

ORAL PRESENTATION

Open Access

Heart transplantation for adults with congenital heart disease: a single-center experience of 29 years

O Szárszoi^{1*}, J Pirk¹, J Maly¹, M Urban¹, M Smetana¹, H Riha², T Kotulak², L Hoskova³, I Netuka¹

From 23rd World Congress of the World Society of Cardio-Thoracic Surgeons Split, Croatia. 12-15 September 2013

Introduction

Advances in palliation of congenital heart disease have resulted in improved survival to adulthood. Many of these patients develop end-stage heart failure requiring heart transplantation. In this study we analyzed the clinical profile and outcome of congenital heart disease patients transplanted at our institution.

Methods

Of 905 patients who underwent orthotopic heart transplantation at our institute from January 1984 to May 2013, 25 patients ranging in age from 18 to 54 years (18 male), in the end-stage of the heart failure were diagnosed to have congenital heart disease. We retrospectively reviewed the clinical data, operative and postoperative courses of these patients.

Results

Mean age was 36.2 ± 10.9 years. The main anatomical diagnoses were transposition of the great arteries, single-ventricle defect, tetralogy of Fallot and Ebstein anomaly. Early, 1-, 5 and 10-year survival was 88%, 88%, 73%, 60%, respectively. Operative mortality for the study group was 8 %. There were 2 early deaths, both of which were related to early severe primary graft failure. Four patients from last three years were successfully bridged to heart transplantation with mechanical circulatory support.

Conclusion

Adult patients with congenital heart disease represent an increasing proportion of heart transplant recipients.

Despite high risk surgery because of their complex anatomy, prior surgical palliation, and hemodynamic status, with careful donor and recipient selection, these patients can have excellent early and mid-term survival after heart transplantation.

Acknowledgements

Study was supported by Grant IGA MZ NT/11269 - 5.

Authors' details

¹Department of Cardiac Surgery, Institute for Clinical and Experimental Medicine, Prague, Czech Republic. ²Department of Cardiac Anaesthesiology, Institute for Clinical and Experimental Medicine, Prague, Czech Republic. ³Department of Cardiology, Institute for Clinical and Experimental Medicine, Prague, Czech Republic.

Published: 11 September 2013

doi:10.1186/1749-8090-8-S1-O150

Cite this article as: Szárszoi et al.: Heart transplantation for adults with congenital heart disease: a single-center experience of 29 years. Journal of Cardiothoracic Surgery 2013 8(Suppl 1):0150.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at www.biomedcentral.com/submit



Full list of author information is available at the end of the article



^{*} Correspondence: onsz@ikem.cz

¹Department of Cardiac Surgery, Institute for Clinical and Experimental Medicine, Prague, Czech Republic