SVS announces major update of AAA Clinical Practice Guidelines

CHICAGO, Illinois, Dec. 18, 2017 – A team of 14 experts has published the first update in nine years to the Society for Vascular Surgery’s Clinical Practice Guidelines for the Care of Patients with an Abdominal Aortic Aneurysm (AAA), a leading cause of death in the U.S.

The document will be published in full in the January issue of the Journal of Vascular Surgery, accompanied by an editorial by the Journal’s editors. The complete online version is available here vsweb.org/AAAGuidelines.

Each year, 200,000 people in the United States are diagnosed with an abdominal aortic aneurysm. Ruptured AAA is the 15th leading cause of death in this country and the 10th leading cause for males over age 55. With the advent of screening programs as well as endovascular therapies, the diagnosis and management of AAA has changed dramatically over the past two decades.

The authors, led by vascular surgeon Dr. Elliot Chaikof from the Beth Israel Deaconess Medical Center and Harvard University, have revised several older recommendations and addressed new topics. The guidelines are supported by three systematic reviews and meta-analyses prepared by the Evidence Based Practice Center at the Mayo Clinic. One of the longest set of guidelines the SVS has ever published, the update has 774 references.

Previous AAA practice guidelines were published in 2003 and 2009 by the SVS in the Journal of Vascular Surgery. In the 2018 updated guidelines, authors made specific practice recommendations using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system, a formal method to assess certainty of the underlying evidence, and concluded with recommendations for further research.

Several new recommendations are among 111 in this document, including:

1. For the first time, an SVS Clinical Practice Guideline has recommended that procedures should be limited to centers that meet a specific case volume threshold and outcome target. These guidelines set a minimum number of AAA procedures per year at each hospital that offers the procedure. This recommendation was discussed at length and now represents a balance between the available evidence and the different practice patterns and environments in which SVS members work. Under these recommendations -
• Elective EVAR should be performed in hospitals with a documented mortality and conversion rate to open surgical repair of 2% or less and that perform at least 10 EVAR cases per year.

• Open AAA should be performed in hospitals with a mortality rate less than 5% and that perform at least 10 open repairs per year.

“This volume requirement prompted much discussion among academic and community surgeons alike,” said Dr. Thomas Forbes, chair of the SVS Document Oversight Committee. “The original suggestion was for higher volume numbers, but eventually epidemiologically sound and clinically relevant case volumes were set to recognize the excellent work that SVS members are doing in a variety of practice settings. We recognize that these case volume requirements are open to discussion and will likely be revisited in future updates to these guidelines.”

2. Surgeons should use the SVS Vascular Quality Initiative (VQI) mortality risk score to assist in making informed decisions and recommendations about aneurysm repair.

“This allows the physician to give a patient-centered and personalized risk prediction, rather than use mortality risks from trials involving other patients. Our patients will be better informed and active participants in the decision-making process,” said Dr. Forbes.

3. Endovascular repair is preferred over open repair for treating ruptured aneurysms if anatomically feasible.

“Randomized trials for this are very difficult to do,” Dr. Forbes said. “When this guideline was being developed, there was a paucity of randomized trial data to support this, however there was a great deal of registry, single- and multi-center data in support, as well as expert opinion,” Dr. Forbes said. “Recently, the mid-term data from the IMPROVE Trial has been published and is in support of this recommendation.”

Other noteworthy recommendations include:

• A door-to-intervention time of less than 90 minutes for emergency repairs.

• A one-time AAA ultrasound screening for men and women ages 65 to 75 who have a history of tobacco use. (Several other societies recommend screenings for male smokers only.)

• Recommendations for the treatment of endoleaks.

• Appropriate use of antibiotic prophylaxis in patients with an aortic prosthesis undergoing dental and other invasive procedures.

Vascular surgeons worldwide will welcome the updated guidelines, Dr. Forbes said. “It’s a huge resource. These guidelines are the new key reference for aneurysm therapy, and this update provides background and clear direction. There is nothing else like it. It is the hallmark of guidelines.”


To find additional SVS guidelines and resources, visit http://vsweb.org/Guidelines.