

AP Target Symposium

## AP Target Symposium 4 (III-APT4)

### Optimizing results in staged surgical management of functionally univentricular hearts – Preparation rather than Selection for Fontan

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Chair: Akio Ikai (The Cardiovascular Center, Mt. Fuji Shizuoka Children's Hospital, Japan)

Chair: Swee Chye Quek (Pediatrics, National University of Singapore, Singapore)

Sun. Jul 9, 2017 8:30 AM - 10:15 AM ROOM 3 (Exhibition and Event Hall Room 3)

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8:30 AM - 10:15 AM

#### [III-APT4-02] Arrhythmia management as a preparation for a Fontan

○Heima Sakaguchi (Department of Pediatric Cardiology, National Cerebral and Cardiovascular Center, Osaka, Japan)

In patients with a single ventricular physiology, arrhythmias can be a risk factor for surgical treatment including a bidirectional Glenn (BDG)/total cavopulmonary connection (TCPC) completion. Cases with hypoplastic right or left heart syndrome especially are often complicated with atrial arrhythmias due to a unilateral atrial load continuing from the fetal period. Herein we reviewed 8 cases (12 sessions) who underwent radiofrequency catheter ablation (RFCA) prior to a BDG/TCPC completion in our hospital over the last decade. Two patients were excluded from this study because they did not have an indication for a TCPC completion at that time. Of the 6 patients, underlying congenital heart defects consisted of a pulmonary atresia (PA) with an intact ventricular septum s/p Blalock Taussig (BT) shunt in 2, hypoplastic left heart syndrome (HLHS) s/p Norwood in 2, tricuspid atresia PA s/p BT shunt in 1, and atrio-ventricular discordance and mitral atresia s/p BDG in 1. Among 10 sessions, the median age and body weight at the time of the RFCA were 7 months and 5.3 kg, respectively. The target arrhythmias that were ablated were focal atrial tachycardia (AT) in 4 cases (8 sessions), intra-atrial re-entrant tachycardia in 1, and AVRT in 1. Although 3 out of 6 patients required multiple sessions because of difficulty inducing AT, their arrhythmia substrates were successfully eliminated. After the RFCA, all underwent a BDG/TCPC completion. It is very useful option as a preparation for the Fontan to tenaciously attempt to ablate any atrial arrhythmias prior to the BDG/TCPC.