



Beyond drugs alone: Pacing, ablation, and surgery for atrial fibrillation

Cardiologists in every subspecialty area deal with patients who experience atrial fibrillation. An aging population, the prevalence of hypertension, and the emergence of heart failure as the final common pathway of heart disease in the modern era guarantee that atrial fibrillation will only expand as a clinical problem.

In this era of increasing fragmentation in cardiology, we must struggle to incorporate up-to-date information into our management decisions. With the growth of electrophysiology and heart failure management as subspecialty disciplines, general cardiologists, imaging specialists, and invasive cardiologists stand to benefit from a description of state-of-the-art approaches to atrial fibrillation.

Nondrug approaches promise major impact

In this supplement, I have brought together a group of experts to review current concepts of atrial fibrillation, with an emphasis on nonpharmacologic management. The focus on nondrug approaches reflects in part a reluctance to add to the polypharmacy required in heart failure management, and in part an intuition that nondrug approaches will have a major impact on management, as they do in ventricular arrhythmia.

Why atrial fibrillation now?

In view of two recent trials^{1,2} showing no advantage to rhythm control over rate control as a management strategy, some may wonder why we have chosen to revisit atrial fibrillation management. Although the trial data were helpful in tempering enthusiasm for restoration of sinus rhythm in all patients, atrial fibrillation results in:

- Increased risk of cardioembolic stroke
- Loss of appropriate rate control
- Alterations in diastolic filling
- Unpleasant symptoms in many patients.

In selected patients, one or more of these facets of

atrial fibrillation pathophysiology will drive the management strategy toward rhythm control.

Management is still a work in progress

This supplement describes a work in progress, not a finished product. We have not solved the problems of atrial fibrillation, but we have gone a long way toward asking the right questions. For some patients, the techniques described here can result in long-term restoration of normal sinus rhythm; for others, a decision for rate control and anticoagulation may be the best option available today. What's important is that *options now do exist*. And when options exist, we must know how to make well-informed recommendations to our patients.

As a clinical cardiologist, I have appreciated the opportunity to edit this supplement. I invited contributions from colleagues who put together the key pieces in the jigsaw puzzle that shows the overall picture of atrial fibrillation. We journey from the basic science to pharmacology, pacing, the electrophysiology laboratory and radiofrequency ablation, and the operating room to look at all the management options we can bring to bear.

Ultimately, the test for each of us is to select the best strategy for managing atrial fibrillation in the context of each individual patient. To do that well, we must keep up to date. I hope that this collaborative effort helps.

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■ REFERENCES

1. The Atrial Fibrillation Follow-up Investigation of Rhythm Management (AFFIRM) Investigators. A comparison of rate control and rhythm control in patients with atrial fibrillation. *N Engl J Med* 2002; 347:1825–1833.
2. Van Gelder IC, Hagen VE, Bosker HA, et al. A comparison of rate control and rhythm control in patients with recurrent persistent atrial fibrillation. *N Engl J Med* 2002; 347:1834–1840.