

Aortic adult congenital heart disease: younger but worse patients?

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Introduction

Aortic root pathology is the second more frequent heart disorder in adults with congenital heart disease. Aortic valve abnormalities occur with a wide spectrum of severity and thus require different surgical techniques. These patients have ongoing morbidity and reduced long-term survival compared to patients with acquired aortic valve disease although they are normally younger patients. However most of them have had one or more surgical or percutaneous procedures which make them a group with higher comorbidities and mortality. The aim of this study was to evaluate the outcome after aortic surgery in adults with congenital heart disease.

Methods

We analyze a total of fifty-four patients at our institution that underwent surgery for congenital aortic disease during a period of 8 years (2008-2016). All past medical history, physical examination, previous surgeries, clinical data, as well as cardiac assessment was obtained. Immediate postoperative management, complications, morbidity and mortality was researched. Patients were followed up after discharged from our institution.

Results

Age ranged from 19 to 70 years with a mean age of 38. There were 22 women and 32 men. 37 of the 54 patients (68%) have had one or more previous cardiac surgeries. The mean Euroscore was 10,25%. Regarding risk factors, there were 3 patients with Down syndrome, 2 with Turner syndrome, 1 CATCH-22 syndrome and 3 endocarditis. The overall 30-day mortality was 5,5 % (n=3). Data from surgical techniques includes 2 Konno surgeries, 2 biological aortic prostheses, 25 mechanical prostheses, 3 valve plasty, 3 posterior annular enlargement, 8 Bentall-Bono surgeries, 3 David-Stanford and 8 supracoronary aortic replacement and mechanical prostheses. 33% of the patients had some type of complications. Leading causes of these were reintervention because of bleeding (4), atrial fibrillation (4), pneumonia (3) and 3 patients required a pacemaker due to complete heart block.

Conclusions

Adult patients with congenital heart disease continue to be affected by an increased morbidity and mortality when compared to general population with acquired heart disease. However, the data suggests that thus this greater risk, we can perform surgery in these patients with adequate outcomes, acceptable mortality and survival benefits.