Review Articles
Neurosciences at The Bombay Hospital - Its Continuing Progress

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The Bombay Hospital was established in 1949 essentially to help the patients of the middle class who did not want to go to general hospitals and who could not afford high charges of a private hospital. It was Sadar Vallabhbhai Patel who inaugurated this hospital. Several physicians and surgeons of eminence had joined the hospital.

It was in 1953-54 that Dr. R.G. Ginde joined the Bombay Hospital as an Hon. Neurosurgeon. Dr. Ginde had been a pioneer neurosurgeon in Western India and with his attachment, Bombay Hospital started having neurosurgical patients from all over the country. Initially the department was started with four beds in the general ward and 3 half operation days in the general operation theatre per week. This much theatre time was found to be inadequate as the work kept on increasing. All type of cranial and spinal work was done and the need for expansion of the services was felt. Soon the services of neurophysicians were added, so also of neuro radiologist. Dr. Dadhich was sent to Scandinavia for a year’s training. After returning from Oslo, a special table for performance of myelography and a schonander table for performing air study was purchased.

Dr. Vijay Dave and Dr. Vijay Daftary joined the team and along with Dr. Premchandani who was with Dr. Ginde from the beginning, the work continued to increase, more beds were commissioned as necessary and more theatre time utilized. By early sixties, the department of neurosurgery was recognized as one of the best in the city. Further expansion occurred when Dr. Bhagwati joined as a neurosurgeon and Dr. Singhal as a neurophysician, specially for development of EEG in 1962. This is how Dr. Ginde widened the field of neurosciences by having electrophysiology also as a part of it. Now a new field of neurosurgery was started with the performance of stereotactic surgery for Parkinson’s Disease and behavioural disorders. Bombay Hospital was the only institution practicing stereotactic surgery for a long time. Over 300 stereotactic pallidotomies and thalamotomies were performed over next decade. People were referred from all over the country for surgical treatment till the advent of L-Dopa when surgical treatment for Parkinson’s disease became less prevalent. Neuropathological examination of tumour tissues was performed by Dr. Iyer and Dr. Darab Dastur, researchers from cancer institute till Dr. Darab Dastur started his department at J.J Group of Hospitals.

In 1972 the Medical Research Centre wing was built. The management of the hospital was extremely pleased with the work that the department of Neurosciences, Neurosurgery in particular was doing and sanctioned a new operation theatre wing with one large well equipped theatre and one
smaller theatre. In the same wing, 5 cubicles with 4 beds each were sanctioned as general ward beds and one cubicle as recovery room. Thanks to the management one now had a well established department of Neurosurgery. Dr. Wagh who initially was our house surgeon had had further training in U.K. and joined as a junior consultant. By now the need for expansion of neurophysiology department was visualized. An EMG machine was brought in with Dr. Shobha Pandya in charge. This was a very useful adjunct in the study of nerve muscle disease. The department of neuro radiology had also improved and good arteriographic studies became available. This was again a philip to the study and treatment of vascular diseases of the brain, aneurysms and AVMs in particular. Also a study of ischaemic stroke could be started.

With this all round development of Neurosciences, Bombay Hospital started occupying a pride of place in the city. The management also became more and more responsive to the needs that modern technology demanded. In 1984 Bombay Hospital was the first institution to install whole body CT scanner. This was again a landmark in the development of neurosciences. This enabled one to have a non invasive study of various brain disorders. The use of arteriographies for tumours became less frequent and that of ventriculography almost extinct. The detection of brain tumour became much easier as they could be seen in a CT scan. Even a negative scan in a suspected patient proved to be of great relief ! Soon the hospital management extended the benefit of CT scan to indoor patients of government medical college by doing their scans at the same concessional rates as its own general ward patients. Not only did they generate a tremendous amount of goodwill, it also helped quite a few economically disabled patients.

By 1986-87 Dr. Geeta Parulekar joined the hospital. In 1988 Dr. Turel joined as Consultant surgeon. The staff thus kept on increasing in number. Dr. Deopujari joined as Asst Hon. Neurosurgeon around the same time. By 1984 with a good surgical microscope that had been installed, transsphenoidal hypophysectomy for pituitary tumours was started. In 1991 the first GE MRI was installed. This further facilitated the diagnosis of brain tumours, vascular pathologies and intervertebral discs and neoplasms of the spinal cord. It was most useful in knowing the damage to the spinal cord in trauma. With the better diagnostic technology that had become available and the availability of good surgical microscope, the scope of surgery widened and we started doing more extensive and larger number of surgeries. Obviously the need for further expansion arose.

In 1992 the new wing was constructed. The management immediately sanctioned creation of a new theatre complex with 2 large 20 x 20 operation theatres and a recovery room ICU of 10 beds with all monitory equipments. We also had a new Zeiss Surgical microscope along with a ceiling mounted Leica microscope. New equipments like high speed drills, new bipolar diathermy units, ventilators, monitors, etc were brought and we could perform more extensive surgeries with greater facilities. The management very enthusiastically instituted Ginde Oration in 1992 in the memory of Dr. Ginde who had started the department in 1953-54. Internationally renowned Prof. Madjid Samii was invited to be the first Ginde Orator when over 100 neurosurgeons from all over the country attended it. Since then every year an internationally well known neurosurgeon is invited as Ginde Orator who gives an oration and performs live surgery. The oration is totally sponsored and supported by the hospital management. Last year Prof.
Yasargil who is declared as Neurosurgeon of the century was invited as the orator when over 350 neurosurgeons from all over the country attended it. The oration has become an event of great educational value.

The volume of work again kept on increasing. By 1999-2000 further expansion of the operation theatre complex was carried out. Besides the extra 2 large theatres, 2 more operation theatres were constructed, the theatre complex now having 4 operation theatres totally dedicated to neurosurgery. Each theatre had a surgical microscope, overhead lights, Macquet operation table, high speed drills, anaesthesia machines with monitors, CUSA, bipolar diathermy machines, Sugita frames as well as May field clamps and microsurgical instruments. We now have a portable C arm of Philips on which even DSA can be performed in the operation theatre. For last few years we also have an endoscope to perform endonasal transphenoidal excision of pituitary tumours and third ventriculostomies for hydrocephalus. The recovery room patients are looked after with 4 channel monitors, ventilators, etc., the ratio of nurses being one nurse between 2 patients.

With the increasing availability of operation time, Dr. Suneel Shah, Dr. Deopujari and Dr. Rajan Shah were appointed as consultant surgeons. With Dr. Mahesh Choudhari and Dr. Uday Andar who had been appointed earlier, we now have 8 neurosurgeons and 2 assistant neurosurgeons. We now have a new navigation equipment which enables us to do navigation guided biopsies and craniotomies. Till now we used to do either CT guided or MR guided stereotactic biopsies. For several years one has been doing both DSAs as well as endovascular treatment of aneurysms or AVMs using the portable C arm in the operation theatre.

Last year 1600 operation procedures were performed. It is by far the largest number of operative procedures carried out in any of the private trust hospitals. A fair number of these operations are performed totally free when the patients are admitted to the general ward. This is the only institution with 340 general ward beds. Department of neurosurgery having 20 dedicated general ward beds for economically weaker sections of the society.

The hospital has a linear accelerator with X-knife with which one can give stereotaxic radiotherapy (SRT) or stereotaxic radiosurgery (SRT for deeper tumours and A.V. malformations). X knife is similar to Gamma knife and works on same principles. The linear accelerator is used to give radiotherapy to other lesions like bigger tumours, etc. This treatment is again offered at a very concessional rate to economically disabled patients.

As far as neurology is considered, the department is manned by extremely well known neurologists like Dr. B.S. Singhal and Dr. N.E. Bharucha. They are ably aided by Drs. A.B. Shah, Dr. Jimmy Lalkaka and Dr. Khadilkar. Advanced therapies for demyelinating disease, myaesthenia Gravis, movement disorders, epilepsy with video EEG, paediatric neurology, etc are carried out. Radio imaging department manned by Dr. Talwar and Dr. Sunila Jaggi are looking after 64 slice CT Scanner and a new 1.5 Tessla MRI machine, doing over 20 MRIs and 30 CT Scan daily.

Thus one finds that neurosciences at the Bombay Hospital have made a tremendous progress since its inception in 1953 and has served several thousands of people suffering from neurological diseases, particularly those with moderate means. It is continuing to expand these specialities and serve the society in a greater way.