Outcome after surgical repair of Ebstein’s anomaly in adulthood

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Objective: To review single-institutional early and mid-term results of surgical repair of Ebstein’s anomaly in adults.

Methods: The records (functional and echocardiographic parameters, surgical techniques, adverse events) of consecutive pts undergoing repair of Ebstein’s anomaly from 2005 to 2014 were retrospectively reviewed with a median follow-up of 2.8 yrs.

Results: A total of 42 pts were operated at a median age of 33 (range 18-67) yrs with 6/42 having had a preceding cardiac procedure. Tricuspid valve plasty (TVP) and tricuspid valve replacement (TVR) were performed in 20 and 21 pts, resp. Additionally bidirectional cavo-pulmonary anastomosis was performed in 8 pts, an arrhythmia procedure in 17, mitral valve repair in 2 and coronary artery bypass graft in 1 pat. Four pts were re-operated (reTVR in 3 and TVR after TVP in 1 pat) yielding a reoperation-free survival of 82.6 % at 5 years. There were 2 early and 2 late deaths with a 5-years survival probability of 83.1 %. In pts undergoing TVP the proportion of significant tricuspid regurgitation (>2nd degree) decreased from 20/20 to 6/20 after repair (P<0.001). Functional classification improved significantly with 27/42 pts having had marked or severe limitation (NYHA class > II) before surgery and only 6/42 at last follow-up (P<0.001).

Conclusions: Surgical treatment of Ebstein's anomaly in adulthood can be performed with acceptable early and late mortality and freedom from re-operations. Significant improvement in both tricuspid valve function and functional capacity is achieved in the majority. Associated arrhythmia procedures are frequently needed.

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