Surgical management of atrioventricular septal defects with double orifice left atrioventricular valve

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Objectives: To compare the post operative results of patients with atrioventricular septal defect (AVSD) and double orifice of the left atrioventricular valve (LAVV) to a matched control group.

Methods: A retrospective matched cohort method was used to compare group 1 (11 patients with AVSD and LAVV double orifice) to 11 control patients, matched on weight, age and AVSD type. LAVV double orifice could be native or after Alfieri plasty. All have been operated on between 2008 and 2016.

Results: The median length of stay in intensive care unit was significantly higher in the first group (p=0.038). There were two deaths in group 1 and no death in group 2 (p<0.0001). The subgroup analysis of double orifice shows that total cleft closure was not a risk factor for LAVV stenosis. There was more significant regurgitation when the cleft was left open or when it was partially closed. The main indication for reoperation was a significant LAVV regurgitation.

Conclusion: For patients with AVSD, double orifice of LAVV is a risk factor for death and reoperation. The total cleft closure seems to limit regurgitation, without implicating stenosis.