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MEETING ABSTRACT Open Access

Sutureless Aortic Valves in combined procedures: a useful tool in the armamentarium of cardiac surgeons

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Background/Introduction

Following the encouraging preliminary results, sutureless aortic valve implantation is performed in a growing number of patients as it makes minimally invasive surgery easier.

Aims/Objectives

On the other hand, less data are available on the performance of sutureless aortic valves in combined or complex procedures.

Method

Between May 2010 and May 2015, 319 patients (age 77.4 ± 5 years, female 169 (53%) underwent aortic valve replacement with a sutureless bioprosthesis in our institution. Of them, 25 were operated upon as REDO (10 with a degenerated aortic bioprosthesis and/or 15 with previous CABG) or as combined procedures (114 Patients, Table 1). In-hospital and follow up clinical and echocardiographic data were collected for all patients and here reported for the combined procedures.

Results

Mean logistic EuroScore was 14.7 ± 12%. The patients received a size S (n = 4), M (n = 40), L (n = 53) or XL (n = 17) prosthesis. Mean aortic cross-clamp time and cardiopulmonary bypass time were 55.3 ± 21 and 88.8 ± 29 minutes, respectively. In-hospital mortality was 6.1%. We recorded 15 pacemaker implantations (13.1%). At follow-up (27 ± 24 months), we observed 2 pts. with endocarditis needing reoperation, 1 of these died postoperatively. Mean transprosthetic gradients were 13.4 ± 5, 13.8 ± 4.5, 13.7 ± 6.4 at 6 months, 1 year, and 2 years, respectively.

Discussion/Conclusion

The sutureless aortic valve represents a useful tool in the armamentarium of cardiac surgeons for combined and complex surgery. As with growing experience, the indications and the limitations may become the same as for a conventional biological prosthesis but its use can make the operations faster, especially in complex and long procedures.

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