

Postgraduate Course Video Session

## Postgraduate Course Video Session (III-PCV)

### Complex BVR Video Session - Challenges and technical solutions -

Chair: Tadashi Ikeda (Department of Cardiovascular Surgery, Kyoto University Graduate School of Medicine, Japan)

Chair: Shingo Kasahara (Department of Cardiovascular Surgery, Okayama University, Japan)

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

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### [III-PCV-08] TGA/LVOTO double root translocation

○ Shoujun Li (National Center for Cardiovascular Diseases, Fuwai Hospital, Peking Union Medical College, China)

**Objective:** To present a long-term result of biventricular repair of transposition of great arteries (TGA) with noncommitted ventricular septal defect (VSD) and left ventricular outflow tract obstruction (LVOTO) by double-root translocation (DRT) technique.

**Methods:** Between November 2004 and June 2016, a total of 142 consecutive patients underwent a double-root translocation procedure at a median age of 4.2 years (range from 8 months to 26 years), which included 9 dextrocardia, 27 coronary anomalies and 16 collateral circulation. Three cases had suffered for Glenn shunt and 16 cases had BT shunt. The VSD was repaired with a Dacron patch. The neo-pulmonary artery was reconstructed with a mono-cusp bovine jugular vein patch or a homograft patch. The median follow-up interval was 62 months (range from 12 to 124 months). Biventricular outflow tract function was assessed by echocardiography.

**Results:** There were 8 deaths in hospital and 13 follow-up deaths. Nine patients needed re-intervention (mitral valvuloplasty 4, tricuspid valvuloplasty 1, pulmonary valvuloplasty 2, pulmonary arterioplasty 2). Six cases needed pacemaker installation. The CPB and cross-clamp time was  $280.0 \pm 75.8$  minutes and  $191.0 \pm 46.1$  minutes. The mean time of ICU stay and mechanical ventilation was 15 days and 8.3 days. Fourteen patients required early support by extracorporeal membrane oxygenation. Postoperative echocardiography showed satisfactory hemodynamic effect of the reconstructed biventricular outflow tract and ventricular function. No patient had aortic regurgitation and 16 patients had trivial or mild pulmonary insufficiency in follow-up.

**Conclusions:** The results showed an optimized solution for biventricular repair of TGA with noncommitted VSD and LVOTO by DRT technique.