Is surgical repair of partial atrioventricular septal defect safe and efficient in adulthood?

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Background.—Partial atrioventricular septal defect (PAVSD) is usually operated in childhood with excellent long-term results. However, some patients may present during adulthood and their management as well as their outcome is still unclear. We sought to analyze the clinical characteristics at presentation and the outcome of patients with PAVSD, non-operated or operated during adulthood.

Methods.—Between January 2000 and March 2013, 31 adult patients with PAVSD presented and were followed in our care network. The mean age at study entry was 34 (±16.6) years.

Results.—Dyspnea was the most frequent symptom at presentation in 19 cases (61%). Left atrioventricular valve regurgitation (LAVVR) and right ventricular overload were higher in patients undergoing surgical repair (P = 0.01). Twenty-two patients (71%) had their surgical repair at a mean age of 39.4 (±15.3) year-old with ostium primum closure and partial or complete suture of the left atrioventricular cleft without postoperative death or major complication. There was one late reoperation for a residual shunt. Nine patients (29%) were not operated. After a mean follow-up of 7.4 (±7.1) years, 26 patients (84%) are in NYHA class I or II whereas five (16%) are in NYHA class III or IV. Operated patients have a lower NYHA class (P < 0.01), a lower grade of LAVVR (P = 0.03) and a lower systolic pulmonary artery pressure (P < 0.01) than unoperated patients at last follow-up. The onset or persistence of supraventricular arrhythmias (SVA) after surgery was associated with an older (>40-year-old) surgical age (P = 0.01).

Conclusion.—Partial atrioventricular septal defect is a frequent congenital heart defect that is usually operated in childhood. The optimal management and outcome of adulthood patients have not been clearly established. In our series, patients who presented during adulthood had more LAVVR and right ventricular overload, however, they showed better outcomes after surgical repair. In contrast, the decision to operate was less frequent in adults and the surgical age was older than in children. Further studies are needed to establish the best approach for adulthood patients with PAVSD.