**The Society of Thoracic Surgeons**
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# News

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# Database Helps Ease Concerns About Heart Surgery Approach

***Minimally invasive EVH safe and effective in CABG surgery***

Chicago—New research shows that a minimally invasive approach used during coronary artery bypass grafting (CABG) surgery is safe and effective, despite previous studies that linked endoscopic vein harvesting (EVH) to a higher mortality rate.

**Key Points**

- Endoscopic vein harvesting has similar morality rate to more invasive method
- STS National Database provides critical data to *JAMA* study
- FDA requested study of EVH vs. OVH using STS National Database

The research, published in the August 1, 2012 edition of *The Journal of the American Medical Association (JAMA),* was an observational study of more than 235,000 patients included in The Society of Thoracic Surgeons (STS) National Database who underwent CABG surgery at 934 participating surgical centers. Investigators compared the three-year outcomes of patients undergoing EVH to the outcomes of patients undergoing the more invasive open vein harvesting (OVH) procedure and found no difference in mortality rates.

"This study should alleviate concerns of patients and surgeons raised by past studies, and confirms the superiority of the EVH technique in terms of infection and wound complication rates that makes the minimally invasive approach the preferred method," said senior author Peter K. Smith, MD, Professor and Chief of Cardiovascular and Thoracic Surgery at Duke University in Durham, N.C.

**Value of STS National Database**

Access to such a large dataset of patients was a vital component in this research. "The quality of the STS National Database was critically important to this study, as it allowed for the collection of accurate, clinically relevant patient risk factors," said Dr. Smith. "Alternate sources of this type of information are not available."

The STS National Database, established in 1989, is the premier clinical data registry for cardiothoracic surgery. It includes three components—the Adult Cardiac Surgery Database (ACSD), the General Thoracic Surgery Database, and the Congenital Heart Surgery Database. Currently, the ACSD contains more than 4.7 million surgical records.

"The STS National Database provides a wealth of real-world clinical information from a highly regarded and trusted national source," said STS Research Center Director Fred H. Edwards, MD, Emeritus Professor of Surgery at the University of Florida, Jacksonville. "The huge number of patient records in the database provides adequate statistical power for virtually any analysis of clinical importance."

For this study, ACSD records, which provide short-term clinical information, were linked to Medicare files to allow longitudinal assessment. "This linkage is critical for benchmarking and quality assessment," said Dr. Edwards.

As an alternative to large, incision-based OVH, cardiothoracic surgeons began using EVH techniques in the mid-1990s to improve post-operative discomfort and incision-site infections.

The U.S. Food and Drug Administration requested the study using data from the ACSD to further assess EVH use in CABG. It was one of many collaborative projects among STS, the FDA, and other public and private sector organizations.

"The recent development of the STS-ACC Transcatheter Valve Therapy Registry demonstrates the use of STS and American College of Cardiology resources in the device surveillance world," said Dr. Edwards. "The TVT Registry was developed in close collaboration with the FDA and that collaboration will continue to be a centerpiece of cardiovascular device surveillance in the foreseeable future."

To learn more about the STS National Database and its use in the *JAMA* study, "Association Between Endoscopic vs. Open Vein Harvesting and Mortality, Wound Complications, and Cardiovascular Events in Patients Undergoing Coronary Bypass Surgery," contact Natalie Boden at 312-202-5819 or nboden@sts.org.

Information is also available about the new TVT Registry.

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Founded in 1964, STS is a not-for-profit organization representing more than 6,500 cardiothoracic surgeons, researchers, and allied health 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 care through education, research and advocacy.