivity in the anterior two-thirds of the tongue on the left, there are no other neurological disorders. Neurological syndromes. Localization of the lesion. Clinical diagnosis. Treatment

14. A 24-year-old male programmer complains of severe pain in the thoracic spine extending to the left side of the chest. The pain occurred two days ago on the background of long-term work at a personal computer. The pain increases with breathing, rotational movements in the spine. Taking nitroglycerin did not reduce the severity of pain, and the ECG did not show any changes. Examination reveals S-shaped scoliosis of the spine, soreness of the paravertebral points at the thoracic level (Th5–Th6) on the left, soreness on palpation of the intercostal space Th5-Th6 on the left, protective tension of the long back muscles at the thoracic level on the left. There are no paresis, sensitivity disorders, or other neurological disorders. Clinical diagnosis. Additional surveys. Treatment.

15. A 57-year-old woman, an accountant, complains of pain in the cervical spine, spreading over the outer surface of the right arm. The pain has been bothering me for the last 3 months, gradually increasing. The examination revealed tension in the neck muscles, increased kyphosis in the cervical region, and limited mobility in the cervical spine due to pain. Tension and soreness of the trapezius muscle, supraspinatus muscle, and middle stair muscle on the right are determined. When palpating the stair muscle, turning the head to the left, pain occurs on the outer surface of the right arm. There is hypesthesia on the medial surface of the forearms and hand and a decrease in the reflex with m. biceps on the right, there are no other neurological disorders. Neurological syndromes. Localization of the lesion. Clinical diagnosis. Additional surveys. Treatment.

16. A 50-year-old man gradually develops weakness in his legs, fatigue when walking, and urination disorders such as imperative urges over the course of five years. In the neurological status: reduced strength in the legs up to 3 points with increased muscle tone of the spastic type, high tendon reflexes, pathological symptoms of Babinsky and Oppenheim on both sides. When examining the fundus, decoloration of the temporal halves of the optic nerve discs is detected. Magnetic resonance imaging of the head revealed foci of increased density in T2 mode, located in the corpus callosum and in the spinal cord. Neurological syndromes. Localization of the lesion. Clinical diagnosis. Treatment.

17. A 52-year-old woman complains of pain, numbness, burning, tingling sensation in her feet. These complaints have been bothering me for 4 months. Suffers from insulin-independent diabetes mellitus, for 3 years, takes maninil, fasting blood sugar level in the range of 8-10 mmol/l. In the neurological status: reduced pain and temperature sensitivity by the type of "socks", hyperpathy in the foot area, lack of Achilles reflexes, trophic changes in the skin of both feet. Neurological syndromes. Localization of the lesion. Clinical diagnosis. Additional surveys and their likely results. Treatment.

18. A 32-year-old woman complains of facial asymmetry, lacrimation from the left eye, pain in the left ear region. I got sick the day before admission, and the day before I spent a long time on the street without a headdress at an air temperature of-5 degrees. The examination reveals facial asymmetry: lagophthalmus on the left, the left nasolabial fold is smoothed, the corner of the mouth is lowered. When performing facial tests, weakness of all the facial muscles of the left half of the face, Bell's symptom on the left, is noted. Reduced taste sensitivity in the anterior two-thirds of the tongue on the left, there are no other neurological disorders. Neurological syndromes. Localization of the lesion. Clinical diagnosis. Treatment.

19. A 24-year-old woman is concerned about clumsiness in her hands, as well as uncertainty when walking, especially in the dark. These disorders are observed for two weeks and gradually increase. Two years ago, for a month, I experienced urination disorders in the form of difficulties in holding urine. In the neurological status: reduced articular-muscular feeling and vibration sensitivity in the hands and feet, missing when performing finger and heel-patellar tests with the eyes closed, Instability in the Romberg test and when walking with the eyes closed. When the head is tilted forward, the patient feels the passage of an electric current along the spine. Magnetic resonance imaging of the head in T2 mode revealed foci of increased density located in the spinal cord and around the ventricles of the brain. Neurological syndromes. Localization of the lesion. Clinical diagnosis. Treatment.

20. Boy U., 14 years old. The patient complains of loss of consciousness, convulsions in the left side of the face and limbs, and repeated vomiting. 2 hours ago, I fell in training, complained of headache, nausea, weakness. An hour after the fall, convulsions suddenly appeared, he lost consciousness. He was taken to the hospital by ambulance. In neurological status: coprosy consciousness. Rigidity of the occipital muscles. Ocular slits D<S, ptosis on the right, the gaze does not fix. Divergent squint OD>OS. The pupil on the right is dilated, the reaction to light is weakened. Muscle tone is increased by spastic type, S>D. Knee reflexes are high, with clonus feet, S>D. Positive reflex of Babinsky and Oppenheim on the left.

1. Where the process is localized.

2. What diagnosis can be made for the patient?

21. The patient is 36 years old. Complains of seizures of twitching of the right hand, which began 6 months ago and repeated 1-2 times a month. During the last week, seizures developed daily,the patient lost consciousness three times during the attack, and tonic-clonic convulsions were noted. I am also concerned about headache with vomiting, photophobia. After the attack, which lasts 2-3 minutes, there is weakness in the right hand, difficulty in speech. All these phenomena regress after 2-3 hours.

Objectively: a slight paresis of the right eye is detected, the right nasolabial fold is smoothed, the tongue deviates to the right. Tendon reflexes D>S, pathological reflexes are detected: upper and lower Rossolimo, Babinsky, Oppenheim on the right. There are no sensitive disorders. Performs coordination tests. Stiffness of the occipital muscles, Kernig's symptom, is indicated. On the fundus-stagnant phenomena. ECHO-EG-mixing M ECHO from left to right by 7 mm. MRI-on the left in the frontal lobe, a tumor-like formation with clear contours is determined, dislocating the median structures that squeeze the anterior horn of the left lateral ventricle.

Questions:diagnosis, tactics.

22. A 16-year-old patient lost consciousness during a school lesson. There was a developed generalized attack. Before the attack, I smelled burnt rubber. From the age of 10, 1-2 times a year, "fading" was noted, attacks of "unexpected falling", which the girl was amnesicized. During the last year, irritability, sleepwalking, and sleep-speaking have appeared.

Objectively: there are no general brain and focal symptoms. An aunt on my mother's side had epileptic seizures. On the EEG-complexes "acute-slow wave", increased paroxysmal activity after hyperventilation.

Questions: diagnosis, tactics.

23. The patient is 20 years old. From the age of 10, there are attacks of turning off consciousness for a few seconds. The patient at this point becomes silent, does not answer the questions asked, the skin of the face turns pale, the eyes become motionless, but does not fall. It seems that she is thinking. As soon as the attack ends, the patient continues the interrupted conversation or work. He doesn't remember the seizures. These conditions are repeated 3-4 times a day. There were no focal symptoms in the neurological status. Fundus - without pathology. On the EEG - "spike" waves.

Questions:

1) make a diagnosis,
2) prescribe treatment.

24. An 18-year-old patient is concerned about generalized convulsive seizures that begin with

sensations of rainbow rings in front of the eyes, all objects lose their shape, after which the patient loses consciousness and falls.

He has suffered from such seizures since childhood, their frequency is 3-4 times a month. There were no focal neurological symptoms in the neurological status. Fundus without pathology. On the EEG - epiactivity of a generalized nature, more pronounced in the occipital region.

Required:

1) make a diagnosis,

2) prescribe treatment.

25. A mother came to the doctor's office with a 9-year-old boy. The mother says that the boy has states when he suddenly seems to freeze, his gaze is fixed on one point, and he does not react to speech addressed to him. Such phenomena occur frequently, 10-15 times a day.

An objective study did not reveal any changes in the child's status.

What is the diagnosis? What additional research methods should be used? What appointments do you need to make?

26. The patient complains of seizures that begin with twitching in the fingers of the left hand, then spread to the entire arm and the left half of the face. Following this, the patient loses consciousness. Seizures are accompanied by biting the tongue and passing urine.

What is the name of this type of epileptic seizure? Where is the primary focus of arousal? What additional research methods should be used for such a patient?

27. The 37-year-old man had involuntary twitching of the left thumb on his hand. Within 30 seconds, the twitching spread to the entire left arm, and violent movements appeared in the left forearm and face. He couldn't remember what had happened to him, but his wife said he had fallen and the twitching had spread to the entire left side of his body. He remained unconscious for 3 minutes, and then recovered for 15 minutes . during the attack, he bit his tongue, involuntary urination was noted.

What kind of attack does the patient
have? Specify the location of the
lesion?

What tests should be performed?

Medical Genetics (8th semester)

1. Draw up a family tree with cases of progressive Duchenne myopathy (skeletal muscle atrophy with rapid development and severe course). Proband is a boy with myopathy. According to the parents ' medical history, the parents themselves and two sisters

probanda are healthy. On my father's side, two uncles, an aunt, and a grandfather and grandmother are healthy. Two cousins from my uncle and a cousin from my aunt probanda are healthy. On Proband's mother's side, one of his two uncles (the eldest) had myopathy. The second uncle (healthy) had two healthy sons and a healthy daughter. Aunt Probanda had a sick son. My grandparents are healthy.

a) After compiling the pedigree, mark the type of inheritance of the disease in this family. b) Specify the heterozygous members of the pedigree.

2. A 26-year-old woman applied to the medical and genetic consultation in the direction of an obstetrician-gynecologist to clarify the diagnosis of miscarriage. From the obstetric history, it is known that two pregnancies ended in spontaneous termination at a period of 7-8 weeks. From the family history, it is known that the sister of the applicant, after one spontaneous miscarriage at 7 weeks, gave birth to a premature baby with multiple malformations, who died on the 2nd day of life. Pedigree on the part of the applicant's husband – no specifics. Objectively: correct physique, reduced nutrition, without phenotypic dysmorphia; gynecological status-healthy.

What clinical data are needed to clarify the diagnosis?

1. What specialized genetic examination should be performed by the applicant?
2. Is there a need to conduct the same survey for the applicant's relatives? If so, to whom; if not, why?
3. Management tactics depending on the survey results.
4. Prognosis of offspring for the applicant.

3. The geneticist was contacted by the mother of a 15-year-old boy with complaints of delayed sexual development of her son. From the medical history, it is known that the child is from 1 pregnancy, urgent delivery. Early development – without special features, vaccinations - by age. From the age of 6, there were some behavioral features (autistic traits). Currently, he is studying in the 9th grade of a comprehensive school, has time for 3, 4. By nature, he is closed, has no friends. Objectively: height-176 cm, weight-82 kg, eunuchoid build, "female-type" fat deposition, high waist, gynecomastia, scanty pubic hair, armpits, no hair above the upper lip. The voice is high. Palpation determines some hypoplasia of the testicles. Family history without special features, there is a healthy Sib of 5 years. Presumptive diagnosis.

1. What additional examination methods can be prescribed to clarify the diagnosis?
2. What genetic methods should be used to confirm the diagnosis?
3. What is the reproduction forecast for proband?

4. What is the risk of this pathology for the offspring of a healthy Sibling?

4. A 16-year-old girl was referred to a pediatric gynecologist-endocrinologist with complaints of delayed sexual development, amenorrhea. On examination: height 138 cm, correct build, normal nutrition, wide chest, short neck, lymphatic edema of the right hand, no secondary sexual characteristics (mammary glands are not developed, fluffy hair in the armpits and pubis). Gynecological status: the external genitalia are formed correctly according to the female type, the uterus is hypoplasticized, the ovaries are in the form of connective tissue strands.

Presumptive diagnosis.

1. What laboratory tests should a girl perform?
2. What genetic methods will confirm the diagnosis?
3. Reproductive prognosis for a proband?
4. What types of correction can be recommended in this case?

5.

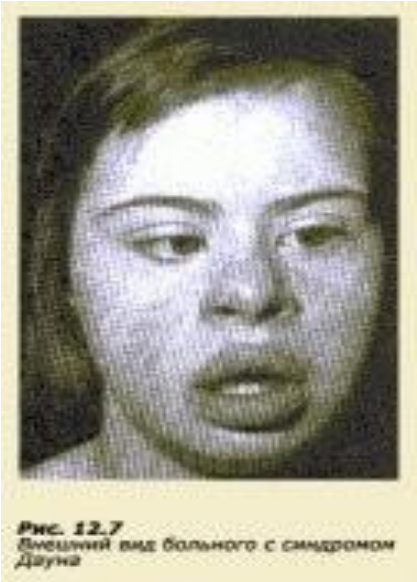

Рис. 12.7
Внешний вид больного с синдромом Дауна

1. What pathology can be assumed from the photo?
2. What group of hereditary diseases does it belong to?
3. What problems from the internal organs are most common in this disease?
4. What is the diagnosis of this disease?
5. What are the recommendations for the treatment and rehabilitation of such people?

6. From the age of 3, the boy began to have a lag in motor development. There was a weakness of the muscles of the pelvic girdle, thighs, there was a "duck gait". Later, weakness of the shoulder girdle muscles joined. By the age of 10, he began to move with difficulty, especially difficult to climb stairs. On examination: the chest is flattened, scoliosis of the thoracic spine, lumbar lordosis, "pterygoid shoulder blades" are formed, weakness of the proximal arms, respiratory muscles, pseudohypertrophy of the calf muscles is noted. There are no fibrillar twitches. Sensitivity is preserved. Signs of cardiomyopathy on the ECG. Intelligence is reduced. In blood serum b, the content of CK is significantly increased. EMG scans reveal changes that are characteristic of primary muscle disease.

Make a diagnosis.

What additional examination methods should be used to clarify the diagnosis? What is the type of inheritance of the disease?

7. From the age of 16, the patient developed and steadily progressed muscle weakness: it became difficult to climb stairs, get up from a squatting position (leaning on the hips,

"climbs by itself" or leans on nearby objects), a "duck gait"has appeared. A few years after the onset of the disease, increasing weakness in the proximal parts of the hands began to be noted. When examined, the following symptoms attract attention: it is difficult to raise your hands above the horizontal (can not comb your hair), "pterygoid shoulder blades" (atrophy of the anterior dentate muscles). Due to the weakness of the trapezoid muscles-a symptom of "free upper arms". The amount of active and passive movements is limited. Low knee reflexes, reflexes with the biceps and triceps muscles of the shoulder. Atrophy, localized mainly in the proximal muscle groups of the upper and lower extremities. Due to atrophy of the muscles of the back and abdominal wall - "frog belly". Increased lumbar lordosis, appeared "wasp waist". The facial muscles are not affected. There are no fibrillar or fascicular twitches. As a manifestation of endocrine pathology - obesity and vegetative dystonia. A biochemical blood test shows a moderate increase in CPK. On the EMG-changes characteristic of primary muscle damage.

Make a diagnosis.

What additional methods of examination should be performed to clarify the diagnosis?

8. At the age of 25, a patient began to experience weakness and progressive hypotrophy of the muscles of the face and shoulder girdle. On examination, a hypomimic face ("sphinx face"), a violation of lip movements, can not fold the lips into a tube, can not whistle, when laughing

the oral slit becomes horizontal (the corners of the mouth do not rise - "transverse laughter"), the eye slits do not close tightly, the forehead does not wrinkle ("polished forehead"), the lips are protruding ("tapir lips"). The muscles of the upper shoulder girdle are hypotrophic, tendon reflexes are reduced. Intelligence saved. Creatine-creatinine metabolism is moderately impaired. On the EMG-signs of primary muscle damage.

Make a diagnosis.

What additional methods of examination should be performed to clarify the diagnosis? What is the type of inheritance?

9. The child has developed and progresses muscle weakness 2 years after birth; at first, movement is restricted in the legs, then in the trunk. Weakness symmetrically and gradually covers the muscles of the shoulder girdle, upper limbs, and neck. It is characterized by a "frog pose" (legs are spread apart and rotated outward). Due to hypotension and muscle atrophy, the "sluggish child" syndrome develops. Fasciculations in the muscles of the extremities are noted. Excursion of the respiratory muscles is reduced. Tendon and periosteal reflexes are reduced. On EMG -

"the rhythm of the palisade". The CPK level is normal. The fatal outcome occurred 5 years after the onset of the disease due to pneumonia due to paresis of the intercostal muscles and diaphragm. Make a diagnosis.

What additional methods of examination should be performed to clarify the diagnosis? What is the type of inheritance?

10. At the age of 35, a patient developed trembling of the hands and then legs, which gradually increases. When performing arbitrary movements, the tremor increases, while at rest it decreases, up to complete absence. After a few years, hyperkinesis spread to the muscles of the face, to the muscles involved in the speech act, and speech became scanned and trembling. In addition to these symptoms, the patient has ataxia, discoordination, nystagmus, muscular dystonia, greenish-brown pigmentation along the outer edge of the iris (Kaiser - Fleischer ring). Laboratory tests: decreased serum levels of ceruloplasmin (below 10 U, normal 25-45 U), hypercupruria (up to 1,000 mcg / day, normal 150 mcg/day); hyperaminociduria (up to 1,000 mg/day, normal 350 mg/day). Changes in liver samples. On MRI - expansion of the ventricles of the brain and atrophy of the cortex. Make a diagnosis.

What additional methods of examination should be performed to clarify the diagnosis? What is the pathogenesis of the disease?

Methods of treatment.

11. The patient is 57 years old. The first symptoms of the disease appeared at the age of 45, when irregular, involuntary movements in various muscle groups began to be noted, which increased with excitement and disappeared during sleep. At the beginning of the disease, she could temporarily suppress these violent movements and serve herself. A few years after the onset of the disease, memory disorders joined, the range of interests narrowed, and intelligence decreased. On examination: the patient, due to hyperkinesis, grimaces, gestures, spreads her arms wide, sways and dances when walking. Due to hyperkinesis of the speech musculature, speech is disrupted - it has become slow and uneven. Muscle tone is dystonic.

Make a diagnosis.

What additional methods of examination should be performed to clarify the diagnosis? What is the type of inheritance?

Neurosurgery (8th semester)

1. The patient gradually develops weakness in the left leg for 6 months. Examination revealed pyramidal paresis in the left leg, surface sensitivity was disturbed from the Th 4-5 level on the right, joint and muscle feeling was upset to the ankle joint on the left. Determine the localization of the pathological process and the clinical syndrome. What pathological processes are characterized by such a clinic?

2. A 42 - year-old woman had reduced vision first on the right, then on the left, no menstruation in the last two years, thirst and frequent urination.

Neurological examination revealed atrophy of the optic nerves on the fundus, bitemporal hemianopsia, weak convergence, reduced pupil response to light, and enlarged Turkish saddle on the craniogram.

What topical and clinical diagnosis can be made, and justify them?

3. A 58-year-old woman complained of ringing and hearing loss on the left side, headaches, staggering when walking, and has been walking with difficulty for 6 months. The symptoms are progressive. Has been ill for 5 years.

Neurological examination revealed nystagmus when looking to the left, lack of corneal reflex on the left, hypesthesia of the face on the left, decreased pharyngeal reflex on the left, walks with legs wide apart, falls to the left in the Romberg pose, performs cerebellar tests worse with the left limbs. Slight pyramidal insufficiency on the right side. On the fundus of the eye, the borders of the nipples of the optic nerves are blurred. Protein-cell dissociation in the lumbar cerebrospinal fluid.

What topical and clinical diagnosis can be made for this patient?

4. A 47-year-old patient was admitted with complaints of staggering when walking. From the medical history, it is known that 8 months ago, hearing in the left ear gradually began to decrease, then the face was distorted to the right, and the left cheek became numb, headaches, nausea and dizziness appeared. When examined by a neurologist: hearing impairment on the left by the type of sound-receiving device, peripheral paresis of the left facial nerve, hypesthesia of the left half of the face, hypotension and ataxia in the left extremities.

What examination methods should be used to clarify the diagnosis? What is your intended diagnosis?

What diseases can lead to the development of hypertension syndrome?

5. Boy U., 14 years old. The patient complains of loss of consciousness, convulsions in the left side of the face and limbs, and repeated vomiting. 2 hours ago, I fell in training, complained of headache, nausea, weakness. An hour after the fall, convulsions suddenly appeared, he lost consciousness. He was taken to the hospital by ambulance.

In neurological status: coprosy consciousness. Rigidity of the occipital muscles. Ocular slits D<S, ptosis on the right, the gaze does not fix. Divergent squint OD>OS. The pupil on the right is dilated, the reaction to light is weakened. Muscle tone is increased by spastic type, S>D. Knee reflexes are high, with clonus feet, S>D. Positive reflex of Babinsky and Oppenheim on the left.

1. Where the process is localized.
2. What diagnosis can be made for the patient?

Приложение 3

TOPICS OF REPORTS AND PRESENTATIONS (7-8 semesters)

1. Modern approaches to the treatment of ischemic stroke.
2. Modern approaches to the treatment of hemorrhagic stroke.
3. Principles of prescribing glucocorticoids in neurological practice.
4. Practice of prescribing immunoglobulins in neurology.
5. Tactics of prescribing anticonvulsants.
6. Practice of prescribing anticholinesterase drugs.
7. Modern neuroimaging capabilities.
8. Endovascular methods of treatment in neurosurgical practice.
9. EEG-video monitoring, diagnostic value.
10. The concept of population genetics in the Kyrgyz Republic.
11. Tactics of antihypertensive therapy for cerebrovascular pathology
12. Rehabilitation in patients with stroke.
13. Primary and secondary prevention of cerebrovascular diseases

Приложение 4

ABSTRACT TOPICS (7-8-semester)

1. Rear longitudinal beam system, function.
2. Types of ataxia, their topical significance.
3. Variants of hemianopsia, topical significance.
4. Alternating syndromes, concept, topical meaning, give examples.
5. Neuroplasticity in practical medicine.
6. Modern approaches to the treatment of ischemic stroke.
7. Complex treatment of hemorrhagic stroke.
8. Modern methods of treatment of hydrocephalus.
9. Modern approaches to the neuropharmacology of epilepsy.
10. Neurosurgical treatment of epilepsy.
11. Principles of rehabilitation of patients with cerebral palsy.
12. Invasive and non-invasive methods of prenatal diagnosis
13. DNA diagnostics of hereditary diseases.
14. Methods of genetic engineering in the service of diagnostics and treatment of nervous diseases.

Приложение 5

QUESTIONS FOR CONDUCTING THE CONTROL WORK

General Neurology (7th semester)

1. Normal reflexes and their pathology.
2. Pathological reflexes (foot, hand)
3. Surface sensitivity – conducting pathways, symptoms of the lesion.
4. Deep sensitivity – pathways, symptoms of the lesion.
5. Types of sensitivity disorders.
6. Pyramid path. Signs of central and peripheral paralysis
7. Clinical manifestations of Brown-Secard syndrome.
8. Horner's syndrome
9. Clinic of complete transverse spinal cord lesion at the level of cervical thickening.
10. Clinic of complete transverse spinal cord lesion at the level of lumbar thickening.
11. Clinic of complete transverse spinal cord lesion at the level of thoracic segments.
12. Striatal system, symptoms of the lesion.
13. Pallid system, symptoms of the lesion
14. Olfactory nerve and its symptoms
15. Draw a diagram of the optic nerve pathways
16. Types of hemianopsias.
17. Oculomotor nerve and its symptoms.
18. Symptoms of trigeminal nerve damage
19. Symptoms of facial nerve damage
20. Clinic of auditory nerve damage
21. Vestibular nerves and symptoms of its damage.
22. Bulbar palsy
23. Pseudobulbar paralysis.
24. Hyoid nerve and symptoms of its damage.
25. The concept of alternating syndromes, give examples.
26. Conducting pathways of the cerebellum (Flexig and Govers)
27. Symptoms of cerebellar damage.
28. Speech and its disorders.
29. Gnosis and types of agnosia.
30. Praxis and types of apraxia.
31. Memory and its disorders.
32. Disorders of innervation of the bladder and rectum.
33. Hypothalamic syndrome.
34. Vegetodystonia syndrome, clinical forms
35. Syndromes of frontal lobe damage.
36. Parietal lobe lesion syndromes.
37. Syndromes of temporal lobe involvement.
38. Syndromes of occipital lobe involvement.
39. Syndromes of the brachial plexus lesion.
40. Syndromes of ulnar nerve damage.
41. Syndromes of radial nerve damage.
42. Syndromes of damage to the median nerve.
43. Syndromes of lesion of the lumbosacral plexus.
44. Syndromes of sciatic nerve damage.

45. Syndromes of femoral nerve damage.
46. Degrees of impaired consciousness.
47. Meningeal syndrome, clinic

Private Neurology and Neurosurgery (7-8 semesters)

1. Classification of cerebral circulatory disorders.
2. Hemorrhagic cerebral stroke. Факторы Risk factors. Pathogenesis, clinic, diagnosis.
3. Principles of hemorrhagic stroke treatment, emergency therapy.
4. Ischemic cerebral stroke. Факторы Risk factors. Pathogenesis, clinic, diagnosis, treatment.
5. Principles of treatment of ischemic stroke, emergency therapy.
6. Subarachnoid hemorrhage. Pathogenesis, risk factors, clinic, diagnosis, treatment.
7. Transient disorders of cerebral circulation. Pathogenesis, risk factors, clinic, diagnosis, treatment.
8. A migraine. Clinic, treatment.
9. Non-migraine headaches.
10. Acute serous meningitis. Etiology, clinic, and treatment.
11. Tuberculosis meningitis. Treatment.
12. Meningococcal meningitis. Etiology, epidemiology, clinic, treatment, prevention.
13. Secondary purulent meningitis. Etiology, pathogenesis, clinic, treatment.
14. Polio. Etiology, pathogenesis, clinic, treatment, prevention.
15. Tick-borne encephalitis. Etiology, pathogenesis, epidemiology, clinic, treatment, prevention.
16. Herpetic encephalitis. Etiology, pathogenesis, epidemiology, clinic, treatment, prevention.
17. Trigeminal neuralgia, etiopathogenesis, clinic, diagnosis, treatment.
18. Acute demyelinating полирадикулоневропатия Guillain-Barre polyradiculoneuropathy. Clinic, diagnostics.
19. Principles of treatment of Guillain-Barre syndrome.
20. Polyneuropathies (diabetic, lead, alcoholic, etc.).
21. Criteria for the diagnosis of neurorheumatism. Chorea minor Pathogenesis, clinic, treatment.
22. Criteria for the diagnosis of neurosyphilis.
23. Criteria for the diagnosis of NEURO-aids.
24. Criteria for the diagnosis of neurobrucellosis.
25. Vegetative dystonia. Clinic, treatment.
26. Cranial nerve pair VII neuropathy.
27. Etiology and types of prozalgia.
28. Epilepsy and convulsive syndromes.
29. Epileptic status. Pathogenesis, clinic, and treatment.
30. Parkinson's disease. Etiology, pathogenesis, clinic, treatment.
31. Myasthenia gravis. Pathogenesis, clinic, and treatment. Myasthenic crisis. Cholinergic crisis, criteria, emergency care.
32. Brain and spinal cord tumors. Classification.
33. Traumatic brain injury. Classification, diagnosis, and treatment.

Medical Genetics (8th semester)

1. Classification of hereditary diseases.

2. Medical and genetic counseling: purpose, objectives, and conditions.
3. Clinical and genealogical method, its diagnostic capabilities.
4. Prenatal diagnostics, its role in the primary prevention of hereditary and familial diseases.
5. Non-invasive methods of prenatal diagnostics: ultrasound, determination of hCG, AFP in blood serum, indications and timing.
6. Cytogenetic research methods. Definition. The essence of methods.
7. Invasive methods of prenatal diagnosis: amniocentesis, cordiocentesis, indications, timing.
8. Invasive methods of prenatal diagnostics, skin and muscle biopsies, indications, timing, contraindications.
9. Molecular genetic and biochemical methods for the diagnosis of hereditary diseases. Indications for their implementation.
10. Progressive Duchenne muscular dystrophy, clinic, diagnosis.
11. Hepatocerebral dystrophy, clinic, treatment.
12. Progressive muscular dystrophy of Landuzi-Dejerina, clinical picture.
13. Clinical picture of Klinefelter's syndrome.
14. Family forms of amitrophic Lateral sclerosis, clinic, prognosis.
15. Torsion dystonia, pathogenesis, treatment principles
16. Strumpel's disease. Type of inheritance, pathogenesis
17. Myotonic dystrophy, Thomson's disease.
18. Friedreich's disease, clinical picture.
19. Clinical picture of Shereshevsky-Turner syndrome.
20. Clinical picture of Down syndrome.
21. Charcot-Marie neural amyotrophy, diagnosis.
22. Malformations of the nervous system, syringomyelia, diagnosis, treatment.
23. Hyperkalemic form of paroxysmal myoplegia, treatment.
24. Family forms of primary parkinsonism, diagnosis, treatment.
25. Phacomatosis. Neurofibromatosis, diagnosis, treatment.
26. Huntington's chorea, diagnosis, treatment.

Appendix 5a

PRACTICAL SKILLS

(7th semester)

1. Methodology of motor sphere research
2. Method of research of the sensitive sphere. Pain points, meningeal signs, and tension symptoms.
3. Methods of investigation of the extrapyramidal system, cerebellum.
4. Methods of investigation of IX, X, XI, XII, V, VII, VIII pairs of cranial nerves.
5. Methods of investigation of I, II, III, IV, VI pairs of cranial nerves.
6. Methods of research of the autonomic nervous system.
7. Methodology for the study of higher nervous activity.

Appendix 6 TYPES

OF CONTROL AND CERTIFICATION, FORMS OF EVALUATION TOOLS

SITUATIONAL TASKS

Sample issue

The patient has a decrease in strength in the arms, a decrease in tendon reflexes and muscle tone, fibrillar and fascicular twitching of the shoulder girdle muscles, and leg movements are not disturbed. What is the name of the motor syndrome? What formations are affected?

Standard response to situational tasks

Peripheral paraparesis. Lesion of the anterior horns of the spinal cord at the level of segments C4-C6.

Guidelines for evaluating situational tasks (in %)

- The solution is correct and complete, including all the above elements with a theoretical justification and a schematic image /85-100
- The solution is correct, not complete, and there is no theoretical justification for the answer / 70-84
- The solution is incomplete and includes one of the above elements / 60-69
- All elements are written incorrectly / 0-59

REPORT RATING SCALE

#	**Indicator name**	**Mark (in %)**
FORM		20
1	Division of the text into an introduction, main part and conclusion	0-10
2	Logical and understandable transition from one part to another, as well within parts	as 0-10
CONTENT		60
1	Correspondence to the topic	0-10
2	Presence of the main topic (thesis) in the introductory part and the introductory part's appeal to the reader	0-10
3	Development of the topic (thesis) in the main part parts (disclosure of the main points through a system of arguments supported by facts, examples, etc.)	0-20
4	Availability of conclusions that correspond to the topic and content of the main part	0-20
REPORT		20
1	Correctness and accuracy of speech during the defense	0-5
2	Broad outlook (answers to questions)	0-10
3	Meeting the rules	0-5
	Total points	**100**

ABSTRACT RATING SCALE

	Minimum answer -0-59%	**Stated, disclosed answer -60-69 %**	**Completed complete answer-70-84 %**	**Exemplary, exemplary, worthy of imitation answer - 85-100 %**	**rating**
Problem disclosure	Problem disclosure Problem not disclosed. No conclusions	The problem is not fully disclosed. Conclusions are not drawn or conclusions are not justified	The problem is disclosed. The problem is analyzed without involving additional literature. Not all conclusions are made or justified.	The problem is fully disclosed. The problem is analyzed using additional literature. Conclusions are drawn.	
Presentation	The information presented is not logically related.	The information presented is not systematic or consistent.	The information provided is systematic and consistent.	The information provided is systematic, consistent, and logically linked.	
Registration	He The conditions for completing the abstract were not met. More than 4 errors in the submitted information	3-4 errors in the submitted information	No more than 2 errors in the submitted information	No errors in the submitted information	
Answers to questions	No answers to questions	Only answers to elementary questions	Answers to questions complete or partially complete.	Complete answers to questions with examples and explanations	
Final score	**unsatisfactory**	**satisfactory**	**good**	**excellent**	

PRESENTATION RATING SCALE

	Minimum answer -0-59%	**Stated, disclosed answer -60-69 %**	**Completed complete answer-69-84 %**	**Exemplary, exemplary, worthy of imitation answer - 85-100 %**	**rating**
Problem disclosure	Problem disclosure Problem no t disclosed. No conclusions	The problem is not fully disclosed. Conclusions are not drawn or conclusions are not justified	The problem is disclosed. The analysis was carried out problem is analyzed wit hout involving additional literature. Not all conclusions are made or justified.	The problem is fully disclosed. The problem is analyzed using additional literature. Conclusions are drawn.	
Presentation	The information presented is not logically related. Professional terms are not used.	The information provided is not systematic or consistent. 1-2 professional terms are used	The information presented is systematized and consistent. Used More than 2 professional terms were used.	The information provided is systematic, consistent , and logically linked. More than 5 professional terms were used.	
Registration	Not used informational	Used informational	Used informational	Widely used	

	technologies (PowerPoint). More than 4 errors in the submitted	technology information (PowerPoint) partially. 3-4 errors in the submitted	technology information (PowerPoint). No more than 2 errors in the submitted information	information technologies (PowerPoint). There are no errors in the information	
provided Answers to questions	There are no answers to questions	Only answers to elementary questions	Answers to questions are complete or partially complete.	Complete answers to questions with by casting examples and explanations	
Final score	**unsatisfactory**	**satisfactory**	**good**	**excellent**	

TEST RATING SCALE (intermediate control – "KNOW"):

"Excellent" - 85-100 % of correct answers
"Good" - 70-84 % of correct answers
"Satisfactory" - 60-69% of correct answers
"Unsatisfactory" - less than 60% of correct answers

RATING SCALE FOR ANALYTICAL AND PRACTICAL TASKS
(intermediate control – "BE ABLE and MASTER") Oral survey

When evaluating an oral survey, the following criteria are taken into account:

1. Knowledge of the main sections of general and private neurology.
2. Depth and completeness of the question disclosure.
3. Knowledge of terminology and its use in answering questions.
4. Ability to explain, draw conclusions and generalizations, and give reasoned answers.
5. Knowledge of the consistency and consistency of the answer, the ability to answer additional questions.

Assessment of oral and written responses to the test of the level of learning to be ABLE and MASTER (in %)

The mark **(85-100)** marks the answer that is presented logically correctly in an accessible form, according to the terminology used in neurology, as well as in medicine in general. The student shows excellent knowledge of the etiology and pathogenesis of neurological diseases; is able to identify neurological symptoms and syndromes, make a topical and clinical diagnosis; knows the features of the clinical course, diagnosis, differential diagnosis, treatment and prognosis of neurological diseases.

The mark **(70-84)** marks the answer that shows good knowledge in general and private neurology, features of topical and clinical diagnosis, etiology, pathogenesis and course of neurological diseases, diagnosis, differential diagnosis, treatment and prognosis. It doesn't give a complete answer or doesn't focus on 1 or 2 of the above elements.

The mark **(60-69)** marks the answer that shows average knowledge in general and private neurology, features of the clinical course, diagnostics,

differential diagnosis, treatment and prognosis of neurological diseases, average knowledge of the etiology and pathogenesis of neurological diseases; poorly versed in the issues of making topical and clinical diagnoses. It doesn't give a complete answer or doesn't focus on the 3 elements listed above.

The mark **(0-59)** marks an answer that shows extremely poor knowledge in general and private neurology. The student does not know the etiology, pathogenesis, features of the clinical course, diagnosis, differential diagnosis, treatment and prognosis of various neurological diseases, and makes serious mistakes in the content of the answer. Demonstrates no understanding of the problem. Doesn't meet the requirements for the task.

PRACTICAL SKILLS ASSESSMENT SCALE (in %)

The mark **(85-100)** evaluates the correct implementation of the method of neurological examination of the patient, the student names the research methods, demonstrates the research methodology, gives clear instructions when conducting tests, observes ethical and deontological principles and an individual approach to the patient.

The mark **(70-84)** evaluates the correct implementation of the method of neurological examination of the patient, the student does not give the full name of the research methods, demonstrates the research methodology, does not give clear instructions when conducting tests, observes ethical and deontological principles and an individual approach to the patient.

The mark **(60-69)** evaluates the implementation of the patient's neurological examination methodology, the student does not give the full name of the research methods, makes inaccuracies when demonstrating the research methodology, finds it difficult to give instructions to the patient when conducting tests, and observes ethical and deontological principles.

The mark **(0-59)** is issued if the patient's neurological examination method is not performed, the student does not name the research methods, cannot demonstrate the research method, it is difficult to give instructions to the patient when conducting tests, and there is no individual approach to the patient.

MEDICAL HISTORY ASSESSMENT SCALE (in %)

The mark **(85-100)** marks the story written according to the presented scheme. There is a justification for the topical, preliminary and clinical diagnosis, and a differential diagnosis is made. The examination plan corresponds to the diagnosis made. Medical and non-medical individual treatment was chosen. The prognosis of the course of the disease was determined.

The mark **(70-84)** marks the history. written according to the presented scheme, topical, preliminary and clinical diagnoses are justified, not a complete differential diagnosis is made. The survey plan does not include all possible survey methods. A general treatment regimen for the disease has been prescribed. The prognosis of the course of the disease was determined.

The mark **(60-69)** is used to evaluate the history. written according to the presented scheme, there is no justification for the topical diagnosis, preliminary and clinical diagnoses are formulated, and not a complete differential diagnosis is made. The survey plan does not

includes all possible survey methods. A general treatment regimen for the disease has been prescribed.

The mark **(0-59)** marks the history. It is not written according to the scheme, there is no justification for the topical diagnosis, preliminary and clinical diagnoses are not formulated, and a differential diagnosis is not made. The survey plan does not include all possible survey methods. The treatment regimen does not correspond to this disease.

APPENDIX 7

Technological map of the discipline
"Neurology, medical genetics, neurosurgery "Specialty" Medical science"
Course 4, semester 7, number of ZES-3, reporting-credit

Name of modules of the discipline according to the RPD	Control	Form of control	Credit minimum	Credit maximum	Control schedule (semester week)
7 semester					
Section 1					
1. General neurology	Current control	Oral survey, control work, practical skills of neurological examination, attendance.	5	10	6
	Boundary control	Written survey, situational task, practical skills.	15	20	
Section 2					
2. Private neurology. Cerebrovascular, neuroinfectious diseases, diseases of the peripheral nervous system.	Current control	Oral survey, test paper, abstract, report, presentation, attendance.	5	10	11
	Boundary control	Written survey, situational task.	5	10	
Section 3					
3. Private neurology. Mastenia, demyelinating diseases of the nervous system. Epilepsy. Perinatal encephalopathy, cerebral palsy.	Current control	Oral survey, test paper, abstract, report, presentation, attendance, activity.	5	10	14
	Boundary control	Written survey, situational task	5	10	
Total for the semester			40	70	
Intermediate control test			20	30	
Semester rating by discipline:			**60**	**100**	

Note: 1 point is deducted for each missed lecture and practical lesson.

Technological map of the discipline
"Neurology, medical genetics, neurosurgery "Specialty" Medical science"
Course 4, Semester 8, number of ZES-3, reporting-exam

Name of modules of the discipline according to the RPD	Control	Form of control	Credit minimum	Credit maximum	Control schedule (semester week)
8th semester					
Section 4					
4. Medical genetics. Clinical and genealogical diagnostic methods. Malformations, hereditary diseases with a predominant lesion of the pyramidal and cerebellar systems.	Current control	Oral survey, test paper, abstract, report, presentation, attendance. Lineage.	5	10	28
	Boundary control	Written survey, situational task.	5	10	
Section 5					
5. Medical genetics. Hereditary diseases with a predominant involvement of the extrapyramidal system, neuromuscular diseases, diseases associated with metabolic disorders, phacomatosis.	Current control	Oral survey, test paper, abstract, report, presentation, attendance.	5	10	33
	Border control	Written survey, situational task.	5	10	
Section 6					
6. Neurosurgery	Current control	Oral survey, test paper, abstract, report, presentation, attendance.	5	10	37
	Border control	Written survey, situational task, protection of medical history.	15	20	
Total for the semester			40	70	
Intermediate control exam			20	30	
Discipline rating:			**60**	**100**	

Note: 1 point is deducted for each missed lecture and practical lesson.

Appendix 8

SCHEME FOR WRITING A MEDICAL HISTORY IN NEUROLOGY

TITLE PAGE-contains the details of the university, the name of the department, the full name of the student indicating the group and course, the full name, position, title and degree of the teacher.
Design example:
KRSU
Head of Department: title, degree, full
NAME Teacher: title, degree, full NAME
Medical history
Patient's full name and
clinical diagnosis
Curator: Full name of the student, course, group

PASSPORT PART:
Last name, first name, patronymic. Home address.
Date of the disease.
Date of receipt.
Place of work.

1. ЖалобыPatient's complaints (main complaints come first, then general ones)
2. Anamnesis of the disease (how the disease started, how it developed, what treatment it received, what is the effect of the treatment).

Anamnesis of life Features of development by age stages. At what age did you start walking, talking, and attending school? Conditions of life and upbringing in the family. School performance. Education.Diseases suffered in childhood of particular note: seizures, stuttering, sleepwalking, nighttime urinary incontinence and in adulthood. Intoxication: alcohol, tobacco, food products, etc. Physical injuries, surgeries. Injuries of the skull and spine, disorders in the acute period and consequences. Mental overexertion, conflict situations and reactions to them. Labor activity: profession, qualification and length of service, working conditions. Occupational hazards. Working capacity before the illness and in connection with the present illness. Sex life, from what age. In women-the onset of menstruation, pregnancy, childbirth, abortions, miscarriages. Marital status, family composition. Relationship between parents. Diseases in the next of kin (make a pedigree table). Housing conditions and material security.)

3. Status praesens objectivus (objective examination data): Somatic status (according to the standard scheme)
   Neurological status:
   State of consciousness, presence of general brain symptoms.
   Meningeal symptoms.
   Stigmas of dysembryogenesis.
   Skull shape
   Cranial nerves (pairs 1 to 12)
   Motor sphere – the volume of active movements, if walking, indicate the type of gait, muscle tone, muscle strength, the presence of atrophy, their symmetry.
   Tendon reflexes
   Pathological reflexes
   Coordination sphere
   Sensitivity.

Vegetative disorders (pelvic organ function, dermographism, trophic disorders)
Higher nervous activity.

4. Preliminary diagnosis: it is made on the basis of complaints, anamnesis of the disease and life, identification of leading neurological syndromes, establishment of a topical diagnosis, after which the nosological form is indicated.
5. План обследованияThe patient's examination plan (logically follows from the preliminary diagnosis, which must either be confirmed or refuted).
6. Results of the performed examination (written out from the patient's medical history).
7. Differential diagnosis is performed with 2-3 clinically similar diseases.
8. Prescribed treatment (a prescription statement indicating the calculated dose, method, and frequency of drug administration).
9. Clinical diagnosis and its justification (use only the necessary data to make a diagnosis). The main and concomitant diagnoses are justified separately.
10. Diaries (should reflect the dynamics of the process, only 2-3).
11. Discharge or staged epicrisis (if the patient continues to stay in the hospital) - indicate the time of stay in the hospital, clinical diagnosis, complaints, objective examination data, examination performed, treatment, and the effect of the treatment performed. Recommendations.