

He was among the first doctors in Canada to perform dialysis

Irish-born renal specialist who had trained in the U.S. introduced the experimental treatment to Kingston hospitals. Sometimes, he even built his own equipment

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Special to the Globe and Mail

November 2, 2007

Peter Morrin was a Canadian pioneer in kidney dialysis who in 1967 performed one of the first successful uses of blood purification, or hemodialysis, in Kingston.

Although trained as a nephrologist - or kidney specialist - the Irish-born doctor did not want to get involved in hemodialysis when he first arrived at Kingston General Hospital. At the time, the equipment was large and complicated, and Dr. Morrin maintained that dialysis would only work if applied by a properly trained team with the right apparatus. But a dramatic incident in the emergency room forced him to act before he was ready.

A badly injured car-accident victim arrived at Kingston General suffering from kidney failure, among other things. Dialysis might save him. As it turned out, an unused dialysis machine lay in the basement of the nearby Hotel Dieu Hospital. Volunteer fundraisers had donated the machine after a patient died of kidney failure and it had sat, untouched, ever since.

The trouble was, no one in Kingston was familiar with the thing - except for Dr. Morrin, that is. Nine years earlier, he had been a member of a university medical team in Missouri that had been among the first in the world to achieve hemodialysis and he knew what he must do.

"We borrowed the KGH van and drove over to the Hotel Dieu where we found the kidney dialysis machine covered with dust and brought it back to KGH. I plugged it in, switched it on and it seemed to be in working order," recalled Dr. Morrin in a memoir in 2004. "The OR staff cleaned it, and we set it up in the one of the operating rooms."

It took eight hours to prepare the dialysis machine, which turned out to be tragically too long for the patient. By the time the machine was hooked up, his condition had deteriorated and he died.

"This event galvanized the hospital to establish a hemodialysis team and draw up the necessary protocols and procedures. The next patient with acute renal failure did not meet such a tragic end," relates a profile of Dr. Morrin from the Kidney Foundation of Canada.

The next patient was another accident victim, a 21-year-old man who had rolled his car and spent six hours in a ditch before anyone noticed him. He was dying, and one of his problems was kidney failure. Dr. Morrin and a urologist, Andrew Bruce, stayed with the young man for six hours during the treatment. He survived.

Dialysis is used to mimic the functions of the kidneys, cleaning the blood, among other things. It is not a perfect replacement for a kidney, but treatment on a dialysis machine is enough to keep a patient alive. Dialysis can be used for patients with temporary or permanent kidney failure.

Peter Morrin was the son of two Dublin doctors. He was sent to school in England at Ampleforth College, a Catholic boarding school run by the Benedictine Order. He returned to Ireland for university, studying medicine at University College, Dublin. In 1954, he graduated first in his class and studied in Liverpool for several months. He then went to work for two years at Boston City Hospital in Massachusetts.

After that, he moved to St. Louis, Mo., for more postgraduate work and it was at the Washington University School of Medicine that he became a part of a team that was among the first anywhere to achieve hemodialysis. The 1958 procedure saved the life of a 9-year-old.

From there, he went on to become acting director of the renal division at the Barnes Hospital in St. Louis in 1960. Always a keen rugger player in Ireland, he hooked up with the local rugby club and it was through that connection that he met his wife, Mariella.

A year later, he arrived at Queen's University to be a lecturer in the department of medicine and to join the staff of Kingston General. After working in general medicine, he established the hospital's renal program and the nephrology division.

Along the way, he began experimenting with dialysis machines of his own. Applying what he had learned in Missouri and adding everything he had since figured out for himself, he began to put together his own equipment.

In 1965, he invented his own dialysis machine, said his friend, Ross Morton. Dr. Morrin called it the King Med machine.

"He also had to mix his own chemical solution in a big steel drum," added Dr. Morton, a professor of medicine at Queen's. "He put in water and added the correct concentration of chemicals. Now it's done automatically, but then it had to be done by hand."

In the end, it was not until 1967 that the Kingston dialysis unit opened. At first, it was just a four-bed unit located upstairs from the X-ray department. Today, the unit has eight nephrologists on staff and provides dialysis to 250 patients in Kingston, as well as another 100 patients in seven satellite centres and at homes in eastern Ontario from Brockville to Belleville.

Along with his specialty in nephrology, Dr. Morrin was also a medical ethicist. From the outset, many ethical questions arose about who would receive dialysis and who would not. To be refused was to receive a death sentence.

Hospital boards made decisions on who would be given dialysis, since the machinery, the chemicals and the medical specialists were in short supply. Sometimes, hospitals would choose men over women because men were the breadwinners. It was something that always troubled Dr. Morrin.

"In the early days of dialysis, you had to be between the ages of 15 to 45 to qualify - with no other serious disease apart from the renal failure. It was done by a committee," said Dr. Morton.

"Peter was a very fair man and worked on the basis that anyone who could benefit from the treatment should get it. He always struck the right ethical balance."

In his academic career, Dr. Morrin started as a lecturer in medicine at Queen's in 1961, and rose to become a full professor by 1977. He took a sabbatical year in 1975-76, studying at the Institute of Nephrology in Paris.

Peter Morrin was an outgoing man. All his life he retained the soft accent of educated Dublin, but he could mimic the many other Irish accents. If he listened to an Irishman speak, he could pinpoint the county of his birth - be it Kerry, Sligo or Wexford.

He was also a great storyteller and raconteur. At his engagement party in St. Louis he was cornered by some Americans who seemed to think all Irishmen were peasants, priests or Bing Crosby.

"So, Peter, why did you come to America?"

"Well, because the bull died."

His audience was astonished.

"Well, you see," he continued, straight-faced, "I was engaged to be married to a lovely Irish girl. But in Ireland, the bride's family must provide a dowry. Then, the night before the wedding, the bull - the dowry - died. So we couldn't get married, and I had to leave Ireland."

Mariella, his fiancée, soon broke up the bull session.

A devoted family man, Dr. Morrin was involved in the lives of his three sons as children and adults. He took up sailing, first buying a sailboat and then a book on how to sail. The family sailed out of the Kingston Yacht Club and one son, Hugh, went on to represent Canada at the 1981 world youth championships in Portugal. Dr. Morrin was also a keen fly fisherman.

In 1995, he retired from clinical work and full-time teaching. The Peter Morrin Prize in Nephrology, established by colleagues and friends on his retirement, is awarded annually to the fourth-year medical student at Queen's University obtaining the highest overall standing in nephrology.

PETER MORRIN

Peter Arthur Francis Morrin was born in Dublin, Ireland, on Oct. 8, 1931. He died at Kingston, Ont., on Oct. 3, 2007, of injuries suffered in a head-on car accident that occurred while on his way home from a day spent fly fishing. He was five days short of his 75th(¹) birthday. Dr. Morrin is survived by his wife, Mariella, and his three sons, Peter, Hugh and Robin.

¹ Fortunately the Globe's writing is better than their math.