Werner Forssmann

Forssmann was the pioneer in cardiac catheterisation.

He was born Werner Theodor Otto Forssmann on August 29, 1904 in Berlin. Receiving his education at the secondary grammar school. Then he went on to study medicine at the University of Berlin in 1922. At the University Medical Clinic he perused the study of clinical medicine. He began a two year internship and then passed the state examination in 1928. In 1929 at the August Victoria Home, near Berlin, he undertook training in surgery.

It was there that he got the idea that perhaps drugs for cardiac resuscitation could be directly introduced into the heart through a tube introduced into a cubital vein that could be then made to make its way directly into the heart. He also theorised that such a tube could also be utilised to measure pressures in the heart chambers and that by injecting opaque dyes there various structures of the cardiac chambers could be studied. However, these ideas were not acceptable to his colleagues and he set them aside for the moment. He did, however, practice this on cadavers.

He was resolute in proving himself right and one day, with the help of an assistant, he inserted a cannula into his antecubital vein for about two feet and then walked to the radiology department (climbing two floors) and beseeched the radiologist there to inject radio opaque dye and to take X-Rays of the procedure. The picture showed the cannula to be in the right atrium.

Excited at his discovery he published a paper on this. Much to his chagrin, instead of being eulogised for the momentous discovery, he was chastised and ridiculed by his peers. His work was relegated to the limbo for nearly a decade.

He then became interested in other fields of medicine and took up pulmonary surgery and urology. He first worked at the Charite in Berlin and then in Mainz to become, later on, the chief surgeon of the City Hospital at Dresden-Friedrichstadt and the Robert Koch hospital in Berlin.

He was captured during World War II by the Allies. He had been serving as sanitary inspector. In 1945 he was released from the prisoner-of-war camp. He then set up practice in Schwarzwald, later on moving to Bad Kreuznach to practice urology.

Meanwhile, in America Courmand and Richards had worked on Forssmann’s principle and had made rapid advances in the procedure of cardiac catheterisation. They developed the technique to measure pressures in the cardiac chambers, to inject contrast material and also to study congenital defects.

He was awarded the Leibniz Medal of the German Academy of Sciences in 1954. In 1958 he was elevated to chief surgeon at the Evangelical Hospital in Düsseldorf.

He published many articles in urology. In 1962 he was elected to the membership of committee of the German Surgical Society apart from being a member of the American College of Chest Physicians.

For his work he was also honoured by the Swedish Society of Cardiology and the German Society of Urology.

In 1933 he had married a doctor and had six children from her.

In 1956 the Nobel Prize for Physiology or Medicine was awarded jointly to him, Courmand and Rogers for their pioneering work. When he heard about it, he said, “No one in Germany has paid any attention to me. The Americans were the ones who recognised my work.” He also said that it was a very satisfactory feeling to know that his research had been right.

When asked what he would do with his share of the Prize, he said, “You can imagine that I can find a good use for it with six children.”

He died in Schofphein, in Germany on June 1,1979.