

# **Electrocardiographic and electrophysiologic characteristics of midseptal accessory pathways.**

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摘要

## **Abstract**

Study objective: To investigate the ECG characteristics, the electrophysiologic properties, and an effective radiofrequency catheter ablation technique in patients with septal accessory pathways.

Patients: Forty-six consecutive subjects with septal accessory pathways located in the anteroseptal, midseptal, and para-Hisian areas. Design and interventions: ECGs obtained during sinus rhythm and orthodromic tachycardia, conduction properties obtained from electrophysiologic study, and results of two different ablation techniques were analyzed.

Measurements and results: (1) Twenty-four (52.2%) had manifest preexcitation and 15 (32.6%) had multiple accessory pathways; (2) midseptal pathways could be differentiated from anteroseptal and para-Hisian pathways by a negative delta wave in lead III and a biphasic delta wave in lead aVF during sinus rhythm, and a negative retrograde P wave in two inferior leads during orthodromic tachycardia; (3) midseptal pathways had better antegrade conduction properties and a significantly higher incidence (61.5%) of inducible atrial fibrillation; (4) radiofrequency catheter ablation using lower energy ( $20\pm 6$  W) had a comparable effect to ablation using higher energy ( $36\pm 5$  W), but without impairment of atrioventricular (AV) node conduction or development of AV block; and (5) during the follow-up period of  $26\pm 14$  months (range, 5 to 54 months), three (6.5%) patients had recurrence.

Conclusions: Midseptal accessory pathways had ECG and electrophysiologic characteristics that were distinctive from those of anteroseptal and para-Hisian pathways. Catheter ablation of these septal pathways using low radiofrequency energy was safe and effective.