

**P3. Prosthesis Of Choice For Re-replacement Of Bioprostheses After Structural Valve Deterioration With Concomitant Re-coronary Artery Bypass Graft**

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**OBJECTIVES:** The objectives of the study are to evaluate patients with bioprosthesis (BP) who received repeat aortic valve replacement (Re-AVR) after structural valve deterioration (SVD) and to define the prosthesis selection criteria and to establish the current re-operative risks and the long-term patient survival.

**METHODS:** Between May 1986 and December 2007 330 patients underwent reoperations for failed bioprostheses. Of these, 178 patients (93 males and 85 females) aged 14-89, median 67 years, received re- AVR after SVD. Ninety-six patients received the primary AVR at our institution and 82 externally since 1975. Median follow-up after primary AVR was 13.7 (range:1.8-32.2) years at 2587 patient-years and after re-replacement it was 3.87 (range: 0 – 20.99) years at 1059.2 patient-years. Re-replacement of bioprostheses with concomitant CABG (1st CABG/re-CABG or hybrid procedure: PTCA-stent) was performed in 41 patients.

**RESULTS:** Hospital mortality by year periods was: 1986-2007, primary AVR: 10.9% (549/5027), re-AVR: 8.4% (10/118), re-AVR + CABG: 12.2% (5/41); 2002-2007, primary elective AVR: 5.9%, (119/2020), re-AVR: 1.3%, (2/151), re-AVR+CABG: 5.8% (1/17). Overall 30-day survival was 88% (p=0.580), at 10 years for Re-AVR with and without CABG it was 55.1% and 49.6%, respectively (p= 0.391). 53.4% of the patients received bioprostheses, 0.5% allografts and 46.1% mechanical valves. Distribution of the age groups and type of prosthesis are shown in the table.

**CONCLUSIONS:** Current reoperative mortality in bioprosthesis patients with SVD is as low as that of primary AVR. The results support the recommendations for the use of bioprostheses in selected patients <65 years and proper timing for elective re-replacement.

**Type of re-AVR**

Age groups (years)	Patients n	Bioprosthesis n (%)	Allograft n (%)	Mechanical n (%)
<60	52	11 (21.2%)	1 (1.9%)	40 (76.9%)
60-69	53	24 (45.3%)	0%	29 (54.7%)
>70	73	60 (82.2%)	0%	13 (17.8%)
Total	178 (100%)	95 (53.4%)	1 (0.5%)	82 (46.1%)

**Patient survival after Re-AVR**

