# Predictors of early and late recurrence of atrial fibrillation after catheter ablation of paroxysmal atrial fibrillation

## 謝敏雄

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## 摘要

### Abstract

Introduction: The outcome of patients with early recurrence of atrial fibrillation (AF) (within one month) after ablation procedure is controversial. Furthermore, the predictors of early and late (up to mean follow-up 30 months) recurrence of AF are not investigated in depth.

Aims of the Study: The aim of the present study was to investigate the predictors of early and late recurrence of AF after catheter ablation of arrhythmogenic foci initiating AF in patients with paroxysmal AF.

Methods and Results: The study included 207 patients (155 men; mean age  $62 \pm 13$ years) who received catheter ablation of paroxysmal AF. Eighty-one (39%) patients had early recurrence of AF. Five clinical variables were related to the early recurrence of AF: (1) old age (65 years) (P = 0.004); (2) presence of associated cardiovascular disease (P = 0.01); (3) presence of multiple AF foci (P = 0.004); (4) presence of AF foci from left atrial free wall (P = 0.039); (5) left atrial enlargement (P = 0.038). Multivariate analysis demonstrated that presence of multiple AF foci could predict early recurrence of AF (P = 0.013; ratio = 2.24; 95% CI 1.18 to 4.25). During the follow-up period (30 ± 11 months), 70 (34%) patients had late recurrence of AF, and two clinical variables were related to the late recurrence of AF: (1) presence of early recurrence of AF (P = 0.025); (2) presence of multiple AF foci (P = 0.034). Multivariate analysis found that presence of early recurrence of AF could predict late recurrence of AF (P = 0.046; hazard ratio = 1.62; 95% CI 1.01 to 2.59). Late recurrence of AF happened in 35 (43%) of the 81 patients with early recurrence of AF, and in 35 (28%) of the 126 patients without early recurrence of AF. Conclusions: Early AF recurrence could predict late AF recurrence.