



Canadian Society for Vascular Surgery

Société canadienne de chirurgie vasculaire

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Abdominal Aortic Aneurysm Backgrounder

Abdominal Aortic Aneurysms

An abdominal aortic aneurysm (AAA) is a pathological increase in size of the main blood vessel in the abdomen. The normal aortic size is approximately 2 cm in men and a bit smaller in women. As the aorta increases in size, the risk of rupture increases. The condition is frequently silent and rupture can be the first symptom. Elective repair is available across Canada with significantly better outcomes when compared to those treated for aortic rupture.

Abdominal aortic aneurysms (AAAs) are common and can be deadly if they are not treated. When aortic rupture occurs the majority do not survive.

Who is at Risk

Five per cent of men and under one per cent of women over the age of 65 have an abdominal aortic aneurysm (AAA). All men between the ages of 65 and 75 and those under 65 with a family history should be screened. Women over 65 who are at high risk because of a smoking history and a family history should also be screened.

Latest in Canada

A detailed analysis of AAA screening sponsored by the Canadian Society for Vascular Surgery (CSVS) was published in the *Journal of Vascular Surgery* in 2007. A round table discussion with staff and members of CSVS took place in March 2008 where a multi-faceted approach for disseminating information and garnering support for a national screening program was planned. As a result of the increasing weight of evidence combined with a cost-effective solution, the CSVS has undertaken an awareness campaign about the need for a national screening program.

The Ontario Health Technology Assessment Advisory Committee conducted a review of the utility of vascular ultrasound screening for AAA in Ontario patients over the age of 65. In July 2006, the advisory committee recommended screening for AAA for all men and women aged 65-74, with a history of smoking. The advisory committee also recommended that an implementation strategy be developed to roll out AAA screening. In Ontario there is currently no formal screening program for AAA, although individual ultrasound screening is at the discretion of the physician.

Current AAA Screening Initiatives

In June 2005, the U.S. Preventive Services Task Force recommended one-time ultrasound screening for AAA in men aged 65 to 75 who have ever smoked. For men who have smoked and women and men who have a positive family history turning age 65, a one time AAA screening is offered as part of the welcome to Medicare physical examination. This program began January 1st 2007.

The UK government decided on a screening program in January 2008 and is now planning its implementation. In March 2007, the UK National Screening Committee's reconfirmed that AAA screening could be offered to men aged 65, provided that the men invited were given clear information about the risks of elective surgery, and that steps were taken to create networks of vascular surgical services to allow further specialization, bigger throughput and therefore lower risk.



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Statement on Abdominal Aortic Aneurysm 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

References:

- (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.
- (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.

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