AB041. In-hospital outcomes of asymptomatic descending thoracic aortic aneurysm intervention

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Background: Elective repair of asymptomatic thoracic aortic aneurysms (TAA) may reduce the morbidity and mortality associated with symptomatic/ruptured TAA. The European Society of Vascular Surgeons (ESVS) recommends consideration of endovascular intervention in sporadic descending TAA >60 mm. We aimed to assess the utilization of thoracic stenting (TEVAR) in this cohort across both Australia and New Zealand over the past decade.

Methods: Retrospective data was obtained from the Australian Vascular Audit (AVA) online database. All patients who underwent elective surgical intervention for thoracic aortic aneurysm between 01/01/2010 and 31/12/2017 were included. Demographics, aneurysm diameter, surgical intervention, and complications were recorded. Endpoints were: In-hospital mortality and end organ complications.

Results: In total, 515 patients underwent elective surgical intervention (TEVAR +/- combined procedure) for asymptomatic thoracic aortic aneurysm. The majority of patients were male (66%) with a median age of 71 years (SD 11). Mean diameter at time of intervention was 59.4 mm (22.4 SD) with 75% of cases having a diameter greater than or equal to 60mm. It was significantly larger (P<0.05) in octogenarians. Overall in-hospital mortality was 8.35% (n=43) with octogenarians having a higher risk (10.8%). End organ complications included paraplegia (3.5%), stroke (2.14%), and acute myocardial ischemia (1.75%). Average length of stay was 14.5 days (SD 14.1).

Conclusions: The utilization of TEVAR in asymptomatic thoracic aortic aneurysm management is a viable option to reduce the morbidity and mortality associated with symptomatic TAA. Further investigation is required as regards to long term outcomes.

Keywords: Octogenarians; thoracic aortic aneurysm (TAA); thoracic endovascular aneurysm repair (TEVAR)

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