

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)

10:15 AM - 11:45 AM

[II-APT3-05]The Senning operation in anatomical repair of congenitally corrected transposition

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Current controversies in the management of the patient with congenitally corrected transposition of the great arteries (ccTGA) revolve around the best choice of procedure among the choices of physiologic repair, anatomic repair and single ventricle palliation.(1-3) While anatomic correction of ccTGA aims to improve long term outcome by placing the morphologic left ventricle (LV) as the systemic ventricle and avoiding systemic right ventricular failure the long-term outlook is complicated by a high rate of re-intervention, conduction abnormalities combined with systemic left ventricular dysfunction. Options for the atrial level switch component of the anatomic correction include; the Senning operation, the Mustard procedure or the so called hemi-Mustard combined with a bidirectional Glenn shunt.(4) To maximize the benefit of anatomic repair and limit reoperations, an atrial level switch that minimizes sinus node dysfunction, baffle obstruction and supraventricular arrhythmias is essential.(5-7) While, potentially more complicated to perform the Senning procedure uses native tissue and results in a low rate of late baffle obstruction. Technical strategies to avoid sinus node dysfunction can be successfully applied.(8) The Senning, as opposed the hemi-Mustard, maintains the superior caval vein connection to the atrium which may be important for access for pacemaker and arrhythmia management. The steps of the Senning procedure will be demonstrated with a video and the late outcomes reviewed.

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7. Horer J, Karl E, Theodoratou G, Schreiber C, Cleuziou J, Prodan Z, et al. Incidence and results of reoperations following the Senning operation: 27 years of follow-up in 314 patients at a single center. *Eur J Cardiothorac Surg.* 2008;33(6):1061-7; discussion 7-8.
8. Litwin SB, Bhavani SS. The Senning procedure for repair of d-transposition of the great arteries. *J Card Surg.* 1987;2(4):415-28.