

**Partial anomalous pulmonary venous connection to superior vena cava surgery in Adults:
Our experience**

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Objectives: Partial anomalous pulmonary venous connection (PAPVC) to superior vena cava (SVC) occurs in 10-15% patients with an atrial septal defect (ASD). PAPVC surgery aims to ensure a good drainage of the pulmonary veins (PPVV) into the left atrium, without residual shunt, neither residual SVC/PPVV stenosis, nor changes in heart rhythm. We present our experience with patients older than 14 years of age.

Material & Methods: Retrospective analysis of 26 patients with PAPVC to SVC operated in our Grown up Congenital Heart (GUCH) Unit during the last decade. Diagnosis made with echocardiography 100% and cardio-resonance 85%. Catheterization performed only in cases of doubtful operability and/or presence of coronary risk factors. Surgery is indicated if QP/QS >1,5 and there are clinical data of hemodynamic overload.

Results: Age: 37 ± 18 years, 65% males. Preoperative studies show ASD (88%), Arrhythmia (19%), \geq moderate tricuspid insufficiency (TI) (11%), double VCS (19%), QP/QS $2,3 \pm 0,7$ and systolic pulmonary pressure (PSP) 39 ± 10 mmHg. Functional NYHA class was I (54%), II (38%), III (8%). PAPVC location was low (atrio-caval junction – 31%), half (below azygos – 50%), and high (same azygos level – 19%). Median sternotomy was performed with cardiopulmonary bypass and moderate hypothermia. We used three surgical techniques: VCS septation with venotomy (65%), Warden (8%), and septation from atriotomy (27%). Tricuspid annuloplasty was associated in 11%. There was no early or late mortality. Two patients (8%) had arrhythmia in the postoperative hospitalization. Mean postoperative intubation time was 9 ± 9 hours and hospital stay $8,3 \pm 3$ days. Mean follow up is 41 ± 35 months. During this period, 1 patient (4%) has developed SVC stenosis that was stented percutaneously. All others had normal drainage of the systemic and pulmonary veins. Currently 88% patients are in NYHA class I and 12% in class II. PSP values are normal and TI has improved (88% \leq trivial, 12% mild)

Conclusions: PAPVC surgery in our GUCH unit has good results (no mortality, minimal morbidity). In the postoperative follow up, the functional class improves, TI diminishes and PSP values reach normal values.