

Evolution of Neurosurgery in Bangladesh

The history of Neurosurgery is as old as prehistoric times. Trephined skulls had been found from the Inca civilization with the evidence of sclerosis along the margins of trephination indicates that these were done on living humans and they survived after the procedure.

The subject has undergone numerous improvements and developments through the ages and now come to occupy a very important position in medical science.

During the medieval period steady improvements has been taking place. Significant contributions have been made by Muslim scholars of whom Ibn Sina (Avicenna), Abul kashem Al Zawahiri (Abul kasis) and Abu Bakr al-Razi (Rhazes).

Coming to more recent times Sir Victor Alexander Haden Horsley (1857-1916) in UK and Antonio Egas Moniz (1874-1955) in Portugal contributed a lot.

Establishing Neurosurgery as a specialized subdivision of Surgery is attributed by Harvey Williams Cushing (1869-1939) of USA. Mentionable here is the name of Walter Edward Dandy (1886-1946) who was Cushing's direct disciple. Unfortunately, they fell out with each other.

Neurosurgical services were virtually unavailable in the then East Pakistan (Pre-1971). Professor Omar Vali Juma used to come here from West Pakistan only to provide consultation to Neurosurgical patients particularly for head injury. This service was only available to the very rich and the influential patients.

The pioneer Neurosurgeon of Bangladesh is Professor Rashiduddin Ahmad (1937-2016). Having completed his FRCS in General Surgery, he trained under Francis John Gillingham (1916-2010) in Edinburg. He established the first Neurosurgery unit in the then IPGMR in 1970 with only six beds. later Professor A.H.M. Ahsanullah and Professor Dr. Ata Alahi Khan in Dhaka and Professor Lutful Anwar Qaderi in Chittagong and Colonel Majed Bakth in CMH, Dhaka, started providing Neurosurgical Services.

By the middle of 1980 Professor M. Waheeduzzaman, Professor Shafique Uddin Ahamed, Professor Kanak Kanti Barua, Professor M Afzal Hossain, Professor Abul Khair, Professor (Brig. Gen.) Mohd. Nuruzzaman and Dr Golam Mohiuddin began working full time in Neurosurgery. From these humble beginnings Neurosurgery has seen tremendous improvements in manpower distribution throughout the country, investigative faculties, modern equipments and availability of ICU services.

Beginning with the four pioneers there are now about 220 Neurosurgeons doing Neurosurgical operations independently.

The first MS Course in Neurosurgery started in the then IPGMR. Subsequently MS course was started at Dhaka Medical Collage and Chittagong Medical College. The Bangladesh College of Physicians and Surgeons started a fellowship course in Neurosurgery later on.

The MS course is a 5 years residency course in two phases. Bed Side lectures and supervised training must be completed by candidates and they must defend a thesis.

The MS course now conducted by the BSMMU with uniform written and clinical examination. Many foreign students from Nepal, Bhutan, Maldives and other countries have come to complete the course.

Initially there are only four Neurosurgical centers mainly IPGMR, DMCH, CMH and CMCH. Now, Neurosurgical centers has extended in medical colleges like Rajshahi, Sylhet, Mymensingh, Rangpur, Bogura, Cumilla, Dinajpur, Barishal and Khulna.

The National Institute of Neurosciences & Hospital has been established in 2012.

Now a days, there are many standard centers for doing Neurosurgery in private setup throughout the country.

At the beginning investigative facilities available included plain X-rays, Direct Puncture Cerebral Angiography,

Burrhole Ventriculography, Lumbar Air Encephalography and Myelography. Now a days, CT scan, MRI Scan, various Angiograms (CT, MR, DSA), EEG, NCS, EMG are widely available throughout the country.

Well equipped operation theatres with advance equipments like operating Microscope, CUSA, Neuro endoscope, Neuro navigation and Nerve monitor are

widely available in various centers throughout the country.

Though we have advanced quite a bit but much remains to be done. Number of Neurosurgeons has to be increased. They must be well trained and a capable of providing independent efficient Neurosurgical services.

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