In Memoriam

William W.L. Glenn

The medical profession has lost a respected cardiovascular surgeon, investigator, and educator: Dr. William Glenn died on 10 March 2003, in Peterborough, New Hampshire, at the age of 88. Best known for his development of the Glenn shunt for palliation of complex congenital heart disease, Dr. Glenn had an illustrious academic career. He graduated from Jefferson Medical College in 1938 and worked as a resident surgeon at Massachusetts General Hospital between 1940 and 1946. During this time, he took a 2-year leave of absence to serve as a field surgeon in the Army Medical Corps in the European theater of World War II. Upon completion of postgraduate training, he joined the faculty of Yale University Medical School in New Haven, Connecticut, where he later became chief of cardiovascular surgery, a position he held until his retirement in 1988. He published several hundred scientific papers and edited the popular textbook *Glenn’s Thoracic and Cardiovascular Surgery*.

Widely noted for his interest and accomplishments in surgical research, Glenn devoted much time and effort to the study of cardiovascular physiology. After Dr. Alfred Blalock performed the first successful operation to treat Fallot’s tetralogy at Johns Hopkins in Baltimore, Glenn began to experiment with alternative techniques. While Blalock’s operation involved shunting arterial blood into the pulmonary artery, Glenn devised a system to shunt systemic venous blood instead. His initial operation involved dividing the right pulmonary artery and anastomosing the severed end to the side of the superior vena cava, which was then ligated at the entry to the right atrium. Although the procedure produced unpredictable results at first, the concept became much more successful when cardiopulmonary bypass enabled surgeons to connect the superior vena cava directly to the intact pulmonary artery. Today, a modern version of Glenn’s original technique, the bi-directional Glenn shunt, or BDG, is a standard palliative treatment for right-sided cardiac anomalies and for some cyanotic complexes associated with reduced pulmonary circulation and low resistance.

Dr. Glenn was an innovator and constant investigator. He explored the development of radiofrequency stimulation of the diaphragm and rate-controlled pacemakers, conceived an artificial heart valve, studied induced ventricular fibrillation for cardiac arrest, and attempted to produce and correct mitral regurgitation in animals. Although it was never effectively utilized, Dr. Glenn and his young assistant William Sewell also constructed a primitive artificial heart for right and left heart bypass.

Never considered an aggressive or rapid clinical surgeon, Dr. Glenn inspired many students and young associates to think creatively. To my mind, he was the consummate academic surgeon, both a life-long student of cardiovascular physiology and a powerful visionary. He was honest, humble, and sincere. It was my privilege and honor to present, at his request, the William W.L. Glenn lecture at the American Heart Association meeting in 1988.

Dr. Glenn is survived by his wife, Amory; a son, William A.L. Glenn; a daughter, Elizabeth McLellan; and 4 grandchildren. The surgical profession has lost another pioneer in cardiovascular disease and treatment, and I have lost a close friend.

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