

1. Diseases causing sudden uni- or bilateral visual disturbance.
2. Coverings of the brain and spinal cord.
3. Cisterns, sinuses and cerebral veins.
4. Features of the cerebrospinal fluid.
5. Arterial blood supply of the brain.
6. Anatomy of the arteries and veins in the neck.
7. Cerebral blood flow, cerebral blood volume, cerebral oxygen and glucose metabolism.
8. Disturbances of the olfaction and their causes.
9. Anatomy of the visual system and the types of visual field defects.
10. Papilledema and its differential diagnosis.
11. Diagnostic significance of pathological changes in the fundus.
12. Causes and differential diagnosis of diplopia.
13. Classification and features of nystagmus.
14. Gaze disturbances and their localizing significances.
15. Anatomy of the olfactory nerve.
16. Anatomy of the oculomotor nerve.
17. Anatomy of the trochlear nerve.
18. Anatomy of the abducent nerve.
19. Anatomy of trigeminal nerve.
20. Diagnosis and treatment of trigeminal neuralgia (tic doloreaux).
21. Anatomy of the facial nerve.
22. Differentiation of central from peripheral type of facial palsy.
23. Causes and treatment of peripheral facial palsy.
24. Anatomy of the vestibulocochlear nerve.
25. The most important causes and the treatment of tinnitus.
26. Symptoms and signs of central and peripheral vestibular lesion.
27. Vestibular neuronitis.
28. Ménière's disease and its treatment.
29. Treatment of the benign paroxysmal positional vertigo (BPPV).
30. Anatomy and clinical signs of the lesion of the glossopharyngeal nerve.
31. Anatomy of the vagal nerve.
32. The causes of disturbances of swallowing.
33. Differentiation of pseudobulbar and bulbar palsies.
34. Anatomy and clinical signs of the lesion of the hypoglossal nerve.
35. Anatomy of frontal and prefrontal lobes and signs of their lesions.
36. Anatomy of parietal lobe and signs of its lesion.
37. Anatomy of temporal lobe and signs of its lesion.
38. Anatomy and symptomatology of the occipital lobe.
39. Differentiation of central from peripheral type of motor neuron lesion.
40. The anatomical course of the pyramidal tract and signs of its lesion.
41. Anatomy of cerebellum and its most important connections.
42. Clinical signs of cerebellar lesions.
43. Anatomy of spinal cord.
44. Important dermatomes and reflex-segments.

45. Signs of spinal cord transection.
46. Superficial reflexes.
47. Tendon reflexes and their pathological alterations.
48. Grasping and sucking reflexes.
49. Types of sensation and their receptors.
50. Classification and anatomy of the sensory system.
51. Classification of sensation disturbances.
52. Definition of aphasia and its most important types.
53. Definition of the apraxia and its localizing significance. Examination of the praxia.
54. Alexia, agraphia, acalculia, amusia.
55. Definition and types of agnosia. Anosognosia, spatial agnosia, prosopagnosia. Gerstmann's syndrome.
56. The definition of epilepsy and its classification.
57. Differential diagnosis of epileptic seizures.
58. Partial epilepsy (seizure types).
59. The complex partial epileptic seizure.
60. Types of generalized epileptic seizures.
61. General principles of the treatment of the epilepsies.
62. The commonest antiepileptics and their indications.
63. Treatment of partial seizures.
64. Treatment of grand mal seizures.
65. Most frequent causes of symptomatic epileptic seizures.
66. Practical measures in epileptic seizures.
67. Therapy of status epilepticus.
68. Epilepsy, drivers license and limitations in certain professions.
69. Possibilities of collateral blood supply of brain.
70. Significance of blood-brain barrier.
71. The risk factors of ischemic cerebrovascular diseases.
72. Classification of cerebrovascular diseases.
73. Clinical symptoms and signs of the transient ischemic attack (TIA).
74. Cerebral embolism (pathogenesis, clinical features, differential diagnosis).
75. Symptoms and signs of the occlusion of anterior cerebral artery.
76. Clinical features of the occlusion of the middle cerebral artery.
77. Symptoms and signs of posterior cerebral artery and internal carotid artery occlusions.
78. Symptoms and signs of perfusion disturbances in vertebrobasilar territory.
79. Neurological examinations performed in the case of suspected circulatory disturbance of the brain.
80. Medical (non neurological) examinations performed in the case of suspected circulatory disturbance of the brain.
81. Work up of transient ischemic attack (TIA).
82. Treatment of acute ischemic cerebrovascular diseases.
83. Indications and contraindications of thrombolysis.
84. Time windows in acute ischemic stroke.
85. Mechanical thrombectomy in ischemic stroke.

86. Indications and contraindications in carotid endarterectomy and stenting.
87. Significance of carotid Doppler ultrasound examination.
88. Significance of transcranial Doppler ultrasound (TCD) in cerebrovascular diseases.
89. The use of anticoagulants in the treatment of cerebrovascular diseases and the most dangerous interactions of anticoagulants with other drugs.
90. Etiology, pathology and prognosis of intracerebral hemorrhage.
91. Conservative and surgical treatment of intracerebral hemorrhage and its prognosis.
92. Tasks of general practitioners in acute cerebrovascular accidents.
93. Conservative treatment and care of patients with chronic cerebrovascular diseases.
94. Prevention of cerebrovascular diseases.
95. The hypertonic crisis and its treatment.
96. Significance and treatment of hypotension.
97. Diseases due to disturbances of venous circulation of the brain and their treatment.
98. Clinical features of subarachnoid hemorrhages.
99. Diagnostic strategy in subarachnoid hemorrhage.
100. Therapy and prognosis of subarachnoid hemorrhage.
101. Case history of the headache patients.
102. Types of headache.
103. Clinical examinations in headache.
104. General principles of treatment of headaches.
105. Significance, clinical characteristics and treatment of tension-type headache.
106. The cluster headache and its treatment.
107. Classification and clinical symptomatology of migraine.
108. Treatment and prevention of migraine attack.
109. Differential diagnosis of unusual headache of sudden onset.
110. Signs in the case history and in the findings of special examinations of patients with headache refer to serious diseases.
111. Classification of disturbances of consciousness.
112. Glasgow coma scale.
113. Examination of unconscious patient.
114. Differential diagnosis of disturbances of consciousness, except stupor and coma.
115. The most frequent causes of disturbance of consciousness.
116. Physical and simple laboratory examinations to be done in disturbances of consciousness.
117. The most frequent non-neurological diseases that cause disturbances of consciousness, and their therapy.
118. Symptomatology and criteria of brain death.
119. Acute inflammatory diseases of leptomeninges (pathogenic agents, route of infection).
120. Characteristics of the most important bacterial meningitides.
121. Diagnostic procedures and treatment in meningitides.
122. Prognosis and complications of acute purulent meningitis.
123. Etiology and clinical picture of brain abscess.
124. Viral meningitis and its therapy.
125. Diagnosis and treatment of encephalitides.
126. Post-vaccinal and post-infective encephalomyelitides.

127. Neurological complications of herpes zoster.
128. Clinical features, diagnosis of Lyme disease.
129. Neuroborreliosis and its treatment.
130. Tetanus.
131. Cerebrospinal syphilis.
132. Neurological consequences of AIDS, and their therapy.
133. The most important neurologic diseases causing dementia.
134. The most important neurologic diseases causing depression.
135. Performance of cisternal and lumbar puncture, indications and contraindications.
136. The causes of blood-tinged CSF.
137. Disturbances of the circulation of the cerebrospinal fluid; normal pressure hydrocephalus.
138. Examinations of patients with craniocerebral traumas.
139. Epidural hematoma.
140. Symptomatology, differential diagnosis and treatment of subdural hematoma.
141. Differentiation and therapy of cerebral concussion and contusion.
142. Definition, diagnosis, therapy and possible late consequence of cerebral contusion.
143. Clinical features and symptomatic therapy of brain tumors.
144. The most frequent sources of cerebral metastases and the conservative treatment of metastases.
145. Pathogenesis, types and significance of brain edema in ischaemic brain lesions and brain tumors.
146. Treatment of brain edema.
147. Clinical features of expanding intracranial mass.
148. Types and clinical signs of brain shift.
149. The most important forms of nonpharmacological treatment of pain.
150. Paraneoplastic syndromes in neurology.
151. Significance of ECG and echocardiography in neurology.
152. Electroencephalography and its diagnostic significance.
153. EEG findings in inflammatory diseases of the CNS.
154. EEG findings in metabolic encephalopathy, intoxication.
155. Significance of evoked potentials.
156. EMG indications and typical pathological findings.
157. ENG indications and typical pathological findings.
158. Indications, contraindications and complications of angiography.
159. The computed tomography (CT).
160. MRI investigation in neurology.
161. Positron emission tomography (PET).
162. Classification of polyneuropathies.
163. Causes and clinical symptomatology of polyneuropathies.
164. Treatment of polyneuropathies.
165. Polyneuropathies caused by drugs.
166. Clinical symptomatology and treatment of diabetic and alcoholic polyneuropathies.
167. Neurological consequences of cervical and lumbar spondylosis.

168. Differential diagnostic aspects of cervicobrachialgia.
169. Cervical and thoracic disk diseases causing radicular syndromes and their treatment.
170. Etiology and therapy of myelopathies.
171. Syringomyelia and syringobulbia.
172. Determination of segment affected in spinal cord lesions.
173. Compulsory examinations (special interventions and non neurological examinations) in lower back pain.
174. General symptomatology of disk herniation.
175. Conservative treatment of sciatica.
176. Lower back pain, L3, L4 syndromes and their treatment.
177. S1, L5 radicular syndromes; ancillary investigations.
178. Differential diagnostic aspects of lower back pain.
179. Practical approach to acute traumatic paraplegia.
180. Indications of urgent surgical treatment in disk herniation.
181. Symptoms of conus lesion and cauda equina syndrome.
182. Causes and differentiation of paraparesis of the lower extremities.
183. Differentiation of organic and psychogenic paralysis.
184. Disturbances of bladder function.
185. Disturbances of rectal and genital innervation.
186. Signs of palsy of tibial and peroneal nerves.
187. Clinical signs and treatment of lesion of the brachial plexus.
188. Clinical signs and treatment of palsy of median, ulnar and radial nerves.
189. Amyotrophic lateral sclerosis.
190. The symptoms and most frequent causes of femoral nerve lesions; diabetic amyotrophy.
191. Carpal tunnel and ulnar entrapment syndromes and their treatment.
192. Guillain-Barré syndrome.
193. Neurological complications and therapy of chronic alcoholism.
194. Special problems of childbirth in neurological diseases.
195. Neurological complications in chronic dialysed patients.
196. Neuropsychiatric complications of autoimmune diseases.
197. Etiology and pathology of multiple sclerosis.
198. Clinical signs and course of multiple sclerosis.
199. Initial signs and symptoms, course and prognosis of multiple sclerosis.
200. Special types of multiple sclerosis.
201. Treatment of multiple sclerosis.
202. Classification and clinical symptomatology of extrapyramidal syndromes.
203. Clinical signs and symptoms of Parkinsonian syndrome.
204. Treatment of Parkinsonian syndrome.
205. Spastic torticollis.
206. Chorea minor and chorea gravidarum.
207. Pathophysiology and clinical signs of myasthenia gravis.
208. Therapy of myasthenia gravis, crises in myasthenia.
209. Drugs contraindicated in myasthenia gravis.

210. Classification of myositides.
211. Classification and clinical signs of motor neurone diseases.
212. Classification of muscular dystrophies.
213. Muscular dystrophies and their genetic aspects.
214. Immunosuppressive treatment in neurology.
215. Plasmapheresis in neurological diseases.
216. Drugs used in the prevention of cerebrovascular diseases and their side effects.
217. The most important analgesics and their side effects.
218. Steroid therapy in neurological diseases and its side effects.
219. Side effects of the antiparkinsonian drugs.
220. The most frequent neurological side effects of the muscle relaxants.
221. The most frequent neurological side effects of the neuroleptics.
222. Side effects of the most frequently used antiepileptic drugs.
223. The most important drugs decreasing the threshold for epileptic seizures.
224. The most important drugs producing extrapyramidal and motor side effects.
225. Prion diseases.
226. Normal human sleep.
227. Insomnias (diagnosis, symptoms, therapy).
228. Obstructive sleep apnea and its therapy.
229. Narcolepsy.
230. Restless legs syndrome.
231. Polysomnography.