

ANNOTATION**work program of the discipline****"Neurology, medical genetics, neurosurgery"**

Speciality	05/31/01 General medicine
Number of credits	In accordance with the RUP
Interim certification form (pass/pass with assessment/exam)	exam

1. The purpose of studying the discipline

- 1.) Teach the skill of neurological examination and identifying symptoms of damage nervous system, the ability to combine symptoms into syndromes and make a topical diagnosis.
- 2.) To provide modern knowledge about the etiology, pathogenesis, clinic, diagnosis, treatment and prevention of major diseases of the nervous system.
- 3.) To form in the student clinical neurological thinking, ability independently diagnose the most common neurological diseases, treat emergency neurological conditions and prevent diseases of the nervous system.
- 4.) Establish the concept of the main differences in human hereditary pathology (monogenic diseases, chromosomal syndromes, multifactorial diseases), give the concept of genealogy and reveal the main tasks of the clinical-genealogical method, study modern methods of diagnostics, reveal the cytological and biochemical basis of heredity, determine the role of the genotype and the external environment, study the clinic, diagnosis and prevention of the main chromosomal syndromes and monogenic diseases.

2. Summary of the discipline**1.) Anatomy of the nervous system. Neurological status and its interpretation. Topical diagnosis of diseases of the nervous system.**

Subject of neurology. History of the Rostov School of Neurology and Neurosurgery. Main parts of the nervous system. Methodology for constructing a neurological diagnosis: topical and nosological diagnoses. Syndromes of sensitivity disorders with damage to afferent pathways at various levels. Principles of organization of voluntary movements. Ataxia: cerebellar, vestibular, frontal, sensitive. Dynamic localization of functions. Syndromes of damage to individual sections of the cross section of the spinal cord. Complete spinal cord lesion syndrome. Anatomical and physiological features of the structure of the brain stem. Cerebrospinal fluid. Meningeal syndrome.

2.) Medical genetics.

Cytological bases of heredity. Mutagenesis. Classification of mutations.

Methods of medical genetics, diagnostic capabilities. Principles and objectives of medical genetic counseling. Classification of hereditary diseases.

Classification of chromosomal diseases. Damage to the nervous system and internal organs due to chromosomal diseases. Syndromes with mental retardation, clinical picture and medical tactics. Classification of hereditary neuromuscular diseases. Classification: angiomatosis and blastomatosis. Spinocerebellar degenerations: clinical picture, diagnosis. Extrapyramidal degenerations.

3.) Private neurology.

Definition of the concept of “meningitis” and “meningism”. Meningeal syndrome. Classification of meningitis. Purulent and serous meningitis. Definition of the concept of encephalitis and encephalomyelitis. Etiology, pathogenesis, classification, clinical picture, diagnosis, treatment and prevention. Epidemic encephalitis. Tick-borne encephalitis. Encephalomyelitis. Incidence and prevalence of multiple sclerosis. Etiology. Pathogenesis. Pathomorphology. Classification. Clinic, diagnosis, differential diagnosis. Myelitis. Definition. Etiology, pathomorphology, clinic, diagnosis, treatment, prevention, examination issues. Etiology, pathomorphology of stroke, pathogenesis, classification. Cerebral crises, transient ischemic attacks, hemorrhagic and ischemic strokes. Subarachnoid hemorrhage. Encephalopathy. Epilepsy. Classification of epilepsy and epileptic seizures (fits). Status epilepticus. Neuroses.

4.) Neurosurgery.

Classification of brain tumors. Surgery for spinal cord tumors.

Definition of open, penetrating and non-penetrating traumatic brain injury. Definition of the concept of osteochondrosis, etiology, pathogenesis, stages of development.

Congenital malformations of the nervous system. Hydrocephalus. Etiopathogenetic aspects of trigeminal neuralgia. Clinic of neuralgia of the I, II and III branches of the trigeminal nerve. Conservative treatment methods. Surgical methods for treating trigeminal neuralgia.