Non Emergent Surgical Repair of Ascending Aortic Aneurysms

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OBJECTIVE: To summarize our experience with elective surgical treatment for ascending aortic aneurysms.

METHODS: From January 2004, 350 patients underwent replacement of the ascending aorta with or w/o the aortic root. 63 emergent acute dissection where excluded from the study. There were 214 male patients (74%) with a mean age of 60 years (range16-87). Indications for surgery were; ascending aortic diameter of 5.5 cm (183 pts), 4.5 cm in marfan pts (26 pts) and 5 cm in pts with bicuspid aortic valve (AV) (78 pts). Mean Logistic Euroscore was 9.3% (range1.4%-88%). Operative techniques included: Isolated ascending aorta replacement in 144 pts, either with AV replacement in 49 pts or with AV repair in 21 pts or without any AV involvement in 74 pts. Composite AVR was performed in 97 pts, Root sparing in 39 pts and included 22 pts who underwent David I procedure and 17 pts who underwent David II; 7 pts underwent other root sparing techniques. In 65 pts the aortic arch was also enlarged and need replacement. Total Circulatory arrest was needed in 80 pts.

RESULTS: Thirty day operative mortality was 2.7%. Mean ICU stay was 41 hours, with a mean ventilation time of 12 hours. The major post operative complications were: reexploration for bleeding in 10 pts (3.4%), failure from weaning from mechanical ventilation 4 pts (1.4%), LCO 5 pts (1.7%), major neurological events in 3 pts (1%). Mean hospital stay was of 9 days (range 5-39).

CONCLUSION: Our experience, supported by data from the literature, shows that elective surgical repair for Ascending Aortic Aneurysms is safe and should be considered in any patient who is a candidate for aortic surgery according to the ACC guidelines.

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