



09.2.1
DEPARTMENT OF NEUROLOGY No.1
MATERIALS ON KNOWLEDGE EVALUATION

RE/Д.: 01

DATA: 05.06.2009

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„APPROVED”
Dean of the Faculty Medicine No. 2,
PhD, Associate Professor

Bețiu Mircea

„APPROVED”
at the meeting of the Department of Neurology No.1
Report No.1 from 26.08.2024
Chairman of the Department, PhD, Professor

Gavriiliuc Mihail

NEUROLOGY EXAM QUESTIONS
Faculty of Medicine, 4th year of studies
2024 – 2025 academic year



I. Semiology

1. Life and work of Professor Nicolae Testemitanu in the development of autochthonous medicine.
2. The contributions of the scientists I. Charcot, G. Marinescu, I. Pavlov in the development of Neurology. Boris Sharapov – the founder of the Moldavian neurological school.
3. Pathways mediating the superficial sensation. Signs, symptoms and syndromes of peripheral sensation impairment. Neurological examination.
4. Pain: complex neurological phenomenon. Nocioceptive and antinociceptive system. The theory of “gate control”.
5. Pathways mediating deep sensation. Signs, symptoms and syndromes of central sensation impairment. Neurological examination.
6. Pyramidal pathway: anatomical and physiological peculiarities, neurological examination. Central motor neuron syndrome.
7. Peripheral motor neurone and peripheral nerve: anatomy, clinical signs of affection (peripheral motor neuron syndrome). Electrophysiological signs of impairment.
8. Signs of Spinal Cord lesions at different levels: cervical, thoracic, lumbar.
9. Hemisection of the Spinal Cord (Brown-Sequard Syndrome).
10. Sphincter disturbances of neurologic origin.
11. Extrapyramidal system: anatomy, physiology. Hypertonic-hypokinetic and hyperkinetic-hypotonic syndromes.
12. Semiology of involuntary movements: tremor (parkinsonian, attitude, action), chorea, athetosis, dystonia, iatrogenic dyskinesias, tics, facial hemispasm, myoclonia, hemibalism.
13. The cerebellum: anatomy, physiology. Semiology of the cerebellum affection: ataxia, dysmetria, asynergy, dysdiadochokinesis, intention tremor, speech and writing impairments. Method of clinical examination.
14. Semiology of gait disturbances. Clinical peculiarities of topic and etiologic diagnosis.
15. Midbrain, oculomotor nerves III, IV: anatomical – physiological peculiarities, signs of impairment.
16. Pons of Varoli: cranial nerves V, VI, VII, VIII: the anatomical-physiological peculiarities, signs of impairment.
17. Brainstem, cranial nerves IX, X, XII: anatomical – physiological peculiarities, signs of impairment.
18. Alternating syndromes. General notions. Classification. Wallenberg syndrome.
19. Olfactory nerve: anatomical and physiological peculiarities, signs of impairment.
20. Optic nerve: anatomical and physiological peculiarities, signs of impairment.
21. Autonomic nervous system: anatomical – physiological peculiarities, clinical examination and additional investigations, signs of impairment.



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22. Anatomical – physiological peculiarities of the hypothalamus and reticular formation. Hypothalamic and reticular formation disorders.
23. Frontal lobe of the cerebral cortex: signs of impairment.
24. Speech disturbances in the cerebral cortex lesions. Semiology of aphasia.
25. Temporal lobe of the cerebral cortex: signs of impairment.
26. Parietal lobe of the cerebral cortex: signs of impairment. Semiology of apraxias.
27. Occipital lobe of the cerebral cortex: signs of impairment. Agnosias.
28. Neurologic diagnostic tests: with the use of ultrasound, electrophysiological (EEG, EMG, Doppler ultrasonography of the cervico-cerebral vessels).
29. Radiological and neuroimaging methods with and without the use of contrast agents: angiography, myelography, computed tomography, nuclear magnetic resonance, positron emission tomography.
30. Lumbar puncture. Indications and contraindications. Cerebrospinal fluid (CSF). CSF syndromes.

II. Neurological diseases.

1. Polyneuropathies: aetiology, classification, clinical manifestations, diagnosis and treatment.
2. Paralysis of the median n., ulnar n., radial n.: aetiology, clinical manifestations, diagnosis, treatment.
3. Paralysis of the peroneal n., tibial n.: aetiology, clinical manifestations, diagnosis, treatment.
4. Lumbosacral radiculopathy: clinical manifestations, diagnosis, conservative and surgical treatment.
5. Cervico-brahial plexopathy: aetiology, clinical forms, treatment.
6. Guillain-Barre syndrome, clinical manifestations, diagnosis, treatment.
7. Structure of cerebral meninges. Meningitis and meningism (definitions), meningitis triad.
8. Primary and secondary serous meningitis. Armstrong lymphocytar meningitis, enterovirotic meningitis, clinical manifestations, treatment.
9. Tuberculoses meningitis: clinical forms, principles of treatment.
10. Septic (pyogenic) meningitis, primary and secondary: aetiology, clinical manifestations and treatment.
11. Acute myelitis: aetiology, clinical manifestations, and intensive treatment.
12. Poliomyelitis: aetiology, clinical manifestations, treatment and prophylaxy. Post polio syndrome.
13. Spinal cord vascular syndromes: aetiology, clinical manifestations, differential diagnosis, treatment.
14. Coma states: classification, aetiology, differential diagnosis, Glasgow coma scale.



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15. "Primary" (neurogenic) and "Secondary" (metabolic, somatic etc.) coma. Aetiology, differential diagnosis.
16. The peculiarities of examination of the patient in coma state. Supplementary investigations and treatment principles of states with impaired consciousness.
17. Definition, causes, pathological physiology of vegetative status, akinetic mutism, deafferentation (locked-in) syndrome, brain death.
18. Classification of encephalitis. Differential diagnosis. Principles of treatment.
19. Herpes Simplex encephalitis. Aetiology, pathogenesis, clinical manifestations, diagnosis, treatment.
20. Neuroborreliosis. Aetiology, pathogenesis, clinical manifestations, diagnosis, treatment.
21. Sydenham chorea. Aetiology, clinical manifestations, diagnosis, treatment. Huntington's disease.
22. Amyotrophic lateral sclerosis: pathogenesis, clinical manifestations, diagnosis, treatment.
23. Multiple sclerosis: pathogenesis, diagnostic criteria, clinical forms, diagnosis, treatment.
24. Disturbances of the nervous system in syphilis: clinical forms, diagnosis.
25. Disturbances of the nervous system in AIDS: clinical forms, diagnosis.
26. Clinical manifestations of Stroke and Transient ischemic attack. Pathophysiology of cerebral infarction and cerebral haemorrhage.
27. Epidemiology of stroke, stroke risk factors and measures of prevention. Management of hypertension, hyperlipidaemia and atrial fibrillation. Rare causes of stroke.
28. The importance of complementary diagnostic methods in the diagnosis of stroke: CT, MRI, angio-CT, angio-MRI, conventional angiography, carotid ultrasonography. Stroke treatment. Thrombolysis.
29. Classification, symptoms, differential diagnosis and management of vascular and degenerative dementia.
30. Aetiology and pathophysiology of subarachnoid haemorrhage. Clinical manifestations. Interventional treatment.
31. Clinical manifestations, complementary investigations and treatment of intracranial venous thrombosis.
32. Parkinson's disease: pathogenesis, clinical manifestations, treatment.
33. Neurogenic syncope: definition, differential diagnosis. Panic attack: diagnostic criteria, treatment.
34. Classification of epilepsy and epileptic seizures.
35. Clinical and electrophysiological manifestations of generalised epileptic seizures.
36. Clinical and electrophysiological manifestations of partial epileptic seizures.
37. Temporal lobe epilepsy. Clinical manifestations, diagnosis, treatment.
38. Principles and algorithm of treatment of epilepsy.
39. Epileptic status. Intensive treatment.

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40. Autoimmune encephalitis: aetiology, clinical manifestations, diagnosis and treatment.
41. Paraneoplastic syndromes. Definition, pathogenesis, neurological manifestations, diagnosis.
42. Disturbances of the nervous system in alcoholism. Gayet Wernicke encephalopathy, Korsakoff syndrome, cerebellar degeneration, ethylic polyneuropathy.
43. Headache. International classification. Primary and secondary headaches. Specificity of taking history in a patient with headache.
44. Migraine. Classification. Diagnostic criteria, clinical manifestations, treatment.
45. Tension type headache: clinical manifestations, treatment.
46. Cluster headache and paroxysmal hemicrania: clinical manifestations, treatment.
47. Vertigo: general notions. Benign paroxysmal positional vertigo.
48. Intracranial hypertension syndrome: aetiology, clinical manifestations, diagnosis, treatment.
49. Supratentorial brain tumours. General and focal signs, clinical peculiarities, diagnosis, treatment.
50. Infratentorial brain tumours. General and focal signs, clinical peculiarities, diagnosis, treatment.
51. Brain herniation syndromes.
52. Extra- and intramedullary tumours. Clinical manifestations, diagnosis, treatment.
53. Classification of traumatic brain injuries. Concussion: clinical manifestations, treatment.
54. Cerebral contusion and compression: clinical manifestations, diagnosis, treatment. Complications of traumatic brain injuries.
55. Spinal cord injuries. Clinical manifestations, treatment.
56. Progressive muscular dystrophies: Duchenne and girdle Erb forms.
57. Wilson disease (Hepato-lenticular degeneration): pathogenesis, clinical forms, treatment.
58. Myasthenia: clinical manifestations, diagnosis, treatment. Myasthenic crisis. Emergency treatment.
59. Charcot-Marie-Tooth hereditary neuropathy: pathogenesis, clinical manifestations, diagnosis and treatment.
60. Friedreich ataxia: pathogenesis, clinical manifestations, diagnosis and treatment.
61. Myotonia: pathogenesis, clinical manifestations, diagnosis and treatment.

Chief of Academics

Associate professor



Marina SANGHELI