

TOPICS FOR THE CONTEST FOR THE POSITION OF PROFESSOR OF NEUROLOGY

DISCIPLINE: NEUROLOGY (lectures, clinical internship for students registered in the study programme RADIOLOGY and MEDICAL IMAGISTICS, lectures for students registered in the study programme DENTAL MEDICINE)

position 5 in the Staff Establishment of the Department of Psychoneurosciences and Rehabilitation, Faculty of Medicine and Pharmacy, University of Oradea

1. **MOTRICITY.** Definition of terms. Upper and lower motor neurons. Pyramidal and extrapyramidal motor pathways. Classification of movements. Muscle tone. Reflectivity. Classification and semiology of the involuntary movements.
2. **GENERAL SOMATIC SENSATION.** Sensory pathways. Sensory syndromes.
3. **THE CRANIAL NERVES.** Anatomy, semiology, etiology of cranial nerve palsies.
4. **COORDINATION.** Anatomy and physiology of the cerebellum. Diseases of the cerebellum. Classification and semiology of the various types of ataxias.
5. **NEURODEGENERATIVE DISEASES.** Parkinson's disease. Huntington's disease.
6. **CEREBROVASCULAR DISEASES.** Anatomy and physiology of the cerebral blood supply. Etiopathogenic subtypes of ischemic stroke. Risk factors. Diagnosis and evaluation. Treatment of acute ischemic stroke. Prevention (primary and secondary prevention). Cerebral aneurysms and subarachnoid hemorrhage. Intracerebral hemorrhage (hypertensive and lobar hemorrhages). Clinical picture, evaluation, positive and differential diagnosis, management.
7. **EPILEPSY.** Classification and clinical picture of the epileptic seizures. Electroencephalography. Imagistic evaluation in epileptic syndromes. Positive and differential diagnosis and evaluation. Principles of antiepileptic treatment.
8. **NEUROINFECTIONS.** Lyme disease (neuroborreliosis). Herpes virus infections. Cerebral abscess. Positive and differential diagnosis, treatment.
9. **DEMYELINATING DISEASES.** Multiple sclerosis: pathogenesis, pathology, clinical picture, diagnostic criteria, differential diagnosis, treatment. Myelitis.
10. **INTRACRANIAL TUMORS.** The syndrome of increased intracranial pressure: pathophysiology, clinical picture, treatment. Classification of the primary intracranial tumors and grading systems. Clinical picture, evaluation, differential diagnosis, treatment. Secondary intracranial tumors (cerebral and leptomeningeal metastases). Paraneoplastic neurological syndromes.
11. **DISEASES OF THE PERIPHERAL NERVOUS SYSTEM.** Cervical and lumbar disc herniation. Radiculopathies and neuralgias. Mono- and polyneuropathies. Electromyography and nerve conduction studies. Acute demyelinating polyneuropathy (Guillain-Barré syndrome) - pathogenesis, clinical picture, positive and differential diagnosis, treatment.
12. **DISEASES OF THE NEUROMUSCULAR JUNCTION AND MYOPATHIES.** Myasthenia gravis and myasthenic syndromes - pathogenesis, clinical picture, evaluation, positive and differential diagnosis, treatment. Progressive muscular dystrophies - classification, etiology, pathogenesis, positive and differential diagnosis, therapeutic strategies.

BIBLIOGRAPHY

1. Fuller G. Neurological Examination Made Easy, 6th edition, Elsevier, **2019**
2. Jameson JL, Fauci AS, Kasper DL, Longo DL, et al (ed). Harrison's Principles of Internal Medicine, 20th ed, **2018**
3. Allan H, Ropper MA, Samuels JK. Adams and Victor's Principles of Neurology. 11th Ed, McGraw-Hill, **2019**.

