## CardioVascular and Interventional Radiology © Springer-Verlag New York Inc. 1996

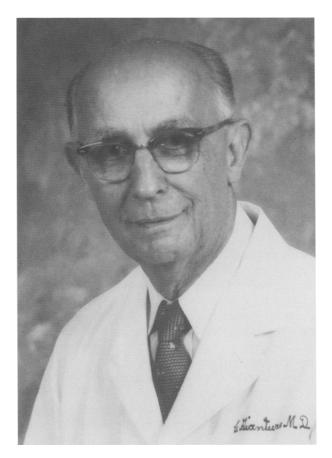
## Obituary

## Cesare Gianturco (1905–1995): A Legend in His Own Time

Dr. Cesare Gianturco died on August 26th, 1995. Cardiovascular and Interventional Radiology does not usually publish obituaries. However, Dr. Gianturco played such an important role in the creation of the specialty of interventional radiology that we felt it necessary to mark his death. Some of the most productive years of Dr. Gianturco's life were spent in the Research Laboratory of the M.D. Anderson Hospital in Texas, where he worked in close collaboration with Dr. Sidney Wallace.

Cesare Gianturco was born in Naples, Italy in 1905 and as the youngest of eight children he had to fight to be noticed in a family of high achievers-a family of lawyers and doctors and of long survivors. His father, Emanuele, was a legal scholar, Professor of Law, and a member of the Parliament. He served as the Minister of Transportation, Minister of Education and ultimately Minister of Justice. He helped write the laws of the recently unified confederation of states that eventually formed Italy in the 1870s. Emanuele Gianturco was a musician and a composer too-a true Renaissance man. Cesare's mother was also musically talented and his parents wrote symphonies and operas for their own entertainment. Cesare, by the way, was tone deaf. What role models his parents were for young Cesare to live up to, although his father died when Cesare was only two years old.

Dr. Gianturco obtained his Doctorate in Medicine from the University of Naples in 1927, graduating Cum Laude. He spent two years as a Specialist in Radiology at the Royal University of Rome, followed by one year in Pathology at the University of Berlin, Germany. Dr. Gianturco came to the United States in 1930 to complete his training in surgery at the Mayo (Brothers) Clinic in preparation to join his brother, a surgeon, in the creation of the Gianturco (Brothers) Clinic in southern Italy near Naples. Two weeks after his arrival at the Mayo Clinic, his brother died and Cesare chose to complete a three-year Fellowship in Radiology. In 1933 he was awarded a Master of Science degree in Radiology with a minor in Physiology by the University of Minnesota.



Dr. Cesare Gianturco

During his Fellowship he collaborated with the famed physiologist, Walter Alvarez, at the Mayo Clinic in the use of cineradiography to study hunger contractions in the cat stomach and the mechanics of the pylorus and duodenum. With John Camp he developed devices to facilitate the radiographic examination of the optic and hypoglossal canals, to determine the position of the calcified pineal gland and to allow the direct measurement of the diameter of the pelvis.

Dr. Gianturco was invited by his friend, a fellow Italian, Dr. Vito Wittig, the founder of the Carle Radiology Department, to join him at Carle Clinic in Champaign-Urbana; Dr. Wittig had not been feeling well and needed help. Dr. Gianturco arrived at 2:00 p.m. and Dr. Wittig was dead of acute leukemia by 10:00 p.m. that night. At the clinic, Dr. Gianturco met his future wife, Verna Daily, who was trained as an English teacher but was working at Carle. In 1934, while on their honeymoon, Dr. Gianturco was one of the first group of candidates examined by the newly formed American Board of Radiology. Following certification he became a founding member and Head of the Department of Radiology at the Carle Clinic.

In World War II, from 1942 to 1946, Dr. Gianturco served in the U.S. Army Medical Corps in the European theater, achieving the rank of Lieutenant Colonel. While in Paris, as the Chief of Radiology at Hôpital Lariboisière, he formulated a stereoscopic method for localizing metallic fragments in the eye.

After the war, he returned to the Carle Clinic and remained there until his retirement in 1968. As Clinical Professor of Radiology he maintained his interest in academic pursuits, frequently working with Professor F.R. Steggerda of the Department of Physiology of the University of Illinois, and publishing over 50 papers. Particularly outstanding was his work on the gastrointestinal tract, including high-kilovoltage radiography in the detection of colonic polyps and the development of a rapid method of duodenal intubation employing a Volkswagen speedometer cable as a flexible guidewire. He also designed, constructed and used the first balloon dilatation catheter in the mid-1960s. The balloon dilator consisted of an 8 Fr catheter on which was mounted a 3-inch long segment of polyolefin electrical shrink tubing. Dr. Gianturco used this device to dilate a stenosis in the femoral artery in one patient. He also investigated the use of systemic heparinization during vascular catheterization.

In 1968, Dr. Gianturco found the life of a retiree less than stimulating and through his long-time friend, Dr. Robert D. Moreton, joined the staff of the University of Texas M.D. Anderson Hospital and Tumor Institute as Professor of Experimental Diagnostic Radiology and Director of the Residency Training Program. He held these posts until the end of 1969, at which time he relinquished his clinical and teaching responsibilities to devote more time to research, both in Champaign-Urbana, Illinois and Houston, Texas. Together with Dr. Gerald D. Dodd and Dr. Sidney Wallace, a Radiologic Research Laboratory was created, which in 1980 became the John S. Dunn Sr. Foundation Center for Research in Radiological Sciences.

As the years passed, family considerations and advancing age gradually forced Dr. Gianturco to reduce the amount of time spent at the M.D. Anderson Cancer Center John S. Dunn Laboratory. However, he remained extremely productive and innovative, continuing to visit the laboratory periodically, two to three times a year, until his eighty-ninth year. His visits were eagerly anticipated, not only for the pleasure of his company, but also for a continuing flow of fresh and practical ideas. During his illustrious career, he published a total of 165 scientific papers.

Dr. Gianturco was an honorary member of the Society of Cardiovascular and Interventional Radiology, the Italian Radiologic Society, the Radiological Societies of Panama and of Tennessee. He was an emeritus member of the Champaign County Medical Society, Illinois Medical Society, American Medical Association, Illinois Radiological Society, Radiological Society of North America and American Roentgen Ray Society, and was a Fellow of the American College of Radiology.

Cesare Gianturco brought great honor, creativity and humility to the Gianturco family, the family of "John, the Turk." He was a gentleman, a scholar, a physican and an inventor.

- Cesare Gianturco, a true *Gentleman:* Dr. Gianturco was soft-spoken and gentle in manner, self-effacing and polite to a fault. He even mowed his lawn dressed in a suit, tie and gloves. When frustrated by failed attempts to rid his grass of dandelions, he used a vacuum cleaner. Cesare Gianturco was a modest, warm and wonderful human being—a most gentle man.
- Cesare Gianturco, an amazing *Scholar:* Dr. Gianturco was possessed of an incisive and inquiring mind supported by an indomitable will. His knowledge of medicine and physiology, flying and sailing, metals and motors, plastics and pulleys, and the like, was phenomenal.
- · Cesare Gianturco, a caring and compassionate Physician: a superb Radiologist in his first career as the Head of the Department of Diagnostic Radiology at Carle Clinic, Champaign-Urbana, Illinois, Cesare would do a high-kilovoltage barium enema, an intravenous pyelogram, an upper gastrointestinal examination, a cholecystogram and proctoscopy, all on the same patient in a one-day patient visit. Cesare Gianturco was awarded the Gold Medal from the Radiological Society of North America in 1970 for his contributions while at Carle Clinic. In his second career, he earned Gold Medals from the Italian Radiological Society (1992), the American College of Radiology (1994) and, posthumously, from the Society of Cardiovascular and Interventional Radiology (1996).
- Cesare Gianturco, an *Inventor:* Dr. Gianturco was even more successful in his second career after retirement, in the John S. Dunn Laboratory at the M.D. Anderson Cancer Center. He brought to the Department of Diagnostic Radiology a wealth of clinical experience and a sense of scientific order.

He had the unique capability to analyze the clinical problem, reduce it to its basic elements and conceive an appropriate device for its solution. He was responsible for the first balloon catheter used in radiology, the first stainless steel coil, the first pulsatile pump, the first balloon-assisted stent, the first percutaneously placed aortic graft, and for sacs, bags and disks for the occlusion of a patent ductus and septal defects among others. Cesare Gianturco was a veritable *Genius*, and tens of thousands are alive today because of his *Genius*.

The American College of Radiology named him one of the six "Legends of Radiology."

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