**INTRA-HIS BLOCK RARELY PROGRESS TO PACEMAKER DEPENDENCY: A CASE SERIES**

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*Background*: It is recognized that patients with pre-existing wide QRS complex (bundle branch block) who then develop complete atrioventricular block (AVB) often progress to pacemaker (PM) dependency, and therefore dual chamber PMs are indicated. However, AVB can rarely be due to disease within the common bundle of His (intra-His block, IHB), when the conducted QRS complex remains narrow. The progression of conduction system disease and development of PM dependency in patients with narrow QRS and AVB is not known.

*Methods:* We retrospectively identified patients followed at our center who had documented IHB by split His-bundle signals on electrophysiologic study (EPS), or who had paroxysmal AVB with a narrow QRS on surface ECG. Clinical and PM characteristics at PM implant and at last PM follow up were evaluated.

*Results*: A total of 23 patients were included. Of these, 10 patients had EPS-documented IHB and 13 had PAVB with narrow QRS recorded on ECG. Of these, 19 patients presented with syncope or presyncope; 7 patients had single chamber PM implanted, and 16 patients had dual chamber PM. The mean QRS duration on the presenting ECG was 87±8ms (range=72 to 102 ms). At a median of 1.62 years (IQR 0.08-7.46) following PM implant, the median percentage of right ventricular pacing was 1% (IQR 0-83%). No patients developed PM dependency due to progression of conduction disease. There were 6 patients with >95% right ventricular pacing, but all these patients had narrow complex escape rhythms and were not PM dependent.

*Conclusions*: In contrast to the known development of PM dependency in patients with wide QRS complex, patients with IHB and paroxysmal AVB with narrow QRS do not typically progress to PM dependency. If confirmed with larger studies, single chamber PM may be appropriate for selected patients with IHB and paroxysmal AVB.