

Postgraduate Course Video Session

Postgraduate Course Video Session (III-PCV)

Complex BVR Video Session - Challenges and technical solutions -

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Sun. Jul 9, 2017 3:10 PM - 5:00 PM ROOM 3 (Exhibition and Event Hall Room 3)

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[III-PCV-04]The Yasui Operation for Patients with Adequate-sized Ventricles and VSD Associated with Aortic Arch and Left Ventricular Outflow Tract Obstructions

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Keywords:Yasui operation, aortic arch obstruction, left ventricular outflow tract obstruction

Background:In patients with severe aortic stenosis/aortic atresia with aortic arch obstruction, biventricular repair is feasible in the presence of VSD and adequate-sized ventricles.**Patients and Method:**From 1985 to 2016, 24 patients had undergone Yasui operation. Yasui Operation is consisted with three parts. (1) Intraventricular rerouting creating a left ventricular outflow to both aortic and pulmonary valves (making double outlet left ventricle). (2) Aortic arch reconstruction by either DKS anastomosis and arch reconstruction, or Norwood type arch reconstruction. (3) Creating a right ventricle to pulmonary artery continuity with valved conduit. Seventeen patients were staged following bilateral pulmonary artery banding (PAB) in 11, arch repair with PAB in 4, and Norwood in 2. **Results:**Median age and body weight at Yasui operation was 23 days and 3.2 kg for primary repair and 6.9 months and 5.3 kg for staged repair. VSD was enlarged in 9 patients. There were 2 operative deaths and 2 late deaths. Overall actuarial survival was 86.8% at 5 years and 77.2% at 10 years. Three patients required reoperation for left ventricular outflow tract (LVOT) obstruction, and freedom from LVOT reoperation was 88.2% at 5 years and 70.6% at 10 years. The latest cardiac echo (6.4±6.2 years after the Yasui operation) showed LV ejection fraction of 68±8 % and LVOT peak velocity of 1.1±0.3 m/s.**Conclusion:** Yasui operation can be performed with excellent results in patients with adequate-sized two ventricles and VSD associated with obstruction of the aortic arch and LVOT.