



The Society of Thoracic Surgeons
633 N. St. Clair, Suite 2320
Chicago, IL 60611
www.sts.org

News

STS Press Release

Media Contact:

Jennifer Bagley
312-202-5865

jbagley@sts.org

For Immediate Release

Heart Surgery Is Excellent Option for Elderly Patients with Aortic Stenosis

Study surprises researchers in that surgical aortic valve replacement outcomes equal those of minimally invasive procedure

HOUSTON (January 24, 2017) — Elderly patients with aortic stenosis (AS) and medium surgical risk experienced better than expected results after undergoing traditional surgical aortic valve replacement (SAVR), according to research presented at the 53rd Annual Meeting of The Society of Thoracic Surgeons.

“In an era that includes both SAVR and transcatheter aortic valve replacement (TAVR), it is clear that the treatment for aortic stenosis has changed,” said Vinod H. Thourani, MD, from Emory University in Atlanta, who led the study. “But even with the availability of the relatively new TAVR procedure, SAVR remains a safe and effective way to treat aortic stenosis in intermediate-risk, elderly patients.”

Dr. Thourani and colleagues from 15 other institutions performed an in-depth analysis of SAVR outcomes in patients who participated in the Placement of Aortic Transcatheter Valves (PARTNER-IIA) trial. In the PARTNER-IIA trial, conducted from December 2011 to November 2013, 1,011 severe aortic stenosis, intermediate-risk patients were randomized in 57 North American centers to SAVR. Of these, 937 patients had surgical valve implantation and ultimately composed the study group for this research. The mean age was 82 years old, and 55% were male.

In their analyses, researchers found that the operative mortality was 4.1%, somewhat lower than the STS predicted risk models—a tool for surgeons to predict the patient risk of death or illness following open aortic valve replacement. “The outcomes in intermediate-risk patients who received SAVR were excellent, showing that mortality is non-inferior to TAVR,” said Dr. Thourani. “This was better than expected.”

According to Dr. Thourani, approximately 15% of all patients undergoing SAVR in the US are intermediate risk. SAVR is the replacement of the aortic valve, the main valve separating the heart from the rest of the body, through an incision in the chest. During this procedure, the patient is placed on the heart-lung machine while

KEY POINTS

- Mortality in medium-risk patients who receive SAVR is similar to those treated with TAVR.
- First neurological exams following SAVR show a higher than expected risk of in-hospital stroke.
- Patients with aortic stenosis should be evaluated by a dedicated heart valve team.

the aorta (main blood vessel of the body) is opened and the defective valve is replaced with an artificial valve. TAVR was approved in the United States in late 2011, providing an alternative therapy for high-risk patients with AS who previously were refused SAVR. Prior to TAVR, SAVR was the only effective long-term therapeutic option for patients.

Two Other Surprising Findings

In addition to a lower than expected mortality rate from SAVR, researchers were surprised to learn that prosthesis-patient mismatch was common, with 33% of patients receiving a surgical valve that was too small. However, according to Dr. Thourani, this did not affect the mortality. The study also showed a greater risk of in-hospital stroke among SAVR. “In the past, there were no formal neurological assessments, meaning that previous rates possibly were understated,” explained Dr. Thourani. “The PARTNER-IIA study was one of the first times that neurological evaluations following the SAVR procedure were conducted, so further research in this area is required.”

AS is the most common acquired valve disease in elderly patients and affects nearly 3% of those over the age of 75, according to the American Heart Association. The ability to safely treat AS has become increasingly important; the US Census Bureau reports that the elderly population in the United States is projected to almost double, from the most current estimate of 43 million in 2012 to 80 million by the year 2050.

“Patients with aortic stenosis must realize how important it is that they are evaluated by a dedicated heart valve team that can help them understand the variety of options available and shepherd them into the most informed decision,” said Dr. Thourani.

Future research includes a randomized PARTNER-III study that will evaluate TAVR and SAVR in low-risk patients.

###

The other authors of the study were Wilson Szeto, MD, Susheel Kodali, MD, Eugene Blackstone, MD, Ashley Lowry, MD, Raj Makkar, MD, Mathew Williams, MD, Joseph Bavaria, MD, Howard Herrmann, MD, Hersh Maniar, MD, Vasilis Babaliaros, MD, Craig Smith, MD, Alfredo Trento, MD, Paul Corso, MD, Augusto Pichard, MD, D. Craig Miller, MD, Lars Svensson, MD, Samir Kapadia, MD, Gorav Ailawadi, MD, Rakesh Suri, MD, Kevin Greason, MD, Rebecca Hahn, MD, Wael Jaber, MD, Jessica Forcillo, MD, Maria Alu, MD, Martin Leon, MD, and Michael Mack, MD.

Note: Please see the abstract for a full list of the commercial relationships disclosed by the authors.

For more information, contact Media Relations Manager Jennifer Bagley at 312-202-5865 or jbagley@sts.org.

Founded in 1964, The Society of Thoracic Surgeons is a not-for-profit organization representing approximately 7,200 cardiothoracic surgeons, researchers, and allied health care professionals worldwide who are dedicated to ensuring the best possible outcomes for surgeries of the heart, lung, and esophagus, as well as other surgical procedures within the chest. The Society’s mission is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research, and advocacy.