

C55. Transapical Aortic Valve Implantation At Two Years

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OBJECTIVES: The aim of this study was to evaluate the outcome of minimally invasive transapical aortic valve implantation (TA-AVI) at two years.

METHODS: A total of 210 high risk patients with symptomatic aortic stenosis received TA-AVI from 02/2006 until 02/2009 using the Edwards SAPIEN™ transcatheter xenograft. Patient age was 82 ± 6 years, 70% were female. Logistic EuroSCORE was $32 \pm 16\%$ and STS score was $12 \pm 8\%$. The subgroup of recent 90 patients treated during the “post-market approval” period had the same age and similar risk profile (logistic EuroScore $35 \pm 18\%$ and STS score $10 \pm 5\%$).

RESULTS: TA-AVI was performed completely off-pump in 90%. Two patients treated under resuscitation died and were excluded from further analysis. Five patients required perioperative conversion to full sternotomy. Overall survival was $91 \pm 2\%$ at 30 days (196 patients at risk) and $78 \pm 3\%$ at one year (75 patients at risk). One patient suffered secondary stroke with good functional recovery. Subgroup analysis on the recent 90 patients revealed one stroke, four deaths (4.4%) and two conversions to sternotomy. All but one were treated off-pump. Survival at 30 days is $95.5 \pm 2\%$ (74 patients at risk).

CONCLUSIONS: TA-AVI can be performed with excellent results. Optimal imaging and a team approach are essential for success. Recent results indicate further improvements in outcomes while the procedure is continuously applied in high risk elderly individuals with symptomatic aortic stenosis.