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Letter to Editor

Prof. Shokei Yamada: An International Neurosurgeon, Regarded as Father Figure for Adult Tethered Cord Syndrome Management and Dedicated Life for the Advancement of Intracranial Arteriovenous Malformation Surgery

Prof. Skokie Yamada M.D., Ph.D. (January 2, 1926, to August 31, 2017), Emeritus Professor and Chairman, Department of Neurosurgery, Loma Linda University School of Medicine, is a much-respected teacher, mentor, researcher, and friend to younger generation of students and fellows in neurosurgery. He did extensive innovations, master expert, and research work in the field of adult tethered cord syndrome,[1] was regarded as the preeminent authority for adult tethered cord syndrome treatment, and also dedicated his life for the advancement of surgery of brachial plexus injury[2-5] and arteriovenous malformation (AVM).[6-8]

Prof. Yamada was born at Shimizu, Japan. He received M.D., Ph.D. and also got general surgery training at Jikei University in Tokyo, Japan. He started early neurosurgical specialty training at the University of Toronto and further continued at the University of Chicago. In 1962, he completed his neurosurgery residency at the prestigious Oregon Health Science University.

In the second phase of academic and professional career, initially he served as an instructor at the Department of Neurosurgery at Jikei University in Japan but stayed shortly and returned to the United States to join as a Research Associate at the Oregon Health Science University.

In 1964, Dr. Yamada got appointment as Associate Professor, Medical University, South Carolina, and served as a co-director of residency training program and the Chief of Neurosurgery. In 1973, Prof. Yamada shifted to Loma Linda University School of Medicine and continued working for the next 26 years with various capacities starting with Associate Professor and subsequently as Professor, Division of Neurosurgery, and finally also served as an Emeritus Professor and Chairman of Neurosurgery over 1989–1995. In 1999, Prof. Yamada took retirement from active service but served as a consultant at the Kaiser Permanente Medical Center and Arrowhead Regional Medical Center, Colton.

During the third phase after retirement, he actively continued to participate in scientific research, teaching, and publications. Prof. Yamada had special interest for research in Neurophysiology and Neuropathology. At Loma Linda, he developed an experimental model of tethered spinal cord. Prof. Yamada published about 175 scientific articles in the prestigious international journals and many book chapters.[1-9] He was regarded as the authority for adult tethered cord syndrome and he wrote a famous book titled "Tethered Cord Syndrome." In addition, he was the editor of "AVMs in Functional Areas" and also served on the Editorial Board of Journal of Neurological Research. He was credited for editing three books related to tethered cord syndrome and AVM.

He was awarded with numerous awards and honors, including the Distinguished Neurosurgeon Award of the Congress of Neurological Surgeons. Remarkably, his interest for research and publication continued, so even at the age of 89, he got the first place for poster presentation at the Pediatric Neurological Surgery Conference, 2015.

Throughout his professional and academic neurosurgical career, he remained involved in combined clinical and research work including longitudinal myelotomy, for which he was awarded with distinguished award at the American Congress of Neurosurgeons, and analyzed the relationship between the ventriculoarterial shunt flow and changes in intracranial pressure during shifting of the body position from the recumbent to upright position. Prof. Yamada provided the elaborate pathophysiology analysis of tethered cord syndrome establishing the importance of stretch-induced functional and reversible spinal cord disorder critically evaluated on the anatomical, oxidative, metabolic, biochemistry, and electrophysiological studies and helped to radicalize the management of adult tethered cord syndrome. Prof. Yamada had very special interest for improving the surgical outcome of microneurosurgical resection of AVMs located in the functional brain areas by delineating the border of the brain tissue and AVM based on detailed study involving anatomical, angiographic, and cerebral oxidative metabolism studies. Further, he reported improvement of cerebral oxidative metabolism paralleling and mirroring the augmentation to the cerebral blood flow in patients with functional superficial and middle cerebral artery anastomosis.

Prof. Yamada was credited for putting effort for management of highly neglected brachial plexus injury and strongly advocated bypass coaptation of the C3 and C4 anterior primary rami to the upper trunk of the brachial plexus for the functional restoration of shoulder girdle muscles and biceps in patients suffering with Erb–Duchenne palsy. Further, he advocated the coaptation to the lower trunk for Klumpke palsy due to C8 and T1 root avulsion in children to regain power and useful function of small hand muscle function and he was awarded the blue ribbon at the meeting of Spine and Peripheral Nerve Section, American Association of Neurological Surgeons.[1-4]

Prof. Shokei had deep love for classical music especially the violin and also regularly played sports especially sumo wrestling, judo, baseball, and basketball. He was a devoted Angels fan and attended many games over the years.

Prof. Yamada was a dedicated family man. He had immense pride in children and grandchildren and used to spent time and found great enjoyment in fulfilling various interests of grand children. Prof. Yamada also loved learning various languages including Japanese, English, French, and German, and he was working on writing idioms dictionary for Japanese students. Prof. Yamada had thousands of happy patients treated by him in personal care, and many neurosurgeons across the globe benefitted with his vision and teaching.

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