

P32. Prospectively Randomized Comparison Of Three Supraannular Stented Aortic Xenografts

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OBJECTIVES: The aim of this study was to compare the hemodynamic function of supraannular stented xenografts using a stratified intraoperative randomization protocol.

METHODS: 83 patients were prospectively included after intraoperative metric sizing of the decalcified aortic annulus. They received Epic supra (E), Perimount magna (P) or Soprano (S) aortic valve replacement. Patient age was 73 ± 4 (E), 75 ± 3 (P) and 72 ± 4 (S) years, 13 (E), 13 (P) and 11 (S) were female. The predominant aortic valve lesion was stenosis in all groups. Preoperative NYHA-functional class, left ventricular ejection fraction, cardiac index and surgical risk according to the Euroscore were comparable between groups ($p=n.s.$).

RESULTS: Surgery was uncomplicated in all patients. Metric diameter of the aortic annulus was 24.4 ± 1.9 (E), 24.1 ± 1.5 (P) and 24.3 ± 1.8 (S) mm. A nominal valve size of 23.4 ± 2.1 (E), 23.2 ± 2 (P), and 22.7 ± 1.6 (S) was implanted. Aortic cross clamp duration was 67 ± 19 (E), 58 ± 9 (P) and 62 ± 11 (S) min. Follow-up was complete in 100%. Mean follow-up was 37.7 ± 14.2 month. Survival rate after 30 days was 96.7 ± 3.3 (E), 100 (P), $95.8 \pm 4.1\%$ (S) and after 56 month was 89.6 ± 5.7 (E), 92.4 ± 5.2 (P) and $54.3 \pm 23.3\%$ (S). Transvalvular maximum pressure gradients were 28.8 ± 9.5 (E), 22.9 ± 10.5 (P) and 22.9 ± 5.7 (S) (p

CONCLUSIONS: All three supraannular stented xenografts offer a safe and standardized implantation with sufficient hemodynamic function. Long term follow-up is necessary to elude on potential differences in outcomes.