

Neurology exam (Dentistry students): list of questions

A. General Neurology

1. Motor system (anatomy, function, classification of disorders, types of pareses)
2. Somato-sensory system (anatomy, function, classification of disorders) – (except pain)
3. Pain (anatomy, characteristics, types of pain)
4. Peripheral nervous system (anatomy, function, classification of disorders, localisation of lesions)
5. Cranial nerves I-II (anatomy, function, signs and symptoms of lesion)
6. Cranial nerves III, IV, VI (anatomy, function, signs and symptoms of lesion)
7. Cranial nerve V (anatomy, function, signs and symptoms of lesion)
8. Cranial nerve VII (anatomy, function, signs and symptoms of lesion)
9. Cranial nerve VIII, vestibular syndrome (anatomy, function, signs and symptoms of lesion)
10. Cranial nerves IX-XII (anatomy, function, signs and symptoms of lesion)
11. Speech and language disorders (aphasia, aphonia, dysarthria, agraphia, alexia).
12. Focal brain syndromes (frontal, pericentral, temporal, parietal, occipital)
13. Syndrome of internal capsule and cerebellopontine angle
14. Spinal cord lesion syndromes (hemisection, transversal lesion, central gray matter syndrome, posterior and lateral funicular syndromes)
15. Intracranial hypertension, hypotension (symptoms, causes of disorders)
16. Meningeal syndrome (symptoms, causes of disorders)
17. Autonomic nervous system and its disorders
18. Imaging methods in neurology
19. EMG, EEG and evoked potentials in neurology
20. Cerebrospinal fluid examination. Lumbar puncture

B. Special Neurology

1. Epilepsy: epileptic seizures and syndromes
2. Epilepsy: diagnosis of epileptic syndromes (medical history, objective description of the seizure, clinical neurological examination, EEG and other auxiliary tests), differential diagnostics (nonepileptic seizures)
3. Epilepsy treatment (pharmacotherapy, recommended lifestyle changes and rules, surgery)
4. Syncope, Menier syndrome
5. Sleep disorders (sleep apnea syndrome, parasomnias, insomnia, narcolepsy, hypersomnia)
6. Spondylogenic disorders (definition, incidence, imaging methods, etiology, prevention, therapy)
7. Clinical syndromes related to cervical and thoracic spine (segmental, pseudoradicular, radicular, cervical/ thoracic myelopathy).
8. Back pain syndromes related to lumbar spine (segmental, pseudoradicular, radicular).
9. Cerebrovascular diseases (classification, characteristics)
10. Ischemic stroke (classification, etiology, syndromes of occlusion of cerebral arteries)
11. Intracerebral haemorrhage (etiology, treatment)
12. Subarachnoid haemorrhage (etiology, treatment)
13. Cerebral venous thrombosis
14. Traumatic lesions of the brain - classification
15. Comotio cerebri (cerebral concussion) and contusio cerebri (cerebral contusion)
16. Intracranial traumatic haemorrhage (epidural, subdural, cerebral)

17. Opened brain injuries (penetrating, frontobasal and temporobasal injury, carotid cavernous fistula, posttraumatic inflammatory complications)
18. Traumatic injuries of the spine and spinal cord
19. Neuropathies (definition, classification, etiology)
20. Polyneuropathies (causes, diagnosis, treatment)
21. Guillain-Barré syndrome
22. The most frequent mononeuropathies in upper extremities - lesions of the median, radial and ulnar nerve)
23. The most frequent mononeuropathies in lower extremities (lesions of the ischiadic, peroneal tibial, and femoral nerves)
24. Plexopathies - lesions of the brachial and lumbosacral plexus
25. Radiculopathy L4, L5 and S1
26. Epiconus, conus and cauda equina syndrome
27. Amyotrophic lateral sclerosis
28. Bacterial meningitis and brain abscess, including tuberculosis
29. Neurosyphilis, Lyme disease. HIV infection (AIDS) from the neurological perspective
30. Viral meningitis, encephalitis and myelitis (tick encefalitis, herpetic encephalitis, parainfectio)
31. Prion diseases: Jakob-Creutzfeldt disease, others (new variant JCD, Gerstmann-Straussler-Scheinker disease)
32. Tumours of the brain and spinal cord and their therapy
33. Headache (definition, classification)
34. Migraine (pathophysiology, diagnostics, treatment), cluster headache
35. Trigeminal and glossopharyngeal neuralgias
36. Multiple sclerosis
37. Hyperkinesia and dystonia
38. Parkinson's disease and parkinsonian syndromes (vascular, MSA, PSP, CBD)
39. Muscular dystrophies
40. Neuromuscular junction disorders (Myasthenia gravis, Lambert-Eaton syndrome), inflammatory myopathies
41. Toxic and nutritional disorders of nervous system (associated with vitamins deficiency or excess – B1, B2, B12; ethanol, Wernicke's encephalopathy, central pontine myelinolysis)
42. Diseases of facial nerve
43. Diseases of oculomotor nerves
44. Spinal cord compression (spondylogenic, tumor, epidural hematoma, epidural abscess, traumatic)
45. Cerebral palsy
46. Disorders of consciousness – classification, causes, brain death
47. Normal pressure hydrocephalus, benign intracranial hypertension
48. Dementia – definition, classification, diagnosis, treatment)