

INVITED COMMENTARY

Small Aneurysm Surveillance Over 80: Is it Worthwhile?

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Vega de Ceniga *et al.*¹ conducted a retrospective cohort study of 310 patients with small abdominal aortic aneurysms (AAAs) aged over 80 years. The authors concluded that the risk of late rupture in octogenarian and nonagenarian patients is small and conservative management without follow up and repair seems reasonable for most of these patients. This was a large population that was contemporaneously followed up (follow up index 0.997).

This study raises some interesting questions in an area where the evidence base is limited. Of those who had AAA diameters of 55 mm, reaching the threshold for intervention, > 90% were managed conservatively owing to significant comorbidity precluding endovascular or open repair, and the vast majority succumbed to causes of death unrelated to their AAA. This finding alone questions the role surveillance in this age group. As life expectancy increases, how do we adjust services to be cost effective but not limit therapeutic intervention on the basis of age alone? Contemporary evidence suggests that not offering AAA surveillance to those aged > 85 years with an AAA diameter < 40 mm is a justified approach.² Certainly, based on the findings in this study, an earlier determination of fitness for surgery should be made to prevent unnecessary surveillance of patients who are unlikely ever to be candidates for intervention. Ideally, such a decision should be made after multidisciplinary team review and discussion with patient and family. Age alone should not be a single determinant for offering or declining intervention, but it should prompt a dialogue about what is in the patient's best interests.

AAA guidelines published by the European Society of Vascular Surgery recommend that AAA intervention should not be offered to those with life expectancy < 2 years.³ This study supports this by demonstrating life expectancy, irrespective of comorbidity, at two and five years was 71% and 38%, respectively. One of the strengths of this study was that it included all patients, including those managed conservatively, which may explain the worse survival figures observed compared with data for selected octogenarians un-

dergoing AAA intervention from the Swedish Vascular Registry.⁴

We know that rupture rates for small AAAs, certainly those < 40 mm, are 'very low' indeed, late rupture in this cohort is extremely rare.⁵ There is certainly an increasingly strong argument against surveillance of small AAAs in the very elderly, and in an era of providing more cost effective care it seems sensible to take this approach. A small minority (5.5%) in this study suffered AAA rupture with a median diameter of 68 mm (interquartile range 50 – 79 mm). Survival in the few that had intervention was poor ($n = 1/4$; 25%). However, an inherent issue with retrospective studies is that cause of death cannot be defined confidently for all patients who die in the community. We cannot be certain that those with significant comorbidity, such as advanced dementia, did not suffer an AAA rupture related death. In ideal circumstances, all study participants would undergo autopsy.

In conclusion, appropriate patient selection for AAA surveillance and intervention remains paramount. This important study suggests that we should reconsider our approach to surveillance in octogenarians and nonagenarians and identify those that should not be offered intervention early and cease surveillance.

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