Dr. Kenneth George McKenzie

An Appreciation

Kenneth George McKenzie, Canada's first neurological surgeon and the founder of the specialty of neurological surgery in our country, died on February 11, 1964. He was a pioneer. His contributions to neurosurgery, to patients, to medical students, to the training of surgeons and to neurosurgeons were vast. The difficulties faced by an individual pioneering in neurosurgery were no less vast. Today it is unthinkable to imagine operating as he did upon a patient suffering from a brain tumour, without suction, electrocoagulation and the endotracheal tube to assist the anaesthetist. Cerebral angiography had not been discovered and ventriculography and pneumoencephalography were in their infancy when Kenneth McKenzie started the Neurosurgical Division of the Department of Surgery at the Toronto General Hospital and the University of Toronto in 1923. Operations were long and mortality was high. In the face of this and many other obstacles, McKenzie created a Neurosurgical Unit in the Toronto General Hospital which won recognition on the international scene. McKenzie himself became a shrewd and wise consultant and a brilliant surgeon.

He had many great personal qualities which revealed themselves in the major decisions he made, and supported, at intervals during his life. His father was Dr. A. F. McKenzie, a fine family physician. Kenneth McKenzie graduated from the University of Toronto in 1914, standing second in his class and receiving the Silver Medal. His postgraduate training started in the Department of Pathology. Within a few months, on August 4, 1914, World War I began, and on August 5, 1914, McKenzie joined the R.A.M.C. He served in France as a regimental medical officer and with 25 Field Ambulance (R.A.M.C.). In 1916 he was granted leave, returned to Canada and married Irene Biette of Tillsonburg. His last year of service in the R.A.M.C. was in the Middle East. In 1917 he transferred to the R.C.A.M.C. and joined the staff of Davisville Military Hospital in Toronto. At the end of World War I in 1918 he bought a practice. In addition to general practice he worked at the Christie Street Hospital for veterans and served as a demonstrator in anatomy. He was, with great persistence, trying to persuade Clarence L. Starr, the Professor of Surgery, to help him to become a surgeon. He took a correspondence course from England and then went to England to try the primary examinations of the Royal College of Surgeons, passing in physiology and failing in anatomy.
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During the 1922-1923 year, Kenneth McKenzie was the Assistant Resident in Surgery and in charge of the Neurosurgical Service at the Peter Bent Brigham Hospital in Boston. His neurosurgical career had begun. Remarkable was the opportunity to learn, by McKenzie's own account he had a bad time in his dealings with Cushing. Cushing and McKenzie both possessed such independence of spirit, and determination, that McKenzie the resident did not handle easily Cushing the chief.

On returning to Toronto, McKenzie became the second C. L. Starr resident in general surgery. As resident he operated successfully upon his first patient with progressive paralysis of the legs due to a benign spinal cord tumour. "Localization and diagnosis of the tumour was made entirely by clinical examination without the aid of x-rays and contrast media."

At the end of his residency year with C. L. Starr, McKenzie was appointed to the general surgical staff of the Toronto General Hospital and the University of Toronto. The McKenzie Service — neurosurgery — was born amid difficulties requiring for their solution all the wit, courage, and endurance which McKenzie had shown he possessed in World War I, and after. "An [neurosurgical] operation was scheduled in any of one of the general surgical operating rooms that happened to be free in the afternoon. The nurses and house surgeons were tired because they had already completed a full day's work. For the most part, it was their first experience." From this beginning in 1924, there occurred steady development of neurological surgery under McKenzie's leadership until his retirement in 1953, save for one period of five years. During World War II, McKenzie judged that as soon as doctors, including embryo neurosurgeons, were qualified to serve the Armed Forces they should do so, and civil establishments should avoid expansion. During World War II he carried again a very heavy load of neurosurgical duties, involving the care of patients, teaching and training.

McKenzie personally persuaded the University of the need for a Department of Neuropathology. In 1921 E. A. Linell became the first Professor of Neuropathology, with Mary Tom as his associate. McKenzie convinced the hospital of the need for centralized operating-room facilities to be created for neurosurgery, and finally plans were developed for a complete neurological unit.

From 1924 until 1963 a keen and perceptive intelligence, unflagging curiosity and enthusiasm sustained in K. G. McKenzie a distinguished and productive career in neurosurgery and teaching. He was always particularly interested in the clinical and operative aspects of neurosurgery and in the anatomy and pathology upon which must be founded the best clinical neurosurgery. McKenzie himself had special enthusiasm for the original work he started in 1932 on intracranial division of the vestibular portion of the auditory nerve for intractable vertigo. The final results, based on careful follow-up studies, were published 22 years later.

His writings covered a large part of neurosurgery. Following his retirement from the University, he carried on a meticulous clinical and operative study of the place of psychosurgery in mental illness at the Ontario Hospital, Whitby. His last address three months before his death was delivered to a Workshop on Neurosurgical Nursing.

Neurosurgical residents and residents in all surgical specialties gave him their affectionate loyalty, trying to develop his clinical acumen and to emulate his technical virtuosity. McKenzie's ability to see and recognize the unusual was inimitable. His neurosurgical residents now serve as neurosurgical staff in universities and hospitals throughout Canada and the U.S.A. The residents in general and orthopedic surgery who had time with McKenzie have proved their neurosurgical worth in their judicious management of trauma involving the nervous system.

K. G. McKenzie was a surgeon's neurosurgeon. In 1936-37 he became president of the Harvey Cushing Society and in 1948-49, president of the Society of Neurological Surgeons. He was a member of the Canadian Neurological Society, the American Surgical Association, the Canadian Medical Association and many other societies. He was impatient concerning problems of administration and committee work. His concern was for the individual.

He was a great golfer and applied his enquiring mind to the theories and problems of golf. It was tremendous fun to fish with him.

K. G. McKenzie is survived by Mrs. McKenzie, his daughters Jean, Dorothy and Margot, and his son, Dr. Fred McKenzie. The courageous endurance that enabled K. G. McKenzie to survive the era following World War I, the residency with Cushing at the Peter Bent Brigham, and the pioneering development of neurosurgery in the Toronto General Hospital was matched by the unwavering and unselfish faith and support of Mrs. McKenzie.

Canada will always be in debt to K. G. McKenzie, and each of us individuals who knew him, and worked with him, are left with an enduring and deep feeling of loss.

"The lyfe so short, the craft so long to leerne. Th' assay so hard, so sharpe the conquering."

E. H. Botterell