

海外招請講演

海外招請講演3 (IL-03)

AEPC-YIA 記念講演

座長:安河内 聰 (長野県立こども病院 循環器センター)

2016年7月6日(水) 18:00 ~ 18:40 第D会場 (オーライースト)

I-IL-03

18:00 ~ 18:40

[I-IL-03-3] Twenty-Five-year experience following catheter valvotomy for Pulmonary Atresia with Intact Septum

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Introduction: Catheter perforation of the pulmonary valve (PV) for patients with pulmonary atresia and intact septum (PAIVS) was first pioneered at our institution twenty-five years ago and is now an established procedure. This study investigates the outcome for all patients to identify late complications and predictors of final outcome.

Methods: All patients presenting with PAIVS from 01/05/1990 to 25/12/2015 were identified from the Departmental database. Baseline demographic characteristics and clinical pathway data were collected, with final outcome at last follow-up evaluated on 31/12/2015.

Results: 48 patients were put forward for catheter valvotomy (Figure 1). Median follow-up period was 12.2 years (Range 0.3-25.9 years), and all deaths were within 90 days of birth. One patient had an embolic stroke at age 4.3 years following TCPC completion, with no further significant late complications or arrhythmias identified. Five patients with BV outcome required surgical RV overhaul procedure at mean age 1.6 yr. No patient required an interventional or surgical procedure beyond 10.6 years.

Saturations at one year (Sats1Yr) were a strong predictor of BV versus non-BV outcome with Sats1Yr of 90% predicting BV outcome with sensitivity 75% and specificity 78%.

Conclusions: PV perforation for PAIVS is associated with a good long-term outcome, with few late complications. At up to 25 years' follow-up, the incidence of arrhythmias and ventricular dysfunction secondary to PV regurgitation is low. The initial size and anatomy of the RV is clearly a strong predictor of final outcome, but the independent contribution of Sats1Yr suggests that further factors such as diastolic dysfunction and ventricular fibrosis may play a significant role.