

C51. Survival After Transcatheter Aortic Valve Implantation Is Not Related To The Implantation Technique

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OBJECTIVES: Recently, suspicion rose that survival may be impaired after antegrade transapical valve implantation in high-risk patients with aortic stenosis compared to the retrograde transfemoral access. We analyzed survival in patients undergoing transcatheter aortic valve implantation with regard to implantation technique.

METHODS: Between 06/2007 and 02/2009, 199 high-risk patients (EuroScore $22\pm 14\%$, mean age $81\pm 6y$) underwent transcatheter aortic valve implantation transapically (n=47) or transfemorally (n=152). The transapical implantation technique was chosen only in patients who had no access through diseased femoral arteries.

RESULTS: The transapical group had a significantly higher preoperative BNP value, and a significantly higher incidence of peripheral vessel and cerebrovascular disease. 30-day survival was 89.3% after transfemoral vs 90.9% after transapical implantation (p=0.937, see survival curve). Death was valve-related in 14% (transapical) and 31% (transfemoral), cardiac in 14% and 8%, and non-cardiac in 72% and 61%, respectively (n.s.). Access site specific perioperative complications occurred in 16% of the transfemorally treated patients (vessel rupture) and in 11% after transapical valve implantation (reexploration for bleeding). In the transapical group, there were no neurological events (0% vs 5%, n.s.).

CONCLUSIONS: Despite a higher rate of comorbidities, survival does not differ after transapical vs transfemoral transcatheter aortic valve implantation. There are access site specific complications for both techniques. In concordance to the findings of other groups, we did not see cerebrovascular complications with the transapical access.

survival curve

