Historical perspectives of The American Association for Thoracic Surgery: Tirone E. David

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Dr David examines the Toronto Stentless Porcine Valve (St Jude Medical, Minneapolis, Minn).

Central Message

Dr David was the 85th president of The American Association for Thoracic Surgery. He is widely acclaimed as a technically gifted surgeon and scientist.

Dr Tirone Esperidiao David was the 85th president of The American Association for Thoracic Surgery (2004-2005) and the fifth to emerge from the Toronto General Hospital. Prior past presidents from Toronto General Hospital include Robert Janes (32nd), Fred Kergin (47th), Wilfred Bigelow (55th), and F. Griffith Pearson (70th).

Dr David was born on November 20, 1944, in Ribeirão Claro, Brazil, and received his Doctor of Medicine degree from the University of Parana in 1968. Interestingly, he credits his father for pushing him toward a career in medicine. He preferred to pursue teaching but was told to pursue a medical career if he wanted to enjoy the ongoing financial support of his family. During medical school, he developed a passion for surgery, one that would guide his career forever. At this point, he no longer needed the motivation from his family.

He left Brazil to pursue surgical training at the State University of New York and ultimately completed his general surgery training in 1975 at the Cleveland Clinic. He arrived in Toronto eager to train with the pioneering surgeons Drs Wilfred Bigelow and F. Griffith Pearson, with a mission to follow in their legendary footsteps in the field of cardiothoracic surgery.

Dr David's surgical skills were quickly appreciated, and legend has it that many operations were performed faster and better by the young prodigy than by his experienced mentors. After completing his cardiothoracic training, Dr David was appointed as the Chief of Cardiovascular surgery at the Toronto Western Hospital. Although the Toronto Western Hospital was an affiliate hospital of the University of Toronto, the cardiac surgical program there was in disrepair, and many experienced administrators thought that the experience would be ''humbling'' for the young surgical star. Much to their surprise, his surgical skill and unbelievable commitment to his patients turned the division around, and it became the premier unit in the city.

There are countless legendary stories that begin to describe his commitment to his patients. For example, during Dr David's younger years, he phlebotomized himself to provide blood to an exsanguinating patient. His confidence knew no bounds, and far be it for an inferior surgeon to operate on his patients. As an example, one of the first patients undergoing an aortic valve–sparing procedure (now commonly known as the ''David Operation'') had a spontaneous liver hemorrhage. Before the arrival of the hepatobiliary surgeon, a facile and technically perfect liver resection had been performed. In his consummate manner, Dr David casually remarked ''It is OK, the operation is over. The patient is heparinized and I didn't want you to worry about hemostasis.''

It is in this unique and classic manner that Dr David offers praise while simultaneously and surreptitiously dealing a critical evaluation of your performance. The authors recount far too many quotes from the operating room than space allows. A familiar phrase uttered when we were not keeping up to his liking: ''Unfortunately, I will need your help for a moment longer.'' Probably the most common phrase we heard was ''It is my fault.'' ''Don't worry, it is my fault for not knowing you have never seen this procedure.'' ''It is my fault for thinking you could tie that knot.'' ''It is my fault for doing this operation without Joanne.'' Joanne Bos continues to be his most constant companion in the operating room, having assisted Dr David for more than 33 years. Like Dr David himself, she has become a master. She knows exactly where the drapes should lay and when the sutures should be held and when they should be cut, and only she can adequately expose the aortic valve to his satisfaction. Most of his trainees fear the days when

FIGURE 1. Dr David examines the Toronto Stentless Porcine Valve (St Jude Medical, Minneapolis, Minn).

Joanne is off because it is impossible for even the most senior trainee to replace her. Even when she's present, trainees would tremble to hear the words ''If you cannot do, Joanne can do.''

In 1989, the Toronto Western and Toronto General Hospitals merged to form the Toronto Hospital. Dr David succeeded Dr Ronald Baird as the head of the combined division of cardiovascular surgery and held that position until 2011.

During his 22-year reign as chief, Dr David continued to innovate and introduce several new procedures to the surgical community. Although perhaps best known for his contributions to aortic valve–sparing root replacement, Dr David has made seminal contributions to mitral valve repair, postinfarct ventricular septal defect repair (the infarct exclusion technique), the Ross procedure, and the development of a stentless aortic prosthesis (Toronto Stentless Porcine Valve; St Jude Medical, Minneapolis, Minn).[1-6]

FIGURE 2. Dr David and his new best friend, his grandson Leo, pursuing an old passion.

FIGURE 3. Dr David and Dr Rao circa 2010.

It is interesting to speculate that Dr David's development of the stentless porcine valve simultaneously led to the introduction of the ''David'' procedure because both techniques involve annular securement followed by ''reimplantation and resuspension'' of the valve apparatus (Figure 1).

Dr David has enjoyed the support of his wife Jackie and their 3 daughters, Adriane, Carolyn, and Kirsten (not to mention his new grandson, Leo). In his leisure time, he enjoys playing tennis and golf (enjoy may be a strong word), and flying remote-control planes. The latter hobby has now morphed into an interest in drones (Figure 2).

Over the years, Dr David has trained more than 100 cardiac surgeons, many of whom are now in important leadership roles. His attention to detail and technical mastery of surgery continue to amaze the countless surgical visitors who enter his operating room to observe him. As one such visitor remarked, he is not just good, he is in another league altogether.

His current passion is to visit his former trainees and operate in their home countries (more than 22 at last count). In this manner, Dr David's legacy will be continued by another generation of cardiac surgeons, and his influence will be of benefit to thousands of more patients with heart disease.

Dr David is truly a living legend in cardiac surgery, and it has been a great privilege to train and work alongside him (Figure 3). I am reminded of Sir Russel Brock's description of another living legend: ''It stands to reason that the world will not produce a second Denton Cooley, and frankly, I have my doubts if the world could handle another one.''[7] In contrast, we would indeed be fortunate if the world produced another Tirone E. David.

References

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