

AP Target Symposium

AP Target Symposium 3 (II-APT3)

Dealing with congenitally corrected transposition of the great arteries - Efforts to minimize late development of systemic ventricular dysfunction

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Sat. Jul 8, 2017 10:15 AM - 11:45 AM ROOM 3 (Exhibition and Event Hall Room 3)

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[II-APT3-06]Role of Fontan operation in cc-TGA

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Patients with congenitally corrected transposition of the great arteries (cc-TGA) can be categorized into discrete three subgroups with respect to the surgical strategies: 1) cc-TGA with ventricular septal defect (VSD) and no pulmonary stenosis (PS) 2) cc-TGA with intact ventricular septum (IVS), and 3) cc-TGA, VSD and PS or pulmonary atresia (PA). The first subset is thought to be the best candidates for double switch operation (DSO), because patients rapidly develop severe congestive heart failure which necessitates urgent surgical interventions (i.e. pulmonary artery banding for staged DSO or early primary DSO). In the second subgroup, pulmonary artery banding for the training of the morphologic left ventricle is commonly indicated when regurgitation of the atrioventricular valve of the systemic right ventricle (i.e. tricuspid regurgitation) develops. As long as the tricuspid valve is competent, however, it is very difficult to determine the exact timing of any surgical intervention. The best surgical option for the third group is still under debate. Anatomical repair (i.e. Intraventricular rerouting from the morphologic LV to the aortic valve in association with atrial switch operation and right ventricle to pulmonary artery extracardiac conduit interposition) has been attempted for this subset, but it has been pointed out that the potential risks of morbidities associated with atrial switch operation, RV-PA conduit stenosis, and left ventricular outflow tract obstruction, particularly in case of restrictive VSD, may outweigh the potential benefits of recruiting the morphological left ventricle to the systemic circulation. Furthermore, superiority of anatomical repair over the Fontan procedure does not seem to be fully substantiated by the clinical reports pertaining to the long-term outcome of anatomical repair for cc-TGA with VSD and PS.