Letter by MacDonald et al Regarding Article, "Catheter Ablation of Atrial Fibrillation"

To the Editor:
We read with interest the article by Tung et al.1 The authors should be congratulated on providing an excellent technical overview of atrial fibrillation (AF) ablation. In our opinion, however, the author’s comments on the effectiveness of ablation in patients with AF and heart failure (HF) are somewhat overstated: “...ablation has been demonstrated to be effective in patients with congestive HF, particularly in those without established causes.” The literature examining the efficacy of catheter ablation for AF in patients with HF is sparse. The authors reference 3 studies to support their statement: 2 nonrandomized observational studies and 1 randomized trial comparing catheter ablation with cardiac resynchronization therapy and atrioventricular nodal ablation.2–4 These studies enrolled a very heterogeneous group of patients, including some patients without HF; only mild left ventricular (LV) systolic dysfunction, or paroxysmal rather than persistent AF. Although they report that AF ablation can restore and maintain sinus rhythm in patients with LV systolic dysfunction, with subsequent improvement in LV ejection fraction, they are far from definitive.

We randomly assigned 41 patients with persistent AF, LV systolic dysfunction (mean LV ejection fraction 17.7%), and symptomatic HF (90% New York Heart Association class III), to receive catheter ablation for AF or continued medical treatment.5 After 9 months, only 50% of the patients remained in sinus rhythm. Ablation did not improve the LV ejection fraction, quality of life, or the level of N-terminal B-type natriuretic peptide. Furthermore, ablation was associated with a high complication rate. In 27 procedures, there was 1 stroke (representing 4% of patients), 2 episodes of cardiac tamponade (8%), and 1 hospitalization for HF (4%). Although the numbers in our study are small, they provide a striking contrast to previously published data.

Based on available evidence, the efficacy and safety of catheter ablation in patients with HF is uncertain. However, as the authors correctly point out, the treatment may have a role in certain selected cases. Randomized trials in selected populations are warranted to establish its efficacy and safety.

Disclosures

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