



Congenital Cardiology Solutions

TRANSPLANT-FREE SURVIVAL AND HOSPITALIZATIONS LATE AFTER THE FONTAN PALLIATION

Poster Contributions

Poster Sessions, Expo North

Saturday, March 09, 2013, 10:00 a.m.-10:45 a.m.

Session Title: Congenital Cardiology Solutions: Fontan Physiology in the Adult - Liver, Pregnancy and Survival

Abstract Category: 12. Congenital Cardiology Solutions: Adult

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Background: The Fontan operation is standard palliation for single ventricle heart defects. Outcomes beyond 20 yrs after Fontan palliation are not well known. We describe late outcomes in a cohort of adult patients post-Fontan.

Methods: A chart review of all patients post Fontan who survived to adulthood, seen at Emory since 1998 was performed. Diagnosis, surgical history, cardiac hospitalizations (heart failure, arrhythmia, thromboembolic events, or surgical admissions), death and need for transplant were obtained. Outcomes were plotted using Kaplan Meier and tested for difference by Fontan type and ventricular morphology.

Results: 134 patients (57.5% male) were identified (mean age 28.4 yrs [18-55.2]), mean time from Fontan completion 21.4 yrs [5.1-34.8]). Ventricular morphological was right (RV) n=31, left (LV) n=98, or equal ventricles n=5. 55 patients had atriopulmonary Fontan (APC), 24 of which were revised, 77 lateral tunnel, 2 extracardiac. 14 patients died, 10 required transplant. Fig. 1 shows overall survival. LV patients had improved survival compared to RV (p=0.035), with no differences by Fontan type. Freedom from hospitalization was 69%, 38.6%, and 6.4% at 20, 25 and 30 yrs since Fontan, with no difference by Fontan type or ventricular morphology.

Conclusions: In a cohort of Fontan patients with adult survival, hospitalization is common and transplant-free survival decreases with time since Fontan, approaching 50% at 30 yrs following Fontan. Systemic RV confers worse late survival.

