

Neurosurgery in Bangladesh: Past, Present and Future

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Bangladesh is a very populous country. By the law of averages, many people suffer from Neurosurgical disorder of neoplastic, traumatic, degenerative, congenital & functional natures with increasing awareness among the people & availability of diagnostic facilities countrywide, more and more neurosurgical cases are being detected. This creates a tremendous workload on the health services.

During East Pakistan period, Professor Omar Vali Jumma (known as Jumma Khan) used to come from West Pakistan to provide consultancy particularly for head injury patients. Regular Neurosurgery services became available in the year of 1970.

In 1970, Professor Rashid Uddin Ahmad returned to East Pakistan after having completed his FRCS & five years Neurosurgery training under Professor F. John Gillingham in Edinburgh and established the first Neurosurgery unit in the then IPGMR with only six beds. Professor AHM Ahsanullah after completing his neurosurgical training in turkey joined the neurosurgical service just after the liberation of Bangladesh. Professor Ata Alahi Khan returned from UK in 1975 to join Neurosurgery unit in Dhaka Medical College & Hospital, Dhaka. Professor LA Quadery established a Neurosurgical unit in Chittagong Medical College and Hospital, after his returned from United Kingdom (UK) in 1978. These four are our pioneer neurosurgeons. Initially these were only four neurosurgical centers at Institute of Post-Graduate Medicine & Research (IPGMR), Dhaka; Dhaka Medical College & Hospital (DMCH), Dhaka; Chittagong Medical College & Hospital (CMCH) and CMH, Dhaka. At Present established department exist in Rajshahi Medical College, Rajshahi; MAG Osmani Medical College, Sylhet; Sir Salimullah Medical College, Dhaka; Shaheed Suhrawardy Medical College, Dhaka; Holy Family Red Crescent Medical College, Dhaka; Mymensingh Medical College, Mymensingh; Rangpur Medical College, Rangpur; Shaheed Ziaur Rahman Medical College, Bogra; Sher-E-Bangla Medical College, Barisal; Khulna Medical College, Khulna; Comilla Medical College, Comilla. There are also many

well equipped neurosurgical facilities in the private sector spread all over the country. In 1978, when there were only four recognized neurosurgeons; today we have about 137 neurosurgeons spread all over the country.

In 1997, first MS Neurosurgery Course started in IPGMR, Dhaka. It was an academic course of five years under the University of Dhaka. Similar courses started in DMCH in 1997 and CMCH in 2002. In 2010 it was replaced by five years residency course under Banghabandhu Sheikh Mujib Medical University (BSMMU), Dhaka. MS course was started in National Institute of Neurosciences & Hospital (NINS) in 2015. Till now over one hundred candidates have completed MS course and are providing neurosurgical services. At present, there are about 75 students in various phases of the course. The BCPS also offers an FCPS degree in Neurosurgery.

In the early days of Neurosurgery, available diagnostic facilities were meagre these included plain X-ray, Direct puncture Cerebral Angiography, Burrhole Ventriculography, Lumbar air encephalography, Isotope brain scan and Myelogram. CT-scan of brain became available in 1987 and MRI in 1996. Today we have advanced CT and MRI machines in various parts of the country. Also available are facilities like MRS, MR tractography, CT and MRI Angiography, Digital Subtraction Angiography and PET scan.

With time, operative facilities have fastly improved, available are Operating Microscope, Electric and pneumatic craniotomy & drilling system, Endoscopic neurosurgical instrument, advanced Spinal fixation devices and C-arm machine. Dedicated neurosurgery operating table with head fixator are available. With improvements in Neurological anesthesia and availability of ICU services, the rate of Operative success has also improved tremendously & the operative mortality rate of cranial surgery has come down appreciably. Endovascular and Stereotactic Neurosurgery and stem cell therapy are new innovations available.

Future Target includes attaining Neuronavigation

system, Gamma knife/cyber knife, facilities for functional neurosurgery like epilepsy surgery. Ultimate future target is to make neurosurgical facilities available at district level. State of the art centre was established in NINS in 2012.

First operation was performed in NINS on 21st April 2013 with right ulnar nerve transposition for Tardy ulnar nerve palsy under general anesthesia. Every year number of operation is increasing at a rapid rate. In 2016 more than two thousand neurosurgical procedures were performed. Its facilities require to be continually

updated as newer innovations are being introduced to neurosurgery worldwide.

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