

# **Atrial tachycardias originating from the atrial septum: electrophysiologic characteristics and radiofrequency ablation**

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摘要

## **Abstract**

**INTRODUCTION:** The characteristics of atrial tachycardia (AT) have varied widely among different reports. The anatomic locations of ATs may bias the results. We propose that septal ATs and free-wall ATs have different characteristics. **METHODS AND RESULTS:** One hundred forty-one patients with AT underwent electropharmacologic study, endocardial mapping, and radiofrequency ablation. Forty-nine (34.7%) patients had septal AT originating from the anteroseptal, mid-septal, and posteroseptal areas. Tachycardia cycle length was similar between septal AT and free-wall AT (367 +/- 46 msec vs 366 +/- 58 msec,  $P > 0.05$ ). More patients with septal AT required isoproterenol to facilitate induction (44.9% vs 31.5%,  $P < 0.05$ ). Septal AT was more sensitive to adenosine than free-wall AT (84.4% vs 67.8%,  $P < 0.05$ ). Only posteroseptal AT showed a positive P wave in lead V1 and negative P wave in all the inferior leads (II, III, aVF). Radiofrequency catheter ablation had a comparable success rate for septal AT and free-wall AT (96% vs 95%) without impairment of AV conduction. During follow-up of 49 +/- 13 months (range 17 to 85), the recurrence rate was similar for septal AT and free-wall AT (3.2% vs 4.6%,  $P = 0.08$ ). **CONCLUSION:** Septal AT has electrophysiologic characteristics that are distinct from those of free-wall AT. Catheter ablation of the septal AT is safe and effective.