

# CURRICULUM

## SYLLABUS OF LECTURES and SEMINARS

### 1. HEADACHES AND PAINFUL FACIAL SYNDROMES

Definition and classification of headaches. Primary headaches: migraine, tension type headache, cluster headache. Secondary (symptomatic headaches), neuralgias (trigeminal, postherpetic).

**1 class of seminar: CASE REPORTS – HEADACHE**

### 2. EPILEPTIC SEIZURES, EPILEPSY, FEBRILE SEIZURES

Definition and classification of epileptic seizure and epilepsy. Pathogenesis, causes and clinical presentation of epileptic seizures. The role of electroencephalogram in detection of epileptic seizures. Epilepsy and epileptic syndromes, idiopathic and symptomatic epilepsy. Treatment of epilepsy. Epileptic status and its treatment. Febrile seizures.

**1 class of seminar : CASE REPORTS - EPILEPSY**

### 3. CONSCIOUSNESS DISORDERS

Syncope: clinical picture, etiology, differential diagnosis according to epileptic seizures.

Coma: causes, examination of a comatose patient, diagnostic procedures and urgent therapeutic measures.

Acute confusion state and delirium: clinical presentation and causes.

Brain death: importance, clinical diagnosis, confirmatory diagnostic methods.

**1 class of seminar: CASE REPORTS – COMA**

### 4. CEREBROVASCULAR DISEASES

Definition and classification. Risk factors for stroke. Pathophysiology of brain ischaemia. Clinical picture of ischaemic stroke with vascular syndromes of some arteries. Transitory ischaemic attack, Complications, prognosis, diagnostic procedure, treatment and prevention (primary and secondary) of ischaemic stroke.

**1 class of seminar: CASE REPORTS- ISCHEMIC STROKE**

### 5. CEREBROVASCULAR DISEASES

Subarachnoid hemorrhage: causes, clinical picture, complications, diagnostic procedure, treatment, prognosis. Intracerebral hemorrhage: causes, clinical picture, diagnostic procedure, treatment, prognosis of venous brain sinus thrombosis.

Cavernous sinus syndrome.

**1 class of seminar: CASE REPORTS – HAEMORRHAGIC STROKE**

### 6. DEMENTIAS

Memory, types of memory. Classification and diagnosis of dementias. Treatable dementias. Degenerative dementias, Alzheimer's, dementia with Lewy bodies, frontotemporal dementia. Vascular and infectious dementia. Prion diseases (spongiform encephalopathies). Mild cognitive disorder.

**1 class of seminar: CASE REPORTS -DEMENTIA**

- 7. DEMYELINISATION DISEASES OF CNS**  
Multiple sclerosis, acute disseminated encephalomyelitis, NMO spectrum disease  
**1 class of seminar: CASE REPORTS - MULTIPLE SCLEROSIS**
- 8. MOVEMENT DISORDERS AND DISEASES OF CEREBELLUM**  
Parkinsonism and Parkinson's disease. Essential tremor. Wilson's disease. Chorea (Huntington and Sydenham), balism, dystonia, myoclonus, tics. Symptoms and signs of damage to the cerebellum. Acquired and hereditary ataxia.  
**1 class of seminar: CASE REPORTS – EXSTRAPYRAMIDAL DISEASES**
- 9. DISEASES OF CENTRAL AND PERIPHERAL MOTONEURON**  
Amyotrophic lateral sclerosis. Diseases of central motor neuron: primary lateral sclerosis, hereditary spastic paraparesis. Diseases of peripheral motor neuron: spinal muscular atrophy.  
Polyneuropathy: classification and clinical picture. Inflammatory (Guillain Barre syndrome), metabolic and endocrine neuropathy (diabetic, alcoholic, nutritional, traumatic, idiopathic). Compressive mononeuropathy (ulnaris, medianus, radial, peroneus lesions).  
**1 class of seminar: CASE REPORTS – MOTOR NEURON DISEASES, POLYNEUROPATHIES**
- 10. DISEASES OF NEURO-MUSCULAR JUNCTION AND MUSCLES**  
Disorders of neuromuscular transmission: acquired autoimmune myasthenia gravis, Eaton-Lambert syndrome. Myasthenic crisis. Hereditary muscle diseases: Duchenne muscular dystrophy, myotonic dystrophy, congenital and other muscular dystrophies. Acquired muscle diseases: inflammatory myopathies, metabolic and endocrine myopathies,, myopathy caused by drugs and toxins. Diagnostic procedures and treatment of myopathy.  
**1 class of seminar: CASE REPORTS – NEUROMUSCULAR DISEASES**
- 11. SPINAL SYNDROMES AND RADICULOPATHIES**  
Spinal syndromes: height localization of lesions of the spinal cord, complete cross-section syndrome, Brown-Sequardov syndrome, ventral syndrome, centromedular syndrome, syringobulbia and syringomyelia, posterior syndrome. Cervical and lumbar radiculopathies. The syndrome of the spinal canal stenosis. Cauda equina syndrome. Myelopathies.  
**No seminar (Good Friday)**
- 12. BRAIN EDEMA AND BRAIN TUMOURS**  
Concept of blood-brain barrier. Brain edema (cytotoxic, vasogenic, interstitial; brain edema therapy).  
Symptoms and signs of CNS tumors. Gliomas, meningiomas, acusticus neurinom, pituitary tumors, primary lymphoma of the brain, spinal tumors, metastatic tumors. Spinal tumors.  
**1 class of seminar: CASE REPORTS – BRAIN TUMOR**
- 13. INTRACRANIAL HYPERTENSION AND BRAIN TRAUMAS**  
Intracranial hypertension: causes, clinical presentation, cerebral herniations. Hydrocephalus (obstructive and non-obstructive).

Brain trauma: Pathophysiology and mechanisms of injury, classification. Concussion contusion of the brain, diffuse axonal injuries. Traumatic intracranial haemorrhage (subdural, epidural, subarachnoid). Procedure and treatment of patients who suffered head trauma. Spinal cord injuries.

**1 class of seminar: CASE REPORTS – INTRACRANIAL HYPERTENSION AND BRAIN TRAUMA**

**14. NEUROLOGICAL DISEASES OF DEVELOPMENTAL AGE**

Development of motor and manipulative skills, sense of hearing and speech. Mental retardation and developmental regression. Down's syndrome. Children's cerebral palsy. Neurocutaneous syndromes (tuberous sclerosis, neurofibromatosis, Sturge-Weber syndrome).

**1 class of seminar: CASE REPORTS - CEREBRAL PALSY IN CHILDREN**

**15. NERVOUS SYSTEM INFECTIONS AND NEUROLOGICAL MANIFESTATIONS IN OTHER DISEASES**

Meningitis: acute bacterial meningitis, viral encephalitis. Brain abscess. Tuberculosis. HIV and opportunistic infections of CNS. Spinal infection. Neurological manifestations of systemic diseases: vitamin deficiency (Wernicke-Korsakoff, B12 deficit), SLE, vasculitis NS, neurosarcoidosis, paraneoplastic syndromes.

**1 class of seminar: EPIDEMIOLOGY OF NEUROLOGICAL DISEASES**

### **SYLLABUS OF PRACTICALS**

- 1. 3 classes of practicals:** Communication and dealing with neurological patient. Typical neurological symptoms (disturbance of consciousness, syncope, epileptic attacks, headaches, dizziness, pain, involuntary movements, slowness and stiffness, weakness and fatigue, sensitive symptoms, loss of coordination, instability, impaired speech and swallowing, memory disorders). Taking neurological history. Systematic insight into neurological symptoms and chronology of origin. Examination of cortical functions, expressive and receptive speech, praxis, gnosis, lexia, calculia. Examination of psychological status of patients: orientation, thinking, perception, memory, emotional state of the patient.
- 2. 3 classes of practicals:** Examination of cranial nerves, from I – VI. Case reports with lesions of cranial nerves.
- 3. 3 classes of practicals:** Examination of cranial nerves, from VII – XII. Case reports with lesions of cranial nerves.
- 4. 3 classes of practicals:** Examination of the neck (meningeal signs), motor function of upper and lower limbs (trophic, tone, mobility, sinking test, muscle strength). Case report with hemiplegia, paraplegia, quadriplegia.

5. **3 classes of practicals:** Muscle reflexes, Skin abdominal reflexes, r. cremaster, plantar response (Babinski). Case report with typical signs of lesions of central and peripheral motor neuron.
6. **3 classes of practicals:** Sensory examination (of touch, temperature, pain, vibration, position, movement, cortical) by presentation of patients with a variety of sensitive disorders: radicular distribution of sensibility disorder, sensibility disorder in damage of individual peripheral nerves, polyneuropathy, sy conus , caudae equine, posterior funiculi, syringomyelitic dissociation of sensibility.
7. **3 classes of practicals:** Extrapyramid symptoms and signs. (Parkinson disease signs, chorea, dystonia, balism, myoclonus). Investigations of cerebellar signs.
8. **3 classes of practicals:** Speech Disorders. Dementia cases.  
**COLLOQUIUM 1**
9. **3 classes of practicals:** Examination of comatose patient. Stroke cases.
10. **3 classes of practicals:** Headache cases. Epilepsy cases.
11. **3 classes of practicals: Child neurology:** Communication and neurological examination of children, psychomotor development in children, developmental milestones, diagnostic procedures.  
**Good Friday**
12. **3 classes of practicals:** Brain tumors cases. Multiple sclerosis cases.
13. **3 classes of practicals:** Parkinson disease cases. Cerebellar syndromes cases.
14. **3 classes of practicals:** AIDP and CIDP cases. Myasthenia gravis cases.  
**COLLOQUIUM 2.**
15. **3 classes of practicals:** independent performance of complete neurological examination. **SIGNATURES AND CERTIFICATION OF SEMESTER.**