ATRIAL SWITCH OPERATION: OUR EXPERIENCE IN THE LAST DECADE

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INTRODUCTION: Surgical results of D-Transposition of the great vessels (TGV) are a good quality marker of a neonatal intensive care unit, because TGV is a prevalent pathology with reproducible surgery, and comparable between Hospitals. We present our surgical results and follow-up during the last 10-years.

METHODS: Retrospective analysis of 96 infants with biventricular heart and TGV operated with arterial switch operation (ASO) during the period 2007-16. We excluded patients with pulmonary stenosis needing other techniques different than ASO. Statistical study was done with SPSS-15.0

RESULTS:
• Mean age: 0.4 ± 0.36 months, mean weight 3 ± 0.6 kg, 68 % males.
• Prenatal diagnosis was made in 63 %, and 11 % were born premature.
• Rashkind was performed in 75 %
• Intravenous Prostaglandin was re+red in 55 % before surgery.
• Preoperative respiratory assistance was needed in 24 %, and neurological anomalies were detected in 11 %.
• Anomalous coronary pattern present in 14 % with high correlation with echocardiography findings (95 %).
• Three patients had previous surgeries: two received pulmonary band, and one a modified Blalock Taussig shunt.

Hospital morbidity was (64 %):
• Arrhythmia, reopera+on, pleural/peritoneal drainage, infection, neurological morbidity, phrenic nerve palsy and low cardiac output were the more frequent complications.
• Median intubation time was 120 hours (IQR 94-168)
• Median NICU stay was 11 days (IQR 9-18), and postoperative stay was 21 days (IQR 15-35).

Mean follow-up is 3.58 ± 2.5 years (Max 9.3 years).
• Percutaneous reintervention was needed in 16 patients (18 %), and reoperation with extracorporeal circulation in 4 patients (4.5 %) during follow-up.
• Nowadays all patients are alive in good clinical condition and 88 % have no cardiac medication.

CONCLUSIONS: Surgery and postoperative management of TGV are a challenge. Preoperative echocardiogram accurately defines the anomalous coronary patterns and helps the surgeon to plan the operation. Our results show acceptable mortality but moderated morbidity.