

P10. Aortic Root Replacement With Aortic Homografts: 12-year Single Center Experience

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OBJECTIVES: Aortic root replacement (ARR) with aortic homografts (AH) has been used for decades, mostly to treat infective endocarditis; however its durability has been questioned. The aim of our study was to assess in-hospital and long-term results of ARR using allografts.

METHODS: from January 1997 and January 2009, 113 consecutive patients underwent ARR using free-standing root technique with an AH. Clinical and echocardiographic follow-up was performed. Valve associated events (Death, reoperation, thromboembolic complications, endocarditis and aortic valve dysfunction) were analyzed with Kaplan Meier curves. Log-rank test and the Cox model were used for variable analysis.

RESULTS: Mean age was 52 years (18-80), 90 were male (80%), 23 (64%) were in NYHA class III-IV, ejection fraction was normal (52%), and none had coronary artery disease or other valve disease. 36 (32%) had a previous sternotomy. Indication for surgery was endocarditis 48 (42%, 36 native and 12 prosthetic); aortic regurgitation 35 (31%) and aortic stenosis 30 (26%). Surgery was elective in 58 (51%) and urgent in the remaining. Two thirds received an isolated AH, and 41 required an additional ascending aorta procedure. In-hospital mortality was 9.7% (11 pts). During follow-up 7 pts died and 5 required reoperation. Five and eight year survival was 85% (IC 76–90) and 82% (IC 71-89), respectively; and freedom from reoperation or death 83% (IC 74-89) and 76% (IC 62-85), respectively.

CONCLUSIONS: ARR with an AH is a surgical procedure with a low event rate. It should be considered as a surgical alternative in selected patients.