



A Great Teacher of Neurosurgery in Korea: Hun Jae Lee (1921–1983)

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Hun Jae Lee was born on November 11, 1921 in Unsu-myeon, a village of Goryeong-gun, in the province of Gyeongbuk, Korea (Fig. 1). He was the eldest son of Bong Hwan Lee, a patriot who served 3 years in prison for his independence act, and Yeon Bun Ihm. He graduated from Severance Hospital Medical School in 1944 and completed his medical internship in Pyongyang Christian Hospital in 1945. Then, he was recruited to serve as professor in the Department of General Surgery at Daegu Medical University. In 1950, the Korean War began, and he joined the army as a surgeon, where he gained considerable experience in neurosurgery at the mobile army surgical hospital (Fig. 2). At that time, there was no neurosurgical institute in Korea. His experience in the Korean War helped lead him to become a neurosurgeon. In 1955, he went to the United States in order to learn neurosurgery. He underwent resident training at the University of Michigan Medical School from 1955 to 1957.^{1,2} He obtained the American Board of Neurological Surgery in 1958. Professor Edgar Kahn regarded him as excellent, and asked him to write a chapter on metastatic brain tumors in his book *Correlative Neurosurgery*.³ Although Kahn attempted to persuade him to stay in the United States, he returned home to develop neurosurgery in Korea. After his return in 1959, he practiced at Soo Do Medical College, which is now the Korea University College of Medicine. Then, he moved to Yonsei University in 1966 as Chairman of the Department

of Neurosurgery. From that time, he dedicated 17 years to building a foundation for neurosurgery in Yonsei University, until he passed away in 1981. Over those 17 years, he performed stereotactic thalamotomy in a patient with Parkinson's disease using a Cooper stereotactic frame.⁴ He reported the follow-up results of chemothalamotomy for seven cases of Parkinson's disease and four cases of dystonia.^{4,5} He administered open cordotomy for cancer pain, retrogasserian rhizotomy, and percutaneous alcohol injection for trigeminal neuralgia.⁶⁻⁹ For the treatment of hydrocephalus, he performed an experiment on ventriculo-atrial shunt, and he applied it to a patient using a Holter valve.¹⁰ In addition, he presented on hypertensive intracerebral hemorrhage, microneurosurgery, and surgical treatment of cerebral aneurysms under hypotensive anesthesia. He had great interests and passion in the surgical treatment of intracranial aneurysms. As many essential surgical apparatuses were not available in Korea in the 1960s, he even developed his own surgical clips. To do so, he remodeled a remote cable releaser of a film camera into a remote temporary clip, and asked a jeweler to make metal spring clips from his own design.¹¹ He began microneurosurgery in 1972.¹¹ In 1973, the neurosurgical department got their own surgical microscope. By the early 1970s, the annual number of operating cases for cerebrovascular disease had already reached up to 100, and the first micro-neurosurgical training course was organized to foster competitive Korean neurosurgeons (Fig. 3).^{12,13} Not only did this accelerate progress in achieving better neurosurgical outcomes, but also it had a great effect on neurosurgical training. With access to a dedicated microscope in 1974, his surgical technique became much more sophisticated, especially in the surgery for schwannomas and pituitary adenomas. He operated on numerous cases of brain tumors, including glioma, pituitary adenoma, meningioma, schwannoma, cranio-pharyngioma, chordoma, etc.

Dr. Lee first established a system of subspecialties in the neu-

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rological department, which remains a tremendous legacy from the great pioneer. The strict sectioning enabled each section chief to concentrate on his major field and overtake advanced neurosurgery in a short time. In the early 1970s, he allocated professors to each section to help them to concentrate on their respective subjects. As a result, each section was operated by a specialized professor, including Kyu Chang Lee in cerebrovascular surgery, Sang Sup Chung in functional neu-

rosurgery, Young Soo Kim in spine neurosurgery, and Joong Uhn Choi in pediatric neurosurgery (Fig. 4).

International relationships were also important to Dr. Lee. He was selected as a member of the Harvey Cushing Society in 1961. In May 1974, he was selected as an Emeritus Invited Professor in West Germany Max-Plank Brain Institute. In 1975, he was appointed as a consultant neurosurgeon of the US 8th Army and a Korean representative to the International Neurosurgery Society. In September 1977, he was appointed as an In-



Fig. 1. Hun Jae Lee (Nov. 11, 1921–Mar. 13, 1983).



Fig. 4. Department of Neurosurgery.



Fig. 2. The Mobile Army Surgical Hospital under the United States Army medical unit served as a fully functional hospital in combat areas. The picture was taken at Chuncheon in 1952.



Fig. 5. Dr. Hun Jae Lee was appointed as a consultant neurosurgeon for the US 8th Army. In October 1977, he also won a medal of US private service from the United States government.

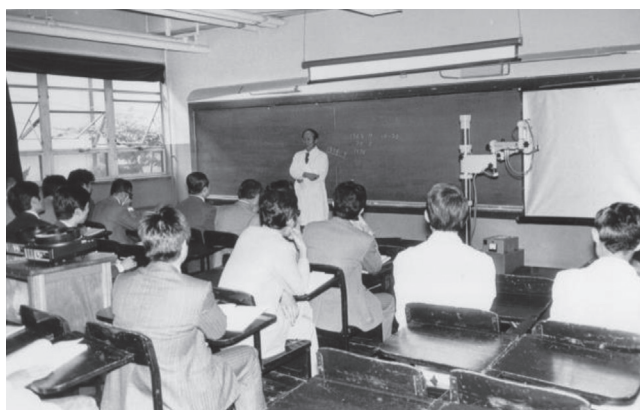


Fig. 3. Dr. Lee in the classroom.



Fig. 6. Dr. Lee in front of his stone collection on the lawn of Yonsei University.

vited Professor of Michigan University. In October of the same year, he also won a medal of US private service from the United States government (Fig. 5). He was one of 16 founding members of the Korean Neurosurgical Society, which was established in 1961.¹⁴ In 1965, he was elected as President of the society.¹³ In July 1979, he was appointed as an academic director of the Korean Medical Association due to recognition of his academic achievements. Also, in November 1980, he was appointed as academic director of the Korean Microsurgery Society.

When Professor Hun Jae Lee selected residents, he always selected one resident from other provinces outside of Seoul. His intent was to change underdeveloped areas through his alumni. The policy was effective and many Yonsei Neurosurgery alumni have taken major roles in regional hospitals. The graduates have settled all over the country, leading many parts of the Korean Neurosurgical Society.⁵ The first alumni meeting was held in 1973 to promote mutual friendship and enhance scientific development between alumni members, and 16 alumni members started having regular meetings. In May 1979, an alumni meeting decided the official name of the Severance Neurosurgery Alumni Association, as Sei Baek Hoe (世栢會). Sei (世) was quoted from Yonsei (延世), and Baek (栢) was taken from the pen name of Professor Hun Jae Lee, Baek Je (栢齊). At present, Sei Baek Hoe has 313 regular members.

The interests of Dr. Lee extended beyond neurosurgery. He was good at Chinese calligraphy and oriental paintings. He presented his calligraphy and paintings at various retirement, marriage, and clinic opening ceremonies. Collecting stones, however, was his most favorite hobby. The collected stones have been displayed on the lawn of Yonsei University until now (Fig. 6). He passed away at 60 years of age on March 13, 1983. His body was buried in his hometown of Unsu-myeon. Regretfully, our beloved chief was unable to spend more time sharing his passion for learning and developing neuroscience in South Korea.

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