



Loss of a cardiology legend: A tribute to Professor David H. Spodick (1927–2019)

Lovely Chhabra, MD FACC*

Heartland Regional Medical Center, Marion, IL 62959, United States of America
Southern IL University, Carbondale, IL, United States of America

A celebrated physician and a giant in pericardial disease and electrocardiology research, Dr. David H. Spodick, passed away on May 19th 2019 at age 91 (Fig. 1).

His academic legacy is a career spanning more than 60 years that was marked by major contributions and advancements in the field of Cardiology. When medical investigators review some of the important 20th and 21st century contributors to the field of general Cardiology and Electrocardiology, Professor Spodick's name stands out for his exactness in thought and writing style. He has taught several generations of physicians and has positively influenced their careers by his teachings and his expectations for meeting the highest standards of care. He has regularly challenged popular beliefs which are not based on rigorous scientific thoughts. As a scientific researcher and a person, Dr. Spodick was remarkable for his analytical skills and commitment to addressing challenging medical problems with a speculative yet kind demeanor, which has earned him well-deserved global admiration.

Dr. Spodick was born in Hartford, CT in 1927 and graduated from Kingston High School, NY in 1944. He studied in Bard College for his pre-medical years. He worked in the non-invasive Cardiology and physiology division and was awarded the honor of 'Doctorate in Science' for his work. He received his medical school degree from the New York Medical College in 1950. He did his internship at Saint Francis Hospital, Hartford, CT in 1951 followed by his residency at Beth Israel Medical Center, MA (1952) and New England Medical Center (1953–56). This tenure was inclusive of his service in the Air Force for 2 years. He joined his cardiology fellowship at VA, West Roxbury in 1956 and became the first fellow of Dr. David Littmann, the legendary inventor of the stethoscope. After completion of his fellowship, he joined Lemuel Shattuck Hospital, where he spent an eminent academic career spanning for 19 years, while holding academic appointments at all three of the Boston medical schools. He later joined as the Chief of Cardiology at Saint Vincent Hospital in 1976 while holding an academic appointment at the University of Massachusetts Medical School until his retirement in 2015 [1].

No stranger to honors and awards, Dr. Spodick has been the recipient of innumerable accolades including the Brower Traveling Scholar of the American College of Physicians in London (1964), the Burger Award of the European Society of Noninvasive Cardiovascular Dynamics (1998)

and the Melvin L. Marcus Memorial Award by the International Academy of Cardiology at the 3rd World Congress (2003), just to name a few [1]. In addition, he has received countless teaching awards from his training program and fellows over the decades of his academic career. Professor Spodick personally always described his most special award to be the 'gratitude' that he had received from his medical trainees. A typical professional scenario of him being at his happiest would be him sitting in his office nestled with a fellow or resident in an energetic conversation over a research proposal (Fig. 2). Both the Department of Medicine and the Division of Cardiovascular Medicine at Saint Vincent Hospital have instituted a yearly research symposium named in his honor called the 'Spodick Symposium'. At one such symposium a few years ago, Eugene Braunwald, one of the prominent legends of cardiology, was an invited speaker and when getting to the podium, remarked, "What can I say about the pericardium when Dave Spodick is here".



Fig. 1. Dr. David H. Spodick's picture at his residence.

* 3331 W. DeYoung Street, Marion, IL 62959, United States of America.
E-mail address: lovids@hotmail.com.



Fig. 2. Dr. Spodick (left) with one of his fellows Dr. Lovely Chhabra (right) in his office.

Dr. Spodick's name is well known across the globe for his work on pericardial diseases, electrocardiology, diseases of the atria and interatrial conduction abnormalities and cardiovascular physical examination [2–6]. He has authored over 800 PubMed indexed journal publications in addition to numerous books and book chapters. Some of the clinical signs after his name include: the Spodick sign in acute pericarditis (electrocardiographic PR-depression and somewhat downsloping appearance of TP-segment in pericarditis) and the Spodick sign in aortic stenosis (auscultation of aortic stenosis murmur over the mid-clavicle) [2,7,8]. He was among the first to investigate the utility of a vertical front P-vector in the diagnosis of emphysema [9,10]. He has also been a lead authority figure on the interatrial block (also known as Bayes' syndrome) due to his significant contributions to this topic in the United States [9–11]. His publication titled “Operational Definition of Normal Sinus Heart Rate” caused all of us to rethink as to how and when we

should label patients as having sinus bradycardia or sinus tachycardia [6]. Even in the last few years of his academic career, he actively collaborated with his European colleagues to conduct several randomized controlled multi-centric trials on acute and recurrent pericarditis which have resulted in a paradigm shift in the treatment of acute pericarditis [12–16] (Fig. 3).

From a personal experience, having Dr. Spodick as a mentor has been one of my lifetime's best experience thus far. He was a voracious reader and hungry for new knowledge. His knowledge about different people, languages and cultures of the world was beyond imagination. Despite his giant professional repute, he was always humble, respectful and extremely supportive (like a grandfather figure) to all of his peers and trainees. He always used to say, “I have learnt something from you today. Thank you for teaching me.” His humbleness was one of his strongest assets and he generously used it as an encouragement technique for others. He had a great fan following for his ‘down-to-earth’ attitude. He was truly a role model, a great mentor and an academic ‘Super-Hero’!

The cardiology community has suffered a great loss with his death. He will be widely mourned and dearly missed for all his academic and personal attributes, and his perseverance in the pursuit of solutions to the new ailments in Cardiology.

Acknowledgments

I would like to acknowledge that some of the information in the article has been quoted from the Drs. Saperia and Bishop's excellent Cardiology profile written about Dr. Spodick in 2004 (added as reference number 1 in the article). I would also like to thank Dr. George Abraham (the Chief of Medicine, Saint Vincent Hospital, Worcester, MA) for allowing me to use the Department Memo especially written in the memory of Dr. David Spodick.

Declaration of Competing Interest

None.

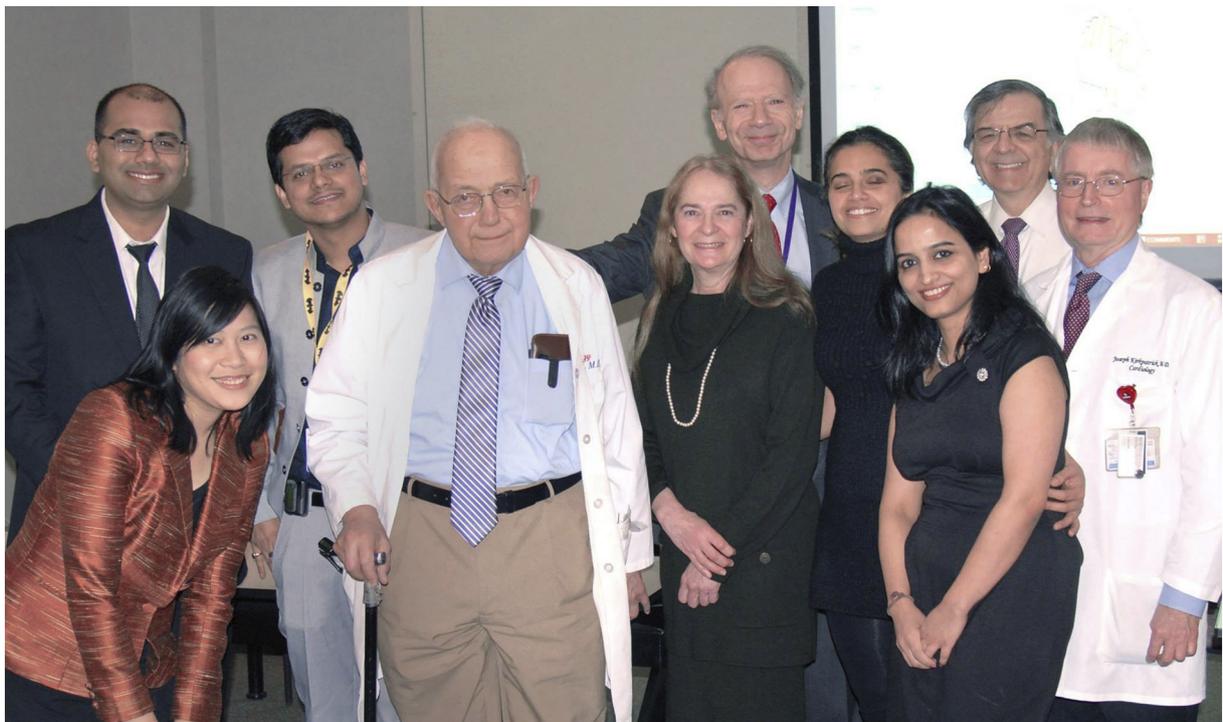


Fig. 3. Dr. Spodick's picture with the medical trainees and faculty on his last attended Spodick Symposium at the Saint Vincent Hospital, Worcester, MA before his retirement in 2015. Dr. Chhabra presented his farewell speech on the occasion.

References

- [1] Saperia GM, Bishop RL. Profile in cardiology. *David H Spodick Clin Cardiol* 2004;27(9):533–4.
- [2] Spodick DH. Diagnostic electrocardiographic sequences in acute pericarditis. Significance of PR segment and PR vector changes. *Circulation* 1973;48(3):575–80.
- [3] Spodick DH. Interatrial block and atrial arrhythmias. *Am J Cardiol* 1996;77(4):326.
- [4] Chhabra L, Devadoss R, Chaubey VK, Spodick DH. Interatrial block in the modern era. *Curr Cardiol Rev* 2014;10(3):181–9.
- [5] Spodick DH. Acute cardiac tamponade. *N Engl J Med* 2003;349(7):684–90 Aug 14.
- [6] Spodick DH, Raju P, Bishop RL, Rifkin RD. Operational definition of normal sinus heart rate. *Am J Cardiol* 1992;69:1245–6.
- [7] Chaubey VK, Chhabra L. Spodick's sign: a helpful electrocardiographic clue to the diagnosis of acute pericarditis. *Perm J* 2014 Winter;18(1):e122.
- [8] Spodick DH, Kerrigan AT, de la Paz LR, Shahamatpour A, Kino M. Clavicular auscultation. Preferential clavicular transmission and amplification of aortic murmurs. *Chest* 1976;70:337–40.
- [9] Spodick DH. Electrocardiographic studies in pulmonary disease: I. Electrocardiographic abnormalities in diffuse lung disease. *Circulation* 1959;20:1067–72.
- [10] Chhabra L, Sareen P, Perli D, Srinivasan I, Spodick DH. Vertical P-wave axis: the electrocardiographic synonym for pulmonary emphysema and its severity. *Indian Heart J* 2012;64(1):40–2.
- [11] <http://cardiolatina.com/wp-content/uploads/2017/05/Bayes-2014-ADRIAN.pdf>.
- [12] Imazio M, Trincherio R, Brucato A, Rovere ME, Gandino A, Cemin R, et al. Colchicine for the Prevention of the Post-pericardiotomy Syndrome (COPPS): a multicentre, randomized, double-blind, placebo-controlled trial. *Eur Heart J* 2010;31(22):2749–54 Nov.
- [13] Imazio M, Brucato A, Cemin R, Ferrua S, Maggolini S, Beqaraj F, et al. A randomized trial of colchicine for acute pericarditis. *N Engl J Med* 2013;369(16):1522–8 Oct 17.
- [14] Imazio M, Belli R, Brucato A, Cemin R, Ferrua S, Beqaraj F, et al. Efficacy and safety of colchicine for treatment of multiple recurrences of pericarditis (CORP-2): a multicentre, double-blind, placebo-controlled, randomised trial. *Lancet* 2014;383(9936):2232–7 Jun 28.
- [15] Imazio M, Brucato A, Ferrazzi P, Rovere ME, Gandino A, Cemin R, et al. Colchicine reduces postoperative atrial fibrillation: results of the Colchicine for the Prevention of the Postpericardiotomy Syndrome (COPPS) atrial fibrillation substudy. *Circulation* 2011;124(21):2290–5 Nov 22.
- [16] Chhabra L, Spodick DH. Is it time for a "reverse paradigm shift" in the treatment of acute idiopathic pericarditis? *Rev Esp Cardiol (Engl Ed)* 2019 Apr 1. <https://doi.org/10.1016/j.rec.2019.02.011> pii: S1885-5857(19)30053-2.