

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

—

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)

8:30 AM - 10:15 AM

[III-APT4-05] Extending the indication of Damus anastomosis

○ Makoto Ando, Yukihiro Takahashi (Department of Pediatric Cardiovascular Surgery, Sakakibara Heart Institute, Tokyo, Japan)

Keywords: Single ventricle, Fontan, Damus

Background

Damus-Kaye-Stansel procedure (DKS), generally performed in the presence of subaortic stenosis, may be beneficial in case of Fontan candidate with a two well-developed ventricles.

Patients

Patients undergoing either Glenn anastomosis (BDG) or modified Fontan operation (F) (1978-2016, N=567) was the object of study. The staged Fontan operation was primarily performed (N=418). The remaining 95 patients are presently awaiting the Fontan operation after the Glenn anastomosis.

Results

Patients undergoing DKS anastomosis had a better mortality (5.1% vs. 11.2%) and medication free rate (73.9% vs. 64.9%) compared with the others. The best actuarial survival and Fontan achievement rate was seen in the DKS group compared with the Norwood and the other groups. The timing of the DKS (BDG or F) did not affect cardiac catheterization data after the Fontan operation. Especially, in the recent years (2006-) more patients have undergone DKS procedure after the preceding pulmonary banding (57.7%); the primary reason includes the increase in patients having two-well developed ventricles. Our data also indicated that transaction of the pulmonary arterial associated a higher incidence of late ventricular dyssynchrony.

Conclusions

DKS can be performed safely at any stage after the BDG procedure. Even without a concern for subaortic stenosis, DKS may be offer better results for patients with two well-developed ventricles, providing systemic outflow from both ventricles.