

Questions for exam from neurology for the 4th year of medical study – general part

1. Olfactory nerve (I.) nerve. Optic (II.) nerve.
2. Oculomotor (III.), trochlear (IV.) and abducent (VI.) cranial nerves.
3. Trigeminal (V.) nerve, trigeminal neuralgia. Facial nerve (VII.) – anatomy, physiology, central palsy of n. VII.
4. Vestibulocochlear (VIII.) nerve. Peripheral and central vestibular syndromes. Nystagm.
5. Glossopharyngeal (IX.), vaggal (X.), accessorial (XI.), and hypoglossal (XII.) cranial nerves. Bulbar and pseudobulbar palsy.
6. The lower and the upper motor neuron lesion. Central and peripheral palsy syndromes. Brain – stem anatomy and syndromes.
7. Syndromes of impaired somatosensory perception. Modalities of sensation. Findings on sensory examination in lesions of different parts of the nervous system. Brown – Sequard syndrome.
8. Pain – anatomy, acute and neuropatic pain, treatment.
9. Spinal cord syndromes. Extramedullary and intramedullary lesions.
10. Balance and gait disorders, ataxias.
11. The extrapyramidal system – hypo and hyperkinetic syndromes.
12. The cerebellar syndromes.
13. Increased intracranial pressure, temporal and occipital brain herniations. Obstructive hydrocephalus. Intracranial hypotension.
14. Disorders of language: Aphasia, Dysphonia, Dysarthria.
15. Lesions of pariental lobe and of the frontal lobe.
16. Lesions of the occipital and of the temporal lobes, talamic syndrome, disconnection syndrome.
17. Coma – pathogenesis, clinical findings, differential diagnosis, GCS, neurological examination of comatose patient, brain death.
18. Lumbar punction. Examination of the cerebrospinal fluid.
19. Imaging procedures of the head and spine. Plain X – rays (skull X – ray). Computerized tomography (CT scanning). Magnetic rezonance imaging (MRI), comparison of CT scanning and MRI. Indications. Normal and pathological findings, explanation.
20. Duplex ultrasound of extracranial and intracranial arteries. Angiography (arteriography). (DSA, CT AG, MR AG) – indications.
21. Electroencephalography (EEG), Polysomnography.
22. Electromyography (EMG). Nerve conduction studies. Studies of neuromuscular transmission.
23. Evoked potentials (VEP, BAEP, SSEP).

Questions for exam from neurology for the 4th year of medical study – special part

1. CNS neoplasms. General symptoms. Glial tumors, Meningiomas, Schwannoma, Pituitary adenoma – clinical findings, diagnosis, treatment, prognosis.
2. Paraneoplastic syndromes. Pseudotumor cerebri. Brain metastases – diagnosis and treatment.
3. Head trauma: Skull fracture, Penetrating injury, Cerebral concussion, Axonal shearing injury, Subdural hematoma, Epidural hematoma, Cerebral contusion, Traumatic haemorrhage. Early and late complications of head traumas.
4. Ischemic stroke. Etiology, risk factors, clinical findings, diagnosis and treatment. Transient ischemic attack (TIA).
5. Brain haemorrhage – pathogenesis, diagnosis, treatment.
6. Subarachnoid haemorrhage – pathogenesis, diagnosis, treatment.
7. Intracranial thrombophlebitis and phlebotrombosis, etiology, clinical picture, diagnosis, treatment. Temporal arteritis and other vasculitides with CNS lesion.
8. Dementia – definition, epidemiology. Classification of dementia. Alzheimer's disease, vascular dementia, other types of dementia – definition, risk factors, clinical feature, therapy. The differential diagnosis of dementia.
9. Multiple sclerosis – pathology, clinical findings, disease course, diagnostic criteria, differential diagnosis, treatment. ADEM, NMO.
10. Encephalitis – etiology, clinical symptomatology, diagnosis, therapy. Brain abscess. Herpes zoster – clinical symptoms, diagnosis and treatment.
11. Meningitis, meningeal syndrome. Tuberculous meningitis. Etiology, clinical symptomatology, diagnosis, therapy.
12. Spirochetal infections (Syphilis, Lyme disease). AIDS and neurological complications. Clinical symptoms, diagnosis and treatment.
13. Prion diseases. Creutzfeldt – Jakob disease. Clinical symptoms, diagnosis and treatment.
14. Parkinson's disease. Other Parkinsonian syndromes. Therapy.
15. Tremor, classification, etiology, treatment. Huntington's disease and other most common causes of chorea.
16. Dystonia, etiology, most common causes and manifestations. Therapy. Wilson's disease.
17. Epilepsy – definition, etiology, types of epileptic seizures, diagnosis, therapy. Febrile convulsions, Status epilepticus.
18. Sleep disorders – narcolepsy with cataplexy. Restless leg syndrome. Parasomnia.
19. Headache – classification. Migraine, Cluster headache, Tension headache. Secondary headaches: Giant cell arteritis.

20. Non traumatic disorders of spinal cord (myelitis, myelomalacia, haematomyelia, spinal tumors). Spinal trauma.
21. Amyotrophic lateral sclerosis (ALS). Clinical symptoms, diagnosis and treatment.
22. Muscular dystrophies. Myositis and dermatomyositis. Clinical symptoms, diagnosis and treatment.
23. Myasthenia gravis and other disorders of neuro muscular junction. Clinical symptoms, diagnosis and treatment.
24. Cervicocranial and cervicobrachial syndromes. Cervical radiculopathies – etiology, clinical picture, diagnosis, treatment. Cervical spondylotic myelopathy.
25. Sciatic syndrom. Lumbar radiculopathies. Lumbar stenosis. Syndrom cauda equina. Clinical symptoms, diagnosis and treatment.
26. Peripheral facial palsy, etiology, diferential diagnosis, treatment.
27. Brachial plexus disorders. Median, ulnar, radial mononeuropathy. Clinical symptoms, diagnosis and treatment. Carpal tunel syndrome.
28. Lumbosacral plexus disorders. Sciatic, peroneal, tibial and femoral mononeuropathy. Clinical symptoms, diagnosis and treatment.
29. Inflammatory neuropathies: AIDP (Guillain – Barre syndrome), CIDP.
30. Neurological complications of alcoholism, diabetes mellitus, anemia, kidney and liver diseases, thyreopathies and systemic collagenous disorders.