

Neurosurgery, past and present

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Chair of Neurosurgery

Neurosurgery is a medical branch, referring to studying, investigation, prevention, diagnosis and surgical treatment of organic and functional disorders of the nervous system.

Neurosurgery is one of the most beautiful medical specialities – “The Queen of the surgery arts” – as Grafton Love defines it.

Subspecialties of Neurosurgery

Neuro-oncology

Neurotraumatology

Vascular Neurosurgery

Pediatric Neurosurgery

Spinal Neurosurgery

Functional & stereotactic Neurosurgery

The most important steps of developing of Neurosurgery are

Neurology – theory of brain mapping of Broca (1861), theory of sensitive pathways of spinal cord of Brown-Sequard (1817-1894), Babinski sign, (1857-1932)

Radiology – developing of X-rays (Roentgen, 1895), mielography (Sicard, Forestier, 1922), cerebral angiography (Monis, 1927), Computer scanning by Hounsfield, 1973

Antisepsy and asepsy – Lister, 1867. Pasteur, 1878

General Anestezia – Boston, 1846

As a medical branch Neurosurgery in Moldova appeared after the second World War, when a neurosurgical Department was established in the Clinical Mental Hospital in 1953 from Chisinau.

A lot of specialists was trained in prestigious neurosurgical centers, such as “N.Burdenco” Institute of the Medical Academy from Moscow, Institute of Neurosurgery “Polenov” from Leningrad, Institute of Neurosurgery “Romadanov” from Kiev. Neurosurgery in the Republic of Moldova began to develop by gigantic steps.

October 27, 1994 is an important date in the history of the neurosurgery in Moldova – it is date of foundation of Neurosurgical Society that lists 53 persons. The first Chairman of the Society was University Professor V. Rață.

In 1995 ” the postuniversity training Department was established by professor Groppa.

September 01, 1999 is considered to be another important date as it is the date of opening of The first Chair of neurosurgery. The Chairman is Professor Gr.Zapuhlîh.

Moldovan neurosurgeons carried out a large amount of work: they have published 924 scientific works, 8 monographs, 59- articles and 857 – works. 20 thesis have been defended by the neurosurgeons from RM.

Currently the Association of neurosurgeons from RM maintains relations of collaboration with many clinics and international communities.

Surgeon contribution into neurosurgery development in RM

Surgical treatment of tunnel syndromes

Microsurgical treatment of cervical myelopathy

Microsurgical treatment of cervical disc hernias

Microsurgical treatment of syringomyelia

Ventriculo-peritoneal shunting

Microsurgical treatment of pituitary adenomas
and craniopharyngiomas using transnasal –
transsphenoidal approach

Cerebral ventriculoscopy

New Neurosurgical Technologies are represented by

Microneurosurgery of brain stem tumors, AVM, aneurysms etc

The endovascular treatment of the carotido-cavernous fistulas and cerebral AVM

The functional and stereotaxic surgery for the treatment of epilepsy, Parkinsonism, etc

The endoscopic treatment of the occlusive hydrocephalus in children

Percutaneous Disc-ectomy

Modern diagnostic equipment

- MRI
- Computer-tomography
- Cerebral angiography
- Gamma camera
- EEG, Evoked potentials
- PET, SPECT scanning
- Sonography etc