

Department of Neurosurgery**PROGRAM OF NEUROSURGERY****2nd semester**

Subject: Neurosurgery

Year, semester: V. 2nd

Number of lessons

Lecture: 6

Practical: 4 x 2 hours

1st week:

Lecture 1. Neurosurgery in general, the topic of the neurosurgery. Main symptoms of different localisations, diagnostic possibilities. Developmental anomalies of the central nervous system requiring neurosurgical intervention.

2nd week:

Lecture 2. Intracranial tumours I. General review. Neuroepithelial tumours, meningioma, schwannoma, neurofibroma, haemangioblastoma.

3rd week:

Lecture 3. Intracranial tumours II. Pituitary adenoma, craniopharyngioma, epidermoid/dermoid cysts, colloid cyst, germinoma, teratoma, lipoma, primary malignant lymphoma, metastatic tumours. Causes and management of hydrocephalus (obstructive, communicating, congenital, acquired).

4th week:

Lecture 4. Spinal space-occupying lesions (tumours, disc prolapse and spondylosis). Tumours of peripheral nervous system.

5th week:

Lecture 5. Neurotraumatology. Head, spinal and peripheral nerve injuries.

6th week:

Lecture 6. Cerebrovascular diseases requiring neurosurgical treatment. Inflammatory processes, brain abscess.

7th week:

Practicum 1. Diagnosis and treatment of intracranial space occupying lesions (except hematomas). Neurosurgical aspects of hydrocephalus and intracranial developmental anomalies. Shunt operations.

8th week:

Practicum 2. Neurosurgical aspects of vascular diseases. Causes and outcome of subarachnoid haemorrhage. Cerebral aneurysm, angioma and fistula, their surgical management.

9th week:

Practicum 3. Craniocerebral and spinal trauma, diagnosis and neurosurgical treatment. Management of unconscious neurosurgical patients. Brain herniations.

10th week:

Practicum 4. Degenerative and space occupying spinal lesions. Their diagnosis and surgical treatment. Operability of spinal developmental anomalies.

Textbook: **Lecture book of neurosurgery for medical students. 2003.**
György I. Csécei

Lindsay, Bone, Callander: Neurology and Neurosurgery Illustrated, Churchill Livingstone, Edinburgh, London, New York, Second ed: 1991. 0443043450