

# Charles Miller Fisher

## (1913-2012)

Dr. C. Miller Fisher, whose many contributions justifiably earned him the designation as the father of modern stroke neurology, died on April 14, 2012 in Albany, New York. He was 98 years-old.

Charles Miller Fisher was born December 5, 1913 and raised in Waterloo, Ontario. In 1938, he graduated from the University of Toronto's seven year program in Biology and Medicine with an M.D. degree. After spending his intern year at the Henry Ford Hospital in Detroit, he began a Medicine residency at the Royal Victoria Hospital in Montreal but left after one year to join the Royal Canadian Navy in 1940.

Surgeon Lieutenant-Commander Fisher's service in the Navy was short-lived but momentous. Almost immediately upon enlistment, he was assigned "on loan" to the Royal Navy. His first posting was to H.M.S. *Letitia* on North Atlantic patrol. When that vessel ran aground in Halifax harbour, he was transferred to H.M.S. *Voltaire*, a vessel that had been refitted for convoy duty. On its first voyage in the South Atlantic in 1941, the *Voltaire* was torpedoed and sunk. After nine hours in the water, Dr. Fisher was taken prisoner and taken to a prison camp in Germany. Dr. Fisher's account of his time as a German prisoner-of-war is vividly described in his autobiography, *Memoirs of a Neurologist*<sup>1</sup>. In June 1944, Dr. Fisher was chosen to be the medical officer to accompany a group of seriously ill prisoners who were being repatriated to England. By September 1944, he was reunited in Toronto with his wife and daughter (whom he had never seen).

After a one-month leave, Dr. Fisher was posted to a Royal Canadian Navy hospital in Halifax where he remained until the end of the war. In July 1945, the Navy sent him on a six month refresher course in Internal Medicine at the Royal Victoria Hospital. During a six week rotation at the Montreal Neurological Hospital, Dr. Fisher was encouraged by Wilder Penfield to consider a career in Neurology. Thus, he was a fellow in Neurology at the MNI from 1946-1948. In 1949, he became a fellow in Neuropathology at the Boston City Hospital where he was mentored by Dr. Raymond Adams. In his writings, Dr. Fisher often emphasized how his time in neuropathology laid the foundation for his career in cerebrovascular disease. For example, in a reminiscence published in 2001, Dr. Fisher described the remarkable convergence of circumstances that permitted him to identify the link between cerebral emboli and hemorrhagic infarcts during one afternoon's brain-cutting session<sup>2</sup>.

In 1950, Dr. Fisher returned to Montreal where he was appointed neuropathologist at the Montreal General Hospital and neurologist at the Queen Mary Veterans' Hospital. For the next four and a half years, he continued his clinico-pathological studies of strokes and other neurological conditions. In his autobiography, he describes how his detailed clinical and pathological studies led to the recognition of transient ischemic attacks - including amaurosis fugax, determined that carotid artery disease is a major cause of stroke, and delineated the ischemic mechanism of "watershed" infarcts. Dr. Fisher's work on carotid artery disease was awarded the prize in Medicine of the Royal College of Physicians and Surgeons of Canada in 1952. He also observed the important role of hypertension in cerebro-vascular disease and presented evidence that "transient ischemic attacks" were caused by microemboli rather than vasospasm<sup>3</sup>. In addition to studying cerebro-vascular disease, Dr. Fisher investigated the residual changes in veterans who had been Hong Kong prisoners of war and examined the first patients with the syndrome that now bears his name<sup>4</sup>.

In July, 1954, Dr. Miller Fisher left the "MGH" in Montreal for the "MGH" in Boston in response to Dr. Raymond Adams' invitation to join the Neurology Service at the Massachusetts General Hospital. At the MGH in Boston, where he worked for 50 years, Dr. Fisher created a Stroke Service and continued his clinico-pathological studies of cerebrovascular disease. He also made seminal observations on many other types of neurological disorders. In 1983, he was named Emeritus Professor of Neurology at Harvard University. Although handicapped by progressive vision loss for several years prior to his death, he continued to write articles based on his vast collection of clinical observations.

Dr. Fisher was honoured in his country of birth with a Doctor of Science, honoris causa, by McGill University in 1984 and by his induction into the Canadian Medical Hall of Fame in 1998.

He was an honorary member of the Canadian Neurological Society and a former member of the Editorial Board of the Canadian Journal of Neurological Sciences.

Dr. Fisher was pre-deceased in 2008 by his wife, Doris. He is survived by three children and four grandchildren.



*Figure: Dr. C. Miller Fisher, 1913-2012. Photograph taken in the 1950s, reproduced from Memoirs of a Neurologist<sup>1</sup> courtesy of Dr. Joseph B. Martin.*

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**REFERENCES**

1. Fisher CM. *Memoirs of a neurologist*. Rutland, VT: Academy Books; 1992.
2. Fisher CM. A career in cerebrovascular disease – a personal account. *Stroke*. 2001;32:2719-24.
3. Fisher CM, Cameron DG. Concerning cerebral vasospasm. *Neurology*. 1953;3:468-73.
4. Fisher CM. An unusual variant of acute idiopathic polyneuritis (syndrome of ophthalmoplegia, ataxia and areflexia). *N Eng J Med*. 1956;255:57-65.