

INVITED COMMENTARY

Commentary on “Multi-Centre Study on Cardiovascular Risk Management in Patients Undergoing AAA Surveillance”

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The issue of cardiovascular risk factor modification among patients with small AAAs is important and currently debated. Thus, the paper by Saratzis and co-workers¹ is timely and the observed low compliance with cardiovascular risk reduction in patients under surveillance for small AAA in the UK is an important finding which highlights the shortcomings of the current handling of patient with small AAAs. To some extent this may, however, be explained by the fact that it was unclear if the GP was aware of the AAA diagnosis and the lack of an existing policy of treatment with best medical treatment of AAA patients in this setting.¹

The reported high risk of cardiovascular events among AAA patients strongly supports the need for cardiovascular risk management strategies. In a systematic review by Bath and co-workers, patients with small AAAs had a three times elevated annual risk of cardiovascular death.² Furthermore, a recent study on more than 12,000 UK patients with AAA showed that 5 year survival rates were significantly improved for those taking statins (68% vs. 42%), antiplatelet therapy (64% vs. 40%), or anti-hypertensive agents (62% vs. 39%), compared with AAA patients not prescribed these medications.³

Most AAA patients are indeed burdened with atherosclerotic disease manifestations, and should receive treatment according to current guidelines on cardiovascular disease prevention, that is to treat high blood pressure or hyperlipidaemia, and for symptomatic atherosclerosis statins and antiplatelet are recommended as secondary prevention.⁴ In the absence of symptoms, however, atherosclerosis guidelines do not recommend statins or antiplatelet therapy.⁴

So, the question is whether AAA should be regarded as a manifestation of (symptomatic) peripheral vascular disease, which usually refers to atherosclerotic disease manifestations, or as a separate disease entity? Although AAA and atherosclerotic disease share common predisposing risk factors, such as smoking, male gender, and high age, there are important epidemiological and histopathological differences and most researchers today consider AAA to be a separate disease.

Most epidemiological studies on the association between AAA and cardiovascular disease prevention are based on a mixture of patients with different cardiovascular disease manifestations, one of which is AAA, and usually originate from the pre-screening era.^{2,3} Accidentally detected AAAs in older and more diseased patients constitute a different cohort compared with today's screening detected AAAs in younger and healthier subjects. This also applies to the current study by Saratzis et al. in which the mean age was 74 years.¹

The situation may be different in a screening population of 65 year old men, where it is not uncommon that some AAA patients are without manifestations of atherosclerosis.⁵ Treatment with antiplatelets and statins come at a cost and they do have risks of serious side effects. On the other hand, one can argue that the benefit of

secondary preventive treatment would be much greater in a young population with more life years to be saved, so there is definitely an opportunity here as well.

There are no data from RCTs or prospective cohort studies evaluating the specific effect and cost effectiveness of cardiovascular risk management in AAA patients. Thus, there is a lack of high quality specific evidence that such strategies are effective for the patient with AAA. Nevertheless, most would agree that there is enough indirect evidence to strongly support a cardiovascular risk management strategy similar to that suggested by Saratzis et al.

At a minimum, strategies targeted at a healthy lifestyle (including smoking cessation), blood pressure, and lipid control should be recommended in all patients with AAA, and in case of atherosclerotic manifestations secondary preventive treatment should be given according to current guidelines.

The implementation of AAA screening targeting 65 year old men^{6,7} raises the question of whether AAA per se is an indication for cardiovascular secondary preventive medical therapy and emphasizes the need for more AAA specific data. At the same time population based screening programs represent the perfect base for prospective studies addressing this issue.

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