Surgical Treatment for the Partial Anomalous Pulmonary Venous Connection: 23-Year Experience

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INTRODUCTION: Surgical treatment of partial anomalous pulmonary venous connection (PAPVC), although presenting no major problems in the short term outcomes, may lead to serious complications in the medium and long term outcomes. This study aim to evaluate the midterm results of surgical treatment of PAPVC. METHODS: A retrospective single-center study was performed with PAPVC patients operated between December/1988 and January/2011 in our institution. Medical records, surgical reports and results of complementary exams were analyzed. Descriptive statistics used mean ±2 standard errors and the nonparametric Wilcoxon test for paired samples was used to assess post-surgical outcomes. RESULTS: Ninety-one patients, with a mean age at surgery of 13.6±3.0 (min=0, max=54.3) years and a mean weight of 32.7±5.2 (min=3, max=94) kilograms, were operated. The mean follow-up time was 29.2±7.2 (min=0, max=107) months. 75.4% of the patients presented right PAPVC, 12.3% left PAPVC and 12.3% mixed type PAPVC. Twenty (22%) patients had other associated diagnoses, besides an atrial septal defect. The surgical technique was tunneling with pericardial patch in 72.5%, direct connection of the pulmonary veins to the left atrium in 17.5% and the Warden technique in 10% of cases. During follow-up, 7 (7.7%) patients underwent other cardiac surgery for correction of associated cardiac malformations. There were 2 (2.2%) late deaths, none of them related to direct complications of surgical treatment of PAPVC. The post-operative control showed decreased right ventricular overload (p=0.022) and dilation (p=0.048), as well as reduced tricuspid insufficiency (p=0.036). CONCLUSION: The medium-term results of the surgical treatment for PAPVC were satisfactory. It is necessary now, the long-term monitoring of these patients.