**UP-TO-DATE MANAGEMENT OF ATRIAL TACHYARRHYTHMIAS IN ADULT CONGENITAL HEART DISEASE**

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Rhythm disorders are the leading cause of morbidity and mortality in adults with congenital heart disease (ACHD).  An expert consensus statement regarding recognition and management of arrhythmias in ACHD patients was published in 2014; however, new technologies provide additional tools in the consideration of arrhythmia management in ACHD patients. The results of new technologies from a large center of ACHD patients are presented.

Tachyarrhythmias in ACHD patients can be asymptomatic and present only after longstanding tachycardia. Conversely, some lesions are at risk for life threatening tachyarrhythmias and risk assessment strategies are incomplete. Monitoring for arrhythmias remains an important consideration. New generation implantable loop recorders (ILRs) designed for atrial fibrillation detection also have a unique role in ACHD patients. The rate of detection of actionable events in a single center cohort of ACHD patients approached 39%. Specifically, in patients with Fontan palliation, 57% demonstrated an arrhythmia not detected by regular Holter and event monitors.

It is known that cardiac dysfunction in ACHD patients can contribute to arrhythmia burden; however, heart failure management can be complex. Heart failure monitoring has decreased hospitalization with implantable heart failure monitoring systems in symptomatic heart failure patients. However, these monitoring systems have only recently been reported in ACHD patients. Single center experience with implantable heart failure monitoring systems in ACHD patients will be discussed.

Treatment of tachyarrhythmias in ACHD patients can be complex due to anatomical challenges and complexity of arrhythmia substrate. However, results of new technologies in ablation procedures including multi-electrode high density mapping catheters and advanced imaging integration demonstrate decreased procedure time and decreased fluoroscopy time with similar success rate.

Conclusion: Diagnosis and management of arrhythmias in ACHD patients are improved with newer technologies. Collaboration with an ACHD center for consideration of invasive long term monitoring is recommended.