Giorgio Brunelli: The champion of microsurgery

Some personalities leave their footprints on time for ever for others to follow. Giorgio Brunelli, a great orthopaedic surgeon, a world pioneer in microsurgery, passionate researcher of the central nervous system and its plasticity, is one such revered doctor and a great human being. He passed away recently leaving behind a great legacy in orthopaedics and microsurgery.

Although he was inclined to study medicine while working in a small field hospital and serving the army during the war, the choice of studying medicine came from his father who was the chief veterinary doctor at the slaughter house in Brescia. Thanks to his father for giving to the world an orthopaedic and microsurgery prodigy.

People in the field of medicine, especially in microsurgery, expressed their great loss in passing away of Prof Brunelli. It is a personal loss to me and my family. He was none less than a family member, guide and a great teacher to us. He used to teach with great excitement and dedication. He always believed to teach to the best of his ability. He always entertained a friendly relationship with students. He used to say, what I can do, anyone can do. One may require little more practice. We had the fortune to work with him.

In the early nineties, we organised a workshop in India. Those were the days when even microscopes were a rare thing. Resources were limited both in finance and infrastructure and expertise. Yet, the workshop was a great success and probably one of its kinds in the history of medicine in bygone era. Dr Brunelli not only personally participated in the workshop, but also transported on loan 25 microscopes from Italy. To maximise the use of microscopes, we ran the workshop in two shifts for 12 h. Dr Brunelli’s wholehearted help raised the standard of workshop to great heights. It was a great learning experience and a sense of fulfilment. We still cherish the memories of our association with Dr Brunelli.

He was a genius. He became chief of surgery at the age of 35. He was a pioneer in many aspects. He performed the first hip joint prosthesis replacement surgical technique in Italy in 1963 and introduced microsurgery in Italy in 1965. He was the first to perform brachial plexus surgery in 1972 and the first total limb re-implant in Europe in 1973. He was bestowed with Honoris Causa Degree by the University of Wroclaw. He always explored new horizons in science and medicine. He has set up the spinal cord lesion foundation and took up hard research on the anatomy and physiology of the bone marrow and its chances to be cured after a lesion.

He strongly believed that there is no substitute for hard work and advised young doctors that they must be prepared to make many sacrifices, must know that money does not come easily and must be aware of how much they must give up if they want to be thorough and well-trained doctors. He was a firm believer that each one of us has different skills and wanted that young doctors should go to foreign countries and add on to their professional skills.

Dr Brunelli’s research instinct was so great that he continued new experiments with the advancement of science and IT. Brunelli decided to connect – through a nerve graft – the extensions of the brain cells with the nerves of some muscles of the pelvis and legs, cutting off the bone marrow underneath the lesion. He proved the ability of the muscles to change its normal acetylcholine receptorstoglutamatetheneurotransmitterofthe brain neurons. His research and experimentation proved that brain plasticity for multiple single neurons scattered in the brain cortex.
The testimony of magnanimous work of Giorgio Brunelli in medicine is that he has performed over 25,000 surgical procedures, 3500 of which with microsurgical techniques. He has authored 466 articles in previewed journals, 30 chapters and 10 scientific texts to his credit. Dr Brunelli was a versatile personality. Besides having scientific and surgical expertise, he was a successful athlete in various disciplines such as fencing, swimming and skiing. He loved vintage cars and participated in various races. He was a passionate nature lover and his love for nature finds its expression in Nature photography and paintings.

Dr Giorgio Brunelli, a great microsurgeon, a multifaceted personality, a thorough gentleman, fatherly figure and a true guide has physically left us, but his work and legacy remain a source of inspiration for generations to come. Our salute to him.