

Transcatheter Aortic Valve Implantation: A Single Center First 300 Cases Experience

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Background:

Transcatheter aortic valve implantation (TAVI) has recently become an alternative to surgical aortic valve replacement in selected patients with high operative risk.

Aim:

To investigate the 30 days clinical outcome of the first 300 consecutive patients treated with trans-femoral TAVI in the Tel Aviv Medical Center.

Methods and Results:

The mean age was 83 ± 5.3 years (range 63 to 98 years) and the mean valve area of 0.69 ± 0.18 cm² (range 0.3 to 0.9 cm²). Core-Valve was used in 250 patients and Edwards Sapien valve in 50 patients. All patients underwent successful valve implantation, and all had fulfilled 30 days follow-up. The average EuroSCORE for the cohort was 26 ± 13 (range: 1.5 to 67). Total mortality at 30 days was 2.3% (7 patients). Sixty seven patients (22%) underwent permanent pacemaker implantation after the TAVI procedure, most of them due to new onset of left bundle brunch block and prolong PR interval or due to high degree atrio-ventricular block. The rate of stroke was 1.7% (5 patients). Forty one patients (13.7%) had vascular complications, of them 9 patients (3%) were defined as major vascular complications (by the VARC definition).

Discussion:

The 30 days clinical outcome of our first 300 consecutive trans-femoral TAVI patients is favorable. We report a 2.3% mortality rate with low rates of stroke (1.7%) and major vascular complications (3%).