

15 Years Results Of Transapical Trans Catheter Aortic Valve Replacement As An Alternative Approach In High Risk Patients

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Background

We here intend to report our 15 years results of transapical tavr as a first line alternative approach in high risk patients deemed unsuitable for transfemoral pproach

Matherials and Methods

From 2008 and 2023 we submitted 222 high sugical risk patients (STS score 5.7 ± 1.1 Euroscore II 9.6 ± 2.3) to Transapical Transcatheter Aortic Valve Replacement (TAVR). At our Institution Transapical TAVR is the the first line alternative aproach to the transfemoral one. Patients were all deemed unsuitable for Transfemoral TAVR due to severe peripheral arterial occlusive disease by local Heart Team. All patients recieved a balloon expandable biological valve. All procedures were performed in cardiac surgery operating theater with a portable c-arm image intensyfier. Mean Age was 80 ± 3.5 years; 101 patients (45 %) were femeales; 68 (30 %) had a porcelain Aorta and 66 (33%) had been previously submitted to cardiac surgery

Results

Postoperative mortality was 2% (5 patients); 2 patients suffered a perioperative stroke (0.9%). Intraprocedural complications occurrede in 4 patients (1.8%): 1 valve embolization in left ventricle that required surgical conversion, coronary artery occlusion in 1 case (0.45%), and in 2 cases left ventricular apex complications (0.9%). Median follow-up was 96 months and at 60 and 120 moths, the extimated rate of survival was 66% and 55% respectively

Preoperative patients Charateristics

Total number	222	
Age	80	$\pm 3,5$
Female	101	45%
Diabetes	65	29%
Hypertension	201	90%
COPD	65	29%
Pre op Creatinin	1.28	± 0.7
NYHA Class		
	II 51	23 %
	III 137	62 %
	IV 34	15 %
Euroscore II	9.6	± 2.3
STS score Mortality	5.7	± 1.1
EF	55 %	IQR 40-60
Porcelain Aorta	68	30 %
Coronaropaty History	119	53 %
Previous Cardia Surgery	66	33 %
Valve-in-Valve	7	3 %

Hospital Outcome

Mortality	5	2%
Ictus/stroke	2	0.9%
PM Implants	10	4.5 %
Intensive Care Stay (hours)	24	IQR 12-36
Mean Gradient at discharge (mmHg)	10	± 4.8

Conclusion

Transapical transcatheter aortic valve replacement as an alternative approach to transfemoral one in high surgical risk elederly patients with severe peripheral artery occlusive disease, seems still safe and effective with accetable survival even in a lomg term period

Survival

