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pathway will result in identical stim–A times both with and without His capture (Figure 3). During this maneuver, it is very important to make sure that there is no capture of the local atrium as this could cloud the results. The presence of a short stimulation to proximal coronary sinus atrium (< 60 ms) and stimulation to the...
high right atrium (< 70 ms) is suggestive of the direct capture of the atrium from the pacing catheter (Figure 1, first beat). A stim–A electrogram time of more than 90 ms in the proximal coronary sinus and 100 ms in the high right atrium argues strongly against direct atrial capture.²
In our patient, the first beat was likely a direct atrial capture as the stim–A time was short (<60 ms), the second beat was a pure His capture, and the third beat was both His and ventricular capture. The last beat was a non-capture.

Based on the response seen in our patient (Figures 1 and 4), it could be called a nodal response as the stim–A time during the loss of His capture was 180 ms and that during the His capture was 113 ms. However, a closer look at the fourth beat in Figure 1 (ventricular capture) reveals an eccentric retrograde conduction over a left-sided accessory pathway. The patient was found to have a left posterior accessory pathway and underwent a successful ablation of the same.

There are several valuable teaching points illustrated in the Figure 1 tracing. First, para-Hisian pacing only differentiates retrogradely conducting septal accessory pathways from retrograde conduction over the AV node. A “nodal” response can be seen in the presence of pathways away from the septum. A “nodal” response to a para-Hisian pacing can also be seen in pathways with a decremental retrograde conduction and pathways that conduct antegrade only.

Second, while performing the para-Hisian maneuver, close attention should be paid to the retrograde atrial activation sequence. Although the maneuver revealed a “nodal” response, close attention to the change in retrograde atrial activation during the loss of His capture (Figure 1, fourth beat) provided a clue toward the correct diagnosis in this patient.

Third, this tracing is unique as, in one snapshot (from beat 1 through beat 5) there are examples of a direct atrial capture, His capture, both His and ventricular capture, only ventricular capture, and loss of capture. The electrophysiology trainees should be able to understand the mechanism of each beat. Electrophysiologists need to be aware of various pitfalls of the maneuvers used during EP studies to accurately identify tachycardia mechanisms.

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