

### **C12. The Original Subcoronary Technique: Single Centre Results Of The Ross Operation In 501 Patients**

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**OBJECTIVES:** The Ross operation results in excellent postoperative clinical outcome. Concern exists about the choice of implantation technique (full root/subcoronary) with respect to neo-aortic root development and occurrence of major adverse cardiac events (MACE). We report about our single-centre experience with the original subcoronary implantation technique (SC) in the Ross operation.

**METHODS:** 501 patients (mean age 44.9±12.9y) with a mean follow-up of 5.0±3.6y, range 0.01-13.1y were treated with the Ross operation performing SC. All postoperative events were defined according to the 2008 guidelines for reporting mortality and morbidity after cardiac valve interventions. Patients' long-term survival characteristics were compared with the survival probabilities of the general German population.

**RESULTS:** Follow-up completeness was 98.2% (total follow-up 2527y). All cause mortality was 3.39%, 0.67%/pt-y with 6 cardiac deaths. Cumulative overall survival was 99.4 % at 1y, 97.2 % at 5y and 93.8 % at 10y. There was no difference in expected numbers of deaths compared to the general German population. Ross operation-related valvular reoperations occurred in 21 pts (4.4%, 0.84%/pt-y) with a time interval of 4.93±4.10y (reoperations on the allograft n=8 (1.6%, LOR:0.32%/pt-y), on the autograft n=10 (2.0%, LOR:0.4%/pt-y), on both the auto- and allograft n=3 (0.6%, LOR:0.12%/pt-y). Freedom from autograft reoperation was 98.5% at 5y and 94.1% at 10y and 98.2% at 5y and 96.3% at 10y for the allograft.

**CONCLUSIONS:** The Ross operation with SC shows excellent clinical mid-term results with a notable low rate of MACE. This procedure can restore patients' life expectancy close to that of a matched general German population.