

Complex electrophysiological characteristics in atrioventricular nodal reentrant tachycardia with continuous atrioventricular node function curves.

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摘要

Abstract

Background: Although typical atrioventricular nodal reentrant tachycardia (AVNRT) with discontinuous AV node function curves has been well studied, there has been a lack of any significant information about AVNRT without evidence of dual AV nodal pathway physiology during atrial extrastimulus testing or atrial pacing. Methods and Results: Group 1 included 9 patients with continuous curves during atrial extrastimulus testing but without a jump (??0 ms) of the atrial-His bundle (AH) interval during incremental atrial pacing. The maximal AH interval during atrial pacing (266 簣 61 versus 168 簣 27 ms, $P=.007$) or extrastimulus testing (290 簣 60 versus 176 簣 18 ms, $P=.005$) shortened significantly after ablation. Antegrade and retrograde AV node properties were similar before and after ablation. Group 2 included 14 patients with continuous curves and a jump of the AH interval during incremental atrial pacing. The atrial pacing cycle length with 1:1 AV conduction and effective refractory period (ERP) of the antegrade AV node increased significantly, whereas the maximal AH interval during atrial pacing (358 簣 70 versus 203 簣 28 ms, $P=.001$) or extrastimulus testing (338 簣 75 versus 196 簣 34 ms, $P=.002$) shortened significantly after ablation. Group 3 included 24 patients with discontinuous curves. The maximal AH interval during atrial pacing or extrastimulus testing and the ERP of the antegrade fast AV node shortened, whereas the ERP of the antegrade AV node increased significantly after ablation. The maximal AH interval before ablation, extent of decrease in

maximal AH interval after ablation, ERP of the retrograde AV node before ablation, and tachycardia cycle length were significantly shorter in group 1 than groups 2 and 3. Conclusions: In AVNRT with continuous AV node function curves, dual AV nodal pathway physiology may or may not be demonstrated during atrial pacing. Significant shortening of the maximal AH interval during atrial pacing after radiofrequency ablation suggests successful elimination of AVNRT.