RIGHT ATRIUM

Termination and Block of Typical Atrial Flutter as Shown by Advisor™ HD Grid Technology

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KEYWORDS. Atrial flutter, arrhythmia, supraventricular tachycardia, ablation.

ISSN 2156-3977 (print)
ISSN 2156-3993 (online)
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Rhythm Management

A 65-year-old male patient with no comorbidities presented with palpitations. A diagnosis of typical atrial flutter was established based on a sawtooth pattern on the electrocardiogram with negative flutter waves in the inferior leads and positive flutter waves in V1. The atrial flutter was found to be refractory to medical therapy with β -blockers; thus, the decision to proceed with ablation was made.

In **Figure 1**, the high-density grid catheter (Advisor™ HD Grid Mapping Catheter, Sensor Enabled™) is

displayed in a caudal view of the right atrium. Intracardiac electrograms are shown on the bottom. Following the activation sequence of white → red → orange → yellow → green → light blue → dark blue → purple, the counterclockwise mechanism is presented in **Figure 1A**. With an additional ablation lesion at the ablation catheter tip, the tachycardia was terminated and the activation pattern changed from counterclockwise to approaching the cavotricuspid isthmus from a clockwise direction, indicating that block had been achieved; this can be observed with the change in activation pattern in **Figure 1B**. Note that, the earliest color, white, is now seen on the septal side of the cavotricuspid isthmus (**Video 1**).

The patient remained well and in normal sinus rhythm six weeks after ablation.

Dr. Sundaram and Dr. Choe are consultants for Abbott and have received honoraria for lectures and training. The other author reports no conflicts of interest for the published content. Address correspondence to: Sri Sundaram, MD, FHRS. Email: sris@southdenver.com.

Figure 1: A: The Advisor™ HD Grid and ablation catheters are displayed in a caudal view of the right atrium. Intracardiac electrograms are shown on the bottom. Following the activation sequence of white → red → orange → yellow → green → light blue → dark blue → purple, the rhythm was confirmed as typical counterclockwise flutter. **B:** The tachycardia terminated and normal sinus rhythm resumed. Note that the color scheme reversed into a clockwise pattern with this achievement, which indicates that block has been achieved as the activation pattern has changed.