

# **Electrophysiologic characteristics and radiofrequency catheter ablation in atrioventricular node reentrant tachycardia with second-degree atrioventricular block.**

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摘要

## **Abstract**

**INTRODUCTION:** Detailed electrophysiologic study of AV nodal reentrant tachycardia (AVNRT) with 2:1 AV block has been limited. **METHODS AND RESULTS:** Six hundred nine consecutive patients with AVNRT underwent electrophysiologic study and radiofrequency catheter ablation of the slow pathway. Twenty-six patients with 2:1 AV block during AVNRT were designated as group I, and those without this particular finding were designated as group II. The major findings of the present study were: (1) group I patients had better anterograde and retrograde AV nodal function, shorter tachycardia cycle length (during tachycardia with 1:1 conduction) (307 +/- 30 vs 360 +/- 58 msec,  $P < 0.001$ ), and higher incidence of transient bundle branch block during tachycardia (18/26 vs 43/609,  $P < 0.001$ ) than group II patients; (2) 21 (80.8%) group I patients had alternans of AA intervals during AVNRT with 2:1 AV block. Longer AH intervals (264 +/- 26 vs 253 +/- 27 msec,  $P = 0.031$ ) were associated with the blocked beats. However, similar HA intervals (51 +/- 12 vs 50 +/- 12 msec,  $P = 0.363$ ) and similar HV intervals (53 +/- 11 vs 52 +/- 12,  $P = 0.834$ ) were found in the blocked and conducted beats; (3) ventricular extrastimulation before or during the His-bundle refractory period bundle could convert 2:1 AV block to 1:1 AV conduction. **CONCLUSIONS:** Fast reentrant circuit, rather than underlying impaired

conduction of the distal AV node or infranodal area, might account for second-degree AV block during AVNRT. Slow pathway ablation is safe and effective in patients who have AVNRT with 2:1 AV block.