

Ben Milstein

Cardiac surgeon who pioneered open heart techniques

Benjamin Bethel Milstein, consultant cardiothoracic surgeon (b 1918; q 1942 University College Hospital Medical School), died from pneumonia on 22 April 2013.

Ben Milstein became a cardiac surgeon in the early days of the specialty, and he performed some of the very first open heart procedures in the United Kingdom. Before heart-lung machines became commonplace, the hypothermia technique was used: anaesthetised patients were plunged into a bath of ice to slow the heartbeat. Once the body temperature had reached 28°C the patient was taken out of the bath and surgeons had a 10 to 15 minute window in which to operate.

Milstein arrived at Papworth Hospital, Cambridgeshire in January 1958 and performed the first open heart surgery in this way to repair a large atrial septal defect on 28 year old Pamela Gooding. The operation was a success, and 40 years later Milstein and Gooding met up at a party to celebrate the hospital's work.

Milstein told the BBC, "I remember this date because it was my birthday. In celebration of this, at the end of the operation, the whole team seized me and plunged me into the bath. They had recently emptied this and refilled it with warm water."

In those early days mortality due to open heart surgery was 80%, and Milstein was one of the founding members of Pete's Club, a group of young cardiac surgeons who would get together to compare results and discuss errors.

John Wallwork, appointed consultant surgeon at Papworth in 1980, says of Milstein and his colleagues: "They were brave men, doing brave things on brave patients."

Groundbreaking techniques

Milstein was born in Dublin, but the family moved to north London when he was a baby. He was born into an Orthodox Jewish household, but he renounced his faith. Neville Silverston, a Cambridge general practitioner who developed a lifelong friendship with Milstein, describes him as a free thinker. "He was an iconoclast all his life," he says.

After being turned down by photography firm Kodak, Milstein went to study medicine at University College Hospital. Here he met his wife, Margaret, and love blossomed



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over the cadaver they shared in dissection classes. Margaret went on to become a chest physician. Milstein qualified in 1942 and joined the Royal Army Medical Corps, where he was attached to an artillery unit. He landed in France four days after D-Day and was mentioned in dispatches for his medical service during the Battle of the Bulge, a German counteroffensive launched in December 1944.

He was demobilised in 1946 and worked at Guy's Hospital and the Royal Brompton under cardiac surgeon Russell Brock (later Lord Brock), who pioneered both the hypothermia technique and the heart-lung machine.

It was this experience which gave Milstein the confidence to carry out these groundbreaking techniques on his arrival at Papworth. The hospital, formerly a tuberculosis colony, had a thoracic department, but the cardiac surgery department was small. In a book charting the history of cardiothoracic surgery at the hospital, Milstein described how when he arrived there was no specialist cardiologist, no cardiological investigation service, one radiologist, and two part time anaesthetists who both lived around 45 km away. Milstein's junior staff consisted of one senior and one junior registrar.

A reputation for being a difficult man

One of his great strengths was building a strong team, says Wallwork, and by the 1970s Milstein and his colleagues were performing 150 open heart procedures a year, with mortality falling to around 5%.

One of his fellow surgeons was Terence English, who arrived at Papworth in 1972 as a locum. Milstein wanted their working relationship to be one of cooperation, rather than competition. English says, "He had an interesting concept that if I were appointed we would try to run a very integrated unit, where we would share staff and facilities."

Despite this desire for cooperation Milstein could be difficult, having little time for people he considered wrong or not up to the job.

"He had a reputation for being a difficult man, but I think this was related to his emphasis on high standards. If you did a good job he could be very supportive," says English.

This was particularly true when English campaigned to develop a heart transplant service at Papworth in the face of strong opposition. The Department of Health had imposed a moratorium on heart transplants because of high death rates.

"Ben didn't really get any recognition, but he played a very important part in helping me to get things going. He helped politically, persuading colleagues locally, the health authority, and the Department of Health," he says.

Milstein let English lead the transplant work, ruefully remarking that English ended up with the knighthood after carrying out the UK's first successful heart transplant at Papworth in 1979, while he remained Mr Milstein.

Outside of work he had many interests and was keen on painting and especially music, annoying his family by blasting Radio 3 through the house and in the car. He joined a group of amateur instrument makers and made three violins, a cello, and a viola, the latter being played at his funeral. He was modest and unflashy, refusing to do private practice. Family was important, and one of his daughters, Anne, remembers a playful streak, such as flooding the lawn to create an ice skating rink one winter.

His wife, Margaret, died in 1994. He leaves his partner, Judith, and three daughters. Anne Gulland London annegulland@yahoo.co.uk

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