Book review

Canadian cardiology

Pioneers of Cardiology in Canada 1820-1970: The Genesis of Canadian Cardiology. Harold N Segall (pp 525: no price given) Willowdale, Ontario: Hounslow Press, 1988. ISBN 0-88882-105-0.

At the age of 91, Harold Segall is not only the doyen of Canadian cardiology but also a link with important figures in British cardiology going back to the years immediately after the first world war when he studied with Starling at University College, London, and indeed, as I understand from other sources, visited Mr S Shaw, the Lancashire jeweller who had made Mackenzie's polygraph. His account is mainly a compendium of various Canadian cardiologists up to 1970 and provides the raw material for a more analytical study that will doubtless appear in due course. Nevertheless, the contributions of important Canadian cardiologists are indicated and some of these deserve special mention.

Segall presents his material in terms of technical advances and many of the sections are preceded by accounts of such developments more generally, sometimes but not always with greater detail than available elsewhere. What emerges from the outset are the different links between French Canadian and English speaking cardiologists and their respective home countries. Pierre Beaubien studied in Paris from 1816 to 1827 and for some time worked at the same hospital as Laennec—though it seems that an unknown student from Newfoundland may have been the first to bring a stethoscope to what is now Canada. Percussion was certainly mentioned in the first Canadian medical journal, *Le Journal de Médecine de Québec*, which was published briefly in the years 1826-27 by Dr X Tessier. A member of the staff of the Montreal General Hospital and one of the four founders in 1823 of the first Canadian medical school based at the hospital, Andrew Fernando Holmes seems later to have used the stethoscope routinely.

William Osler justly gets ample mention. A Montreal graduate, he started his cardiac contributions while at McGill where he almost certainly described the first case of mitral valve prolapse. Maude Abbott became his disciple and was the founder of our

modern understanding of congenital heart disease. One of the first modern cardiac pathologists was John George Adami, who emigrated from England in 1892 to become the first professor of pathology at McGill; before he moved there, he had made important studies on pulse recordings at Cambridge. One of the many McGill graduates who found a niche elsewhere was Harry Goldblatt, whose work on renin and on unilateral renal disease as a cause of hypertension is still so fundamental.

Among outsiders who had a potent influence on the development of Canadian cardiology was Sir James Mackenzie, who visited Toronto for the British Medical Association meeting there in 1906, when he gave papers on heart block and hypertensive heart failure. Many of those who heard him and their pupils subsequently came to London to study with him or his successors including John Parkinson, although when electrocardiography was established, Thomas Lewis was the great magnet. While many of the English speaking Canadians included a side visit to Paris, the French Canadians tended to go directly there and came under the influence of Vaquez, Clerc, and Laubry. There seems to have been little mutual communication, and developments in the English speaking and French worlds, which were of a somewhat different nature, were not synthesised in Canada. These differences go right down to the sort of instruments that they obtained. On the whole the anglophones came back with Cambridge recorders while those who went to France brought back electrocardiographs made by the Boulitte company.

Another link with British cardiology developed during the first world war when several Canadians served at the Mount Vernon and Colchester heart hospitals, where under the direction of Lewis and with the help of Mackenzie the effort syndrome was investigated. Thomas Cotton and Jonathan Meakins both returned to Britain after the war, Cotton to join the staff of the National Heart Hospital in due course. His portrait hangs outside the Osler Room of the Royal College of Physicians, which he had endowed. Meakins became the first full time professor of medicine at Edinburgh, a post that he held until 1924 when he returned to Montreal to become the first chief of the full time staff at the Royal Victoria Hospital.

Segall's own contributions deserve wider knowledge. He graduated from McGill in 1920 and

worked with Maude Abbott and later in Boston with Paul Dudley White. Subsequently he spent two years at University College, London, under Starling, working mainly with G V Anrep on the regulation of the coronary circulation. Later he went to Vienna to study under Wenckebach; before returning to North America he also visited Vaquez and Clerc in Paris. He

rapidly became a key figure in Canadian cardiology and one of the founders in 1947 of the Canadian Cardiovascular Society, and has also been its archivist for the last quarter century. It is a tribute to him that he has assembled these data that provide us with knowledge of how Canadian cardiology developed.

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