

**Effects of cavotricuspid isthmus ablation on
atrioventricular node electrophysiology in patients
with typical atrial flutter**

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摘要

Abstract

Background— The atrial musculature in the cavotricuspid isthmus is a part of posterior inputs to the AV node. In patients with typical atrial flutter, effects of radiofrequency ablation of this isthmus on AV node conduction are still unknown.

Methods and Results— This study included 16 patients with clinically documented typical atrial flutter. Group 1 had 8 patients without and group 2 had 8 patients with dual AV nodal pathway physiology. Electrical pacing from the interatrial septum and low right atrium was performed to evaluate antegrade AV node function before and after ablation of the cavotricuspid isthmus. In group 1, the AV node conduction properties were similar before and after ablation. In group 2, the AV node Wenckebach cycle length and maximal AH interval during low right atrium (356 ± 58 versus 399 ± 49 ms, $P=0.008$; 303 ± 57 versus 376 ± 50 ms, $P=0.008$) and interatrial septum (365 ± 62 versus 393 ± 59 ms, $P=0.008$; 324 ± 52 versus 390 ± 60 ms, $P=0.008$) pacing were significantly longer after ablation. Elimination of the slow pathway after ablation was noted in 2 patients, including 1 with AV nodal reentrant echo beats.

Conclusions— Radiofrequency ablation of the cavotricuspid isthmus was effective in eliminating typical atrial flutter without injury of antegrade fast AV node conduction. The atrial musculature in the cavotricuspid isthmus significantly contributed to the slow AV node conduction

