

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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[III-APT4-06] Single ventricular repair strategy: Controversy and some options and details in right heart bypass operation

○ Hajime Ichikawa (Department of Pediatric Cardiovascular Surgery, National Cerebral and Cardiovascular Center, Japan)

The following 4 subjects are discussed by request.

Antegrade flow

Additional antegrade pulmonary flow (AAPF) after bidirectional Glenn is applied for hepatic factor and pulsatility. In the articles, in which AAPF is recommended, the age of Fontan completion is high. After 2010, the number of articles describing the benefit decreased, possibly because Fontan completion is getting earlier, the role of AAPF may no more exists.

Lateral tunnel (LT) vs. Extracardiac (EC): Systematic review by Dr. Li. shows the data of 3499 patients with either LT or EC, there was almost no difference except the increased incidence of late arrhythmia in lateral tunnel group.

Fenestration In 1990, fenestration was considered to be a savior and employed in many centers as a routine practice. After 2010, many big centers tend to publish their excellent outcome after non-fenestrated Fontan operation. The application of EC tended to avoid fenestration. However, the effect of non-fenestration has influence on a long term outcome including liver dysfunction.

Age at Fontan As we reported more than 20 years ago, better ventricular function could be achieved with a younger age at Fontan completion. This was confirmed in many other centers. However, recent north America's multicenter study shows that the age at Fontan does not predict the long term outcome.

Conclusion: The role of AAPF might be ended in the era of earlier Fontan. EC Fontan is the mainstream after 2010. Fenestration might revive. We need multicenter prospective study to elucidate the optimal age at Fontan.