IMAGES IN CARDIOLOGY

Typical Atrial Flutter Ablation: Demonstration of Cavo-Tricuspid Isthmus Block Aided by a Halo Catheter

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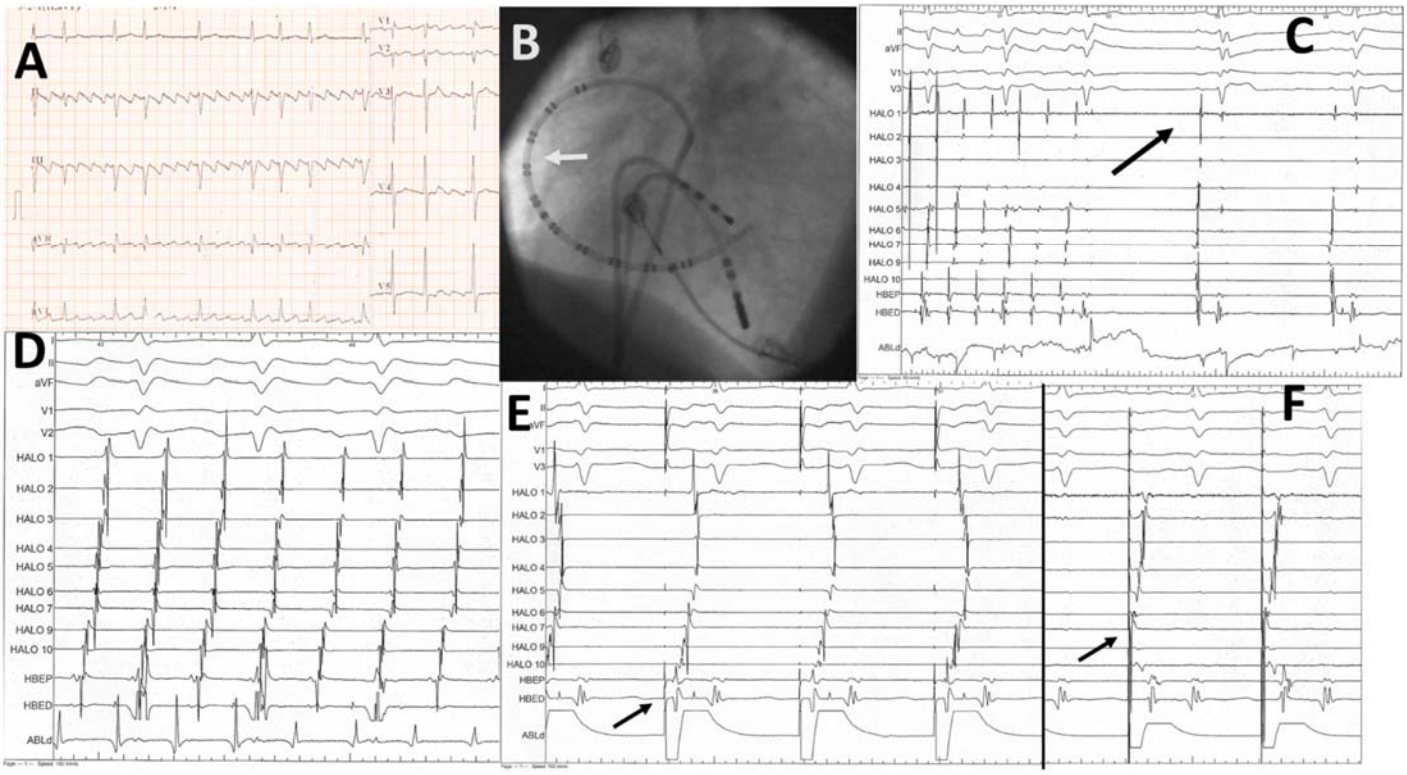
A 61-year-old gentleman with one-year history of atrial flutter (see typical saw-tooth appearance of flutter –F waves in the inferior ECG leads in **Panel A**) refractory to antiarrhythmic agents was submitted to cavotricuspid isthmus ablation. During the procedure, use of an eicosapolar halo catheter (**Panel B**, arrow) helped to demonstrate the counterclockwise direction of activation (from proximal pole pairs Halo 10 toward Halo 1, **Panel D**). Upon completion of the ablation line along the isthmus, conversion of atrial flutter into sinus rhythm was noted (**Panel C**, arrow). With the aid of the halo catheter, bidirectional block could be easily determined by pacing near the coronary sinus os (**Panel E**, arrow) and recording the late activation of Halo 1, which was withdrawn to the lateral wall of the low right atrium, & finally pacing at the low right lateral wall (**Panel F**, arrow) and recording late activation by the catheter at the coronary sinus os (HBEP).



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Demonstrating complete bidirectional block across the cavotricuspid isthmus after radiofrequency ablation of atrial flutter using the activation mapping technique, as performed in this case, correlates with long-term success.[1-3] Of course, it is crucial to correctly position the Halo catheter in order to identify block or residual isthmus conduction, while positional pacing allows for such a differentiation. Use of the Halo catheter facilitates and expedites the procedure by initially identifying the electrical circuit and the direction of activation and upon completion of ablation helps confirm bidirectional block.

REFERENCES

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