

ORAL PRESENTATION

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The repaired tetralogy of Fallot become adult: what should we expect

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

Background

To define the evolution of repaired Tetralogy of Fallot (TOF) in adult patients.

Methods

82 patients with repaired tetralogy of Fallot were collected from the database of our pediatric and congenital adult cardiology and cardiac surgery unit. Only patients older than 16 years of age at the time of the study were selected. All patients underwent complete surgical repair during childhood at a mean age of 1.6 ± 1.3 years. Forty-nine patients (71.9%) were treated with transannular patch, 17 (23.2%) infundibular patch, 3 (3.65%) endoventricular repair and 1 (1.2%) with conduit between the right ventricle (RV) and the pulmonary artery (PA); 17/82 (20.7%) of all patients required palliative BT shunt at birth before repair. Mean age at follow up was 23.7 ± 6.7 years. Follow-up schedule comprised clinical evaluation along with echocardiographic and cardiac-MR, quality of life and VO₂ consumption assessment.

Results

After the 16 years of age, 53/82pts (65%) didn't require any surgical procedure, 29/82 (35%) required reinterventions to reconstruct the right ventricle outflow tract. Associated residual VSD repair was performed in 1/29 pts, tricuspid valve repair in 2/29 and aortic valve repair in 1/29. Twenty-one patients (25.6%) required percutaneous procedures on pulmonary arteries, including pulmonary branch angioplasty in 11/21, pulmonary

stent implantation in 8/21, percutaneous valve angioplasty in 2/21. All patients survived. None of patients developed ventricular failure. At cardiopulmonary exercise testing the peak VO₂ was moderately impaired.

Mean follow up time was 7.8 ± 6.6 years.

Conclusion

Survival prospects for adults with repaired TOF in adult age are now excellent. Incidence of reinterventions is predominant on the right ventricle outflow tract, where timing and correct indications are mandatory to avoid heart failure development. Late functional health status is satisfactory and quality of life is nearly comparable with those of healthy patients.

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Published: 11 September 2013

doi:10.1186/1749-8090-8-S1-O132

Cite this article as: Angeli et al.: The repaired tetralogy of Fallot become adult: what should we expect. *Journal of Cardiothoracic Surgery* 2013 **8** (Suppl 1):O132.

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