Cedars-Sinai

George Berci

Surgeon and pioneer of endoscopy. He was born in Szeged, Hungary, on March 14, 1921 and died in Thousand Oaks, CA, USA, on Aug 30, 2024 aged 103 years.

George Berci was from a Jewish family in central Europe and the first three decades of his life were dominated by upheaval, but also characterised by a remarkable capacity to adapt and survive in impossible circumstances. In 1957 he left Europe to find new homes in Australia and then the USA, where his equally remarkable working life saw him become a driving force behind the development of laparoscopy. His 70-year medical career led eventually to a Chair in Surgery at Cedars-Sinai Medical Center in Los Angeles, CA, USA, and the directorship of its minimally invasive surgery research programme. Berci remained professionally active to the end of his life, says Bruce Gewertz, Professor of Surgery in the University of California at Los Angeles and Surgeon-in-Chief at Cedars-Sinai. Gewertz knew Berci well: "George had an amazing imagination…He always felt things could be done better, and he was an enthusiast for applying laparoscopy to different areas of surgery."

Berci's path to medicine was a difficult one. As a young person in Hungary in the 1930s antisemitism stopped him from finding a place at medical school, so he became a mechanical engineering apprentice in Budapest. In 1942 he was forced into a Nazi labour camp from where, 2 years later, he was put on a train to Auschwitz. During the journey he escaped and joined the Hungarian resistance. When World War 2 ended in 1945 he enrolled in the medical school of the University of Szeged, graduated in 1950, trained as a surgeon, and finished his short career in Hungary by treating the wounded of the 1956 Hungarian Revolution.

The following year Berci left Europe to take up a Rockefeller Fellowship in Experimental Surgery at the University of Melbourne in Australia, where he worked until 1967. It was here that he became interested in minimally invasive technologies and in how to overcome the inadequacy of the laparoscopic instruments then available to the surgeon. Illumination was an area where Berci changed what was possible in surgery. "George was very much involved in understanding how you could deliver more light through small tubes", says Gewertz. His experiments with magnification and optical clarity led Berci to visit Imperial College London in the UK to meet the physicist Harold Hopkins, an authority on optics who had invented the rod lens. Berci introduced Hopkins to Karl Storz, a German medical device manufacturer. The outcome of Berci's collaborations in Australia and later in the USA was a generation of better instruments for examining the interior of the body. Berci also dispensed with the use of a monocular telescope, replacing it with a miniature television camera that he had developed. This camera was linked to a monitor screen that not only gave the surgeon a better view but allowed others to watch. "George's advances made laparoscopy easier to do and easier to teach", Gewertz comments. "And he was also involved in the development of new [operating] instruments that could be slid into the tubes."

The work he had begun in Australia continued when, in 1969, Berci became Director of the Department of Experimental Surgery at Cedars-Sinai, where he also led a multidisciplinary surgical endoscopy unit. Berci did no operating himself because he had never sought a licence to practise in the USA. "As he didn't take care of patients he had the time to teach", says Edward Phillips, Professor of Surgery at Cedars-Sinai. This was important because laparoscopic surgery was not initially popular in the USA, especially with academic surgeons. "It required a totally different skill for a group who were accustomed to using their hands directly", explains Gewertz. Because laparoscopy started outside the traditional academic centres, not all early adopters in the 1980s and early 1990s had been adequately trained. Berci's courses helped to deal with this failure. "He also felt strongly about the need to teach the teachers of laparoscopy", Phillips adds. Over his career Berci not only led changes in surgical practice, but also trained and supported many other surgeons who were able to build on what he had begun.

"No one was more positive about the world and about people than George", says Cristina Ferrone, Chair of the Department of Surgery at Cedars-Sinai. "He had so much energy, so much hope, and such a vision for the future." Adding his own thoughts on Berci's outlook, Gewertz remarks that "despite having lived through the Holocaust and nearly been exterminated by the Nazis…he still believed that people wanted to do good". Berci, who was married four times, leaves a daughter Katherine, a son Winton, and stepchildren Liza and Scott.

Geoff Watts