INVITED COMMENTARY

Screening for Abdominal Aortic Aneurysm among Patients Referred to Vascular Laboratory. Indeed Feasible — But Acceptable?

J.S. Lindholt1* and U. Fasting2

1Vascular Research Unit, Viborg Hospital, Viborg, Denmark, and 2Chairman of the Screening Committee, Council of the Region of Mid Jutland, Viborg, Denmark, and Associated Member of the National Danish Ethical Committee

Recent years have seen an increase in screening for asymptomatic peripheral arterial disease (PAD) among patients hospitalised for stroke and cardiac disease. Such screening is being performed without information or patient consent, with minimal consequences in case of a positive finding, and without evidence of its cost effectiveness.1 A similar is apparently being reported in this edition of the EJVES, where Ålund et al. report findings of screening-diagnosed abdominal aortic aneurysms (AAA) among patients referred to vascular examination due to PAD. Among 9,296 referred patients, 5,924 were screened which makes the study the second largest selective screening study for AAA ever reported. A total of 179 subjects were found to have an AAA. In men aged 60 years or more, the AAA prevalence was 4.0% in the absence and 7.3% (5.7–8.9%) in the presence of an arterial stenosis. Women aged 65 or more with a diagnosed stenosis had a PAD prevalence of 3%. In all, 64% were screened, but the screening proportion rose to 82% at the end of the period. Such selective screening would therefore, indeed, seem to be feasible, and the most important question is therefore whether it is acceptable. The authors write that screening for AAA was introduced as a clinical routine at the vascular laboratory and that they included the infrarenal aortic diameter on all Duplex protocols. No exclusion criterion was used and the patients were not explicitly informed about this routine. The attending vascular surgeon, who informed the patient of the result, handled the information. This practice has some debatable aspects.

Firstly, the participants seem not to have been informed routinely, or even to have accepted the screening offer before commencement of the screening. Individual acceptance of a screening offer should be obtained after a proper information procedure that includes the mentioning of the potential consequences of (non-)acceptance, allows time for reflection, and underscores the patient’s independence and sovereignty. Secondly, if the participants had, indeed, been informed, the screening procedure ought to have been organised under more independent conditions and after the vascular consultation. Performing the screening before the consultation introduces the risk that patients dare not turn down the offer for fear of the potential consequences of declining the invitation. Thirdly, a number of conditions must be fulfilled before screening for an asymptomatic condition can be advocated.

These conditions were initially formulated by the WHO and were later expanded by the Council of Europe.2,3 For instance, an acceptable treatment must be available. However, no exclusion criteria were formulated, so patients with high co-morbidity were included, which leaves a risk of diagnosing a high proportion of patients with AAAs who cannot be offered surgery, and who, if treated, would have an unacceptably high mortality and morbidity. In addition, the participants who are saved will have a shorter survival than the background population and they will be facing an increased morbidity due to other...
cardiovascular events. Furthermore, the group with the highest prevalence would already be covered by the recommended population screening of men aged 65, and the AAAs found among the younger men may not constitute a problem before they reach the age of 65, and they would then be diagnosed by a mass screening programme. Taken together, these reservations sum up to the conclusion that such screening programmes may be cost-ineffective. We therefore strongly agree with the authors that studies evaluating the benefit and costs of such selective high-risk screening are, indeed, warranted.

References


Accepted 31 January 2008
Available online 19 March 2008