

## PIB NEWS ANALYSIS

Neurosurgery Department at Tata Memorial Centre acquires state-of-the art, first of its kind in the country, advanced intraoperative imaging equipment for complex brain tumour surgeries

The Neurosurgery department at Tata Memorial Centre (TMC), Mumbai, recently procured a state-of-the art intraoperative Ultrasound (iUS) machine for performing complex brain tumour surgeries. The neurosurgery team at Tata Memorial Centre, led by Dr Aliasgar Moiyadi, has pioneered the application of iUS in India, and is one of the leading teams across the world. iUS is cost -efficient and with appropriate training, can become an important adjunct in the neurosurgeon's armamentarium. The bKActiv machine, which was recently acquired by the department is the first installation of this advanced iUS system in the country.

Intraoperative imaging is crucial for safely and accurately removing intrinsic brain tumours. Combined with navigational aids (which is like a surgical GPS system), the iUS machine allows neurosurgeons to precisely track tumour remnants. Further, when combined with brain mapping techniques like awake surgery, they enable removal of tumours radically, even near critical functioning brain regions.

The system was unveiled on Saturday, 1st June 2024 at the Tata Memorial Hospital, Parel, Mumbai, in the presence of Dr. Shailesh Shrikhande, Dy. Director Tata Memorial hospital; Dr. Aliasgar Moiyadi, Chief of Neurosurgery, Tata Memorial Centre; and Shri Chaitanya Sarawate, Managing Director, Wipro GE Healthcare South Asia, along with the entire departmental and operation theatre personnel.

Dr. Moiyadi believes this advanced tool is likely to help his team and benefit the large number of brain tumour patients operated at the centre, many of whom are unable to access state-of-the-art care at subsidized rates elsewhere. iUS, being less costly than other intraoperative imaging systems (like intraoperative MRI), is particularly beneficial for resource constrained healthcare systems like ours. The department has also led efforts to train neurosurgeons and equip them with the necessary skills to optimally perform iUS-guided surgeries, conducting training courses both in India as well as globally, hoping that more neurosurgeons can adopt this useful technique and disseminate the benefits to a larger number of patients across India. Dr. A Moiyadi also pointed out that this equipment was procured with the aid of a generous grant provided by UBS. He said that TMC is grateful for the support provided by UBS and highlighted the importance of such contributions, which strengthens TMC's efforts of providing advanced cancer care for all Indians.

Speaking at the launch event, Shri Sarawate said, "We are committed to designing active imaging systems that help surgeons visualize anatomy and lesions, guide interventions, and navigate inside the human body - and this collaboration marks a significant milestone in advancing healthcare technology in India. Poised to revolutionize neurosurgery, the bkActiv Ultrasound system.