



Canadian Society for Vascular Surgery (CSVS) Statement on AAA Screening

Abdominal aortic aneurysm (AAA) is a significant cause of death in Canada. AAAs are most common in men over the age of 65. They can be reliably detected in a cost effective manner using a simple ultrasound scan of the abdomen limited to visualization of the abdominal aorta. While there are risk factors that increase an individual's risk of having an AAA, population screening of men aged 65-75 has been proven to be effective in reducing AAA mortality.

The Canadian Society for Vascular Surgery has reviewed and published the results of the medical evidence for screening of AAA(1). These data demonstrated that screening men 65 to 75 will reduce aneurysm related mortality by half and at seven year follow-up a benefit on all cause mortality was noted. (2) Three aneurysms discovered by screening and repaired electively, will prevent one aneurysm death. A directed AAA screening program has been demonstrated to be cost effective. For men, the number needed to screen to prevent one AAA mortality is similar to mammography.

A Canadian economic analysis has demonstrated that a national screening of men reaching age 65 is an economically viable approach. (3)

The incidence of AAA in women is significantly less and population based screening in all women has not been shown to reduce mortality. Selective screening of women over the age of 65 with multiple risk factors for aneurysms (smoking history, family history (AAA in parent or sibling), cerebrovascular disease) was moderately supported by the evidence.

Therefore the Canadian Society for Vascular Surgery recommends:

- 1) National and provincial health ministries develop a comprehensive population-based ultrasound screening program for AAA detection and referral.
- 2) All men aged age 65-75 be screened for AAA
- 3) Individual selective screening for those at high risk for AAA
 - a. women over age 65 at high risk secondary to smoking, cerebrovascular disease and family history
 - b. men less than 65 with positive family history

Reference List

- (1) Mastracci TM, Cina CS. Screening for abdominal aortic aneurysm in Canada: review and position statement of the Canadian Society for Vascular Surgery. *J Vasc Surg* 2007; 45(6):1268-1276. Comment and Author reply *J Vac Surg* 2007 46(6) 1311-12.
- (2) Kim LG RA PS, Ashton HA, Thompson SG. A sustained mortality benefit from screening for abdominal aortic aneurysm. *Ann Intern Med* 2007; 146(10):699-706.
- (3) Montreuil B, Brophy J. Screening for abdominal aortic aneurysms in men: a Canadian perspective using Monte Carlo-based estimates. *Can J Surg* 2008; 51(1):23-34.