

SVS Statement on Vascular Screening

Vascular disease is among the leading causes of death in the United States, yet is generally asymptomatic until a catastrophic event occurs, such as a stroke or aneurysm rupture. Although preventive screening is available, millions of Americans at risk for stroke or death from vascular disorders remain unaware of their risk.

Vascular disease can cause potentially lethal aneurysms of the aorta (AAA), the main artery of the body.

Overall, the probability of AAA in the general population is low, but is increased when certain risk factors are present. These include increasing age, male gender, white race, smoking, family history of aneurysms, history of other vascular aneurysms, hypertension, atherosclerotic diseases, cerebrovascular disease, and high cholesterol.

- One-time ultrasound screening for AAA is recommended for all men at or older than 65 years. Screening men as early as 55 years is appropriate for those with a family history of AAA.
- One-time ultrasound screening for AAA is recommended for all women at or older than 65 years with a family history of AAA or who have smoked.
 - Re-screening patients for AAA is not recommended if an initial ultrasound scan performed on patients 65 years of age or older demonstrates an aortic diameter of less than 2.6 cm.

Vascular disease can block the carotid arteries to the brain and cause paralyzing strokes.

Stroke remains the third leading cause of death in the U. S. Strokes occur in 700,000 Americans each year with nearly 157,000 people dying annually from this disorder. A large proportion of strokes are caused by plaque in the carotid arteries. In 2006 it was estimated that Americans would pay about \$57.9 billion for stroke-related medical costs and disability.

Vascular disease can impair circulation to the legs, leading to reduced ability to walk and in some cases, leg amputation. Vascular disease in the legs is a major marker for heart disease.

One in every 20 Americans over the age of 50 has peripheral arterial disease (PAD). It affects eight to 12 million people in the United States. Individuals with PAD suffer a five-fold increased relative risk of a cardiovascular ischemic event and total mortality that is two-three fold greater than those without PAD. Therefore, screening for PAD not only identifies patients with asymptomatic PAD in whom risk factor modification can slow or stop the progression of the disease process, but also allows identification of individuals who may also be at risk for heart attack and stroke due to blockages affecting these organ systems.

Individuals 55 years of age or older with cardiovascular risk factors such as a history of hypertension, diabetes mellitus, smoking, hypercholesterolemia, or known cardiovascular disease may benefit from preventive screening for vascular disease. Noninvasive screening examinations have proven to be

accurate in detecting vascular disease prior to active warning signs and before a major medical incident such as stroke, or sudden death from aneurysm rupture. Appropriate screening examinations in high-risk individuals include:

- Ultrasound scan of the aorta to identify aortic aneurysms
- Ultrasound scan of the carotid arteries to assess stroke risk
- Blood pressure measurements in the legs to identify PAD and risk of heart disease

With the baby boomer population aging and expected to reach 87 million by 2015, raising public awareness about vascular disease and screening becomes critical. The Society for Vascular Surgery® believes vascular disease must become a national health care priority and is committed to improving public awareness and understanding of vascular disease.

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