

ARRHYTHMIAS

Catheter ablation improves outcome in drug-refractory, paroxysmal AF

The ThermoCool Atrial Fibrillation (AF) Trial Investigators have demonstrated that patients with paroxysmal AF who undergo catheter ablation have fewer symptomatic recurrences of atrial arrhythmias, and improved quality of life, when compared with those who receive antiarrhythmic drug therapy (ADT).

In this multinational, randomized controlled trial, the researchers enrolled patients who had experienced at least three episodes of AF within the preceding 6-month period and were nonresponsive to antiarrhythmic medication. Participants were randomly assigned to undergo pulmonary vein isolation with the NaviStar™ ThermoCool™ (Biosense Webster, Diamond Bar, CA) irrigated-tip catheter or to ADT (predominantly flecainide or propafenone; amiodarone use was not permitted).

Trial enrollment was stopped early (at $n = 167$) because of the superiority of

catheter ablation over ADT demonstrated at the first interim analysis. More than four times as many patients in the ablation group than in the ADT group were free from symptomatic AF at 9 months follow-up (66% versus 16%). Moreover, catheter ablation was associated with substantial improvements in quality-of-life and symptom frequency and severity scores, whereas ADT was not.

Although hard clinical end points, such as mortality and incidence of stroke, were not assessed in this trial, the investigators recommend that their data “strongly support the use of catheter ablation in patients with paroxysmal AF who do not respond to initial ADT”.

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Original article Wilber, D. J. *et al.* Comparison of antiarrhythmic drug therapy and radiofrequency catheter ablation in patients with paroxysmal atrial fibrillation: a randomized controlled trial. *JAMA* 303, 333–340 (2010)