Cardiovascular risk profile and management of risk factors in patients with small abdominal aortic aneurysm

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Introduction: Patients with an abdominal aortic aneurysm (AAA) are at significant risk of cardiovascular (CV) events and CV-mortality, regardless of aortic-size. We aimed to assess the CV-risk profile of patients with a small AAA, following introduction of the NHS AAA Screening Programme (NAAASP), and assess whether adequate CV-protection is offered to this population after AAA-detection.

Methods: Cardiovascular profiles of 384 males (mean age: 72 years; mean AAA diameter 3.8cm) with a small-AAA participating in the “UK Aneurysm Growth Study” (UKAGS) were assessed. A separate regional audit was performed, including 142 patients (92% males, mean age: 72 years) with a small AAA who were referred to a vascular-clinic and had all CV risk-factors assessed at baseline and after 1-year of surveillance.

Results: A significant number of individuals were ex or current smokers (84.1% for UKAGS and 94.4% for the audit population) and over 90% had at least one major CV-risk factor at baseline, in both groups. However, at baseline only 44% and 6.2% of participants were on aspirin and clopidogrel respectively, whilst 61% were on a statin. Compared to baseline, there
was no increase in the proportion of patients receiving cardioprotective-medication after one or more surveillance appointments. In the 2nd group there was an increase in cholesterol and blood-pressure values a year after AAA-detection. Framingham and BNF CV-risk-scores were not different a year after these patients had been found to have an AAA.

**Conclusions:** Patients with a small AAA are at significant risk of CV-events and the current strategies for CV-protection are inadequate.