

Radiofrequency ablation superior to drugs alone for atrial fibrillation

MedWire News: Treatment of patients with atrial fibrillation (AF) using radiofrequency catheter ablation (RFA) achieves around a 19% greater success rate in resolving arrhythmia than treatment with anti-arrhythmic drugs (AADs) alone, study results demonstrate.

Two side-by-side meta-analyses of the respective therapies revealed “an enormous body of data to support the value of RFA,” say the researchers, who nevertheless warn that the potentially serious side effects of the technique must be considered.

Although RFA is commonly performed worldwide, its proper place in treatment algorithms remains subject to debate.

“The majority view appears to be that ablation should be reserved for patients who have failed one or more trials of anti-arrhythmic drug therapy; however, some investigators and practitioners have championed ablation as first-line therapy for highly symptomatic patients with AF,” Hugh Calkins (Johns Hopkins University, Baltimore, Maryland, USA) and colleagues comment in the journal *Circulation, Arrhythmia and Electrophysiology*.

To investigate, the team searched the medical literature for studies conducted between 1990 and 2007 that separately assessed the clinical efficacy and safety of both therapies in the treatment of AF.

They identified 63 relevant studies on RFA and 34 on AAD – the latter group included the following drugs of interest: amiodarone, dofetilide, sotalol, flecainide, and propafenone.

The single-procedure success rate of RFA following a course of AAD therapy (as is standard practice) was 57%. The multiple procedure success rate after AAD was 71%, and the multiple procedure success rate in combination with AAD or with unknown AAD usage was 77%.

By comparison, the success rate for AAD therapy alone was 52% – a significant 19% lower than the most successful RFA approach.

The rate of complications associated with RFA was quite low, at 4.9%, but events tended to be serious including stroke, pulmonary vein stenosis, cardiac tamponade, development of an atrial esophageal fistula. Adverse events with AAD therapy, although more common at 30%, were less severe.

“At first, these findings might suggest that catheter ablation of AF should always be the preferred treatment strategy for AF,” Calkins and colleagues conclude.

“However, we urge caution, based on important differences in trial methodologies, patient characteristics, and the relative severity of complications resulting from catheter ablation of AF versus AAD therapy.”

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[*Circ Arrhythmia Electrophysiol* 2009; 2: 349-361](#)