

Rastelli procedure in school age and grown up children.

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**BACKGROUND:** The Rastelli procedure is a surgery used to correct congenital heart defects such as, double outlet right ventricle (DORV), pulmonary atresia with ventricular septal defect (VSD) and truncus arteriosus. The Rastelli procedure involves creating a “baffle” to close the VSD, separating the right & left ventricles. The baffle directs blood flow from the left ventricle to the aorta. During this surgery, a right ventricle to pulmonary artery (RV-PA) conduit is also placed to supply blood flow to the lungs.

We examined the result of this procedure between the year 2000 – 2014 in school age and grown up children operated in Queen Sirikit National Institute of Child Health.

**METHODS:** Medical records of cyanotic congenital heart disease patients in school age and grown up period undergoing the Rastelli procedure were reviewed. Demographics and peri-operative variables were analyzed.

**RESULTS:** The Rastelli cohort comprised 16 patients with 13 cases of pulmonary atresia and ventricular septal defect, 2 cases of tetralogy of Fallot and 1 case of d-TGA, VSD and pulmonary stenosis. Median age at operation was 7.8 years (range, 5 to 12 years). All patients had undergone a previous modified Blalock-Taussig's shunt. One operative death occurred 9 days after the operation. Two patients need re-operation due to cardiac tamponade in one and left pulmonary artery stenosis in another one. No patients required permanent cardiac pacemaker implantation. All survived patients (15 cases) were in New York Heart Association functional class I at the last time follow up.

**CONCLUSIONS:** Early and midterm survival after the Rastelli procedure is satisfactory.