

New Data Fuel Atrial Fibrillation Tx Debate

Amiodarone was superior to sotalol for maintaining sinus rhythm, linked to better quality of life.

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NEW ORLEANS — Maintenance of sinus rhythm in patients with persistent atrial fibrillation leads to significantly better quality of life and exercise performance scores—contrary to the findings of several prior highly publicized clinical trials, Steven N. Singh, M.D., said at the annual meeting of the Heart Rhythm Society.

“These observations may have a major impact on the controversy regarding the rhythm or rate control approach to management of patients with atrial fibrillation,” added Dr. Singh of the Veterans Affairs Medical Center in Washington.

He presented a secondary quality of life analysis of the Sotalol Amiodarone Atrial Fibrillation Efficacy Trial (SAFE-T), a double-blind, randomized multicenter VA-sponsored study in which 665 patients with persistent atrial fibrillation were placed on amiodarone, sotalol, or placebo and followed for 1 year.

He noted that the primary SAFE-T results, which were recently published, show that while amiodarone and sotalol were equally effective in converting atrial fibrillation to sinus rhythm, amiodarone was clearly superior at maintaining sinus

rhythm (N. Engl. J. Med. 2005;352:1861-72).

Dr. Singh, SAFE-T co-principal investigator, presented a prespecified secondary quality of life outcomes analysis.

Three previous major, randomized controlled trials—the Atrial Fibrillation in Followup Investigation of Rhythm Management (AFFIRM), Pharmacologic Intervention in Atrial Fibrillation (PIAF), and Rate Control Versus Electrical Cardioversion (RACE)—had concluded that there is little difference in quality of life between the rate and rhythm control strategies.

But the SAFE-T investigators were skeptical of this result.

All three prior trials had used an intention-to-treat statistical analysis. The SAFE-T investigators believed it made more sense to analyze outcomes on the basis of whether patients were actually in sinus rhythm as determined using telemetry readings obtained weekly throughout the follow-up period.

In SAFE-T, quality of life and exercise performance were measured at baseline, 8 weeks, and 1 year. At both 8 weeks and 1 year, patients in sinus rhythm showed clear advantages over those in atrial fibrillation in terms of these outcomes.

At 1 year, for example, the sinus rhythm group fared significantly better than patients in atrial fibrillation on four of the

eight subscales of the Short Form-36 general quality of life scale. They also scored better in measures of specific symptom severity, exercise capacity, and heart rate. (See box.)

Patients whose atrial fibrillation had been asymptomatic at baseline also derived quality of life benefit from being maintained in sinus rhythm, although the magnitude of improvement was less than in symptomatic patients.

“In all fairness to the AFFIRM, RACE, and PIAF trials, which showed that there is no benefit for maintenance of sinus rhythm with respect to quality of life, I strongly believe that their analysis, which was done by intention to treat, is perhaps not the right way to do it, because 40% of

the patients in the sinus-rhythm arm were actually in atrial fibrillation. ... I think intent to treat is good for the statisticians, but I tell you, in-rhythm analysis is really a better way to look at it for the clinician,” Dr. Singh said.

David S. Cannom, M.D., commented that the SAFE-T findings are consistent with the general anecdotal experience, which says that most patients tend to feel better when in sinus rhythm than in atrial fibrillation.

The SAFE-T data “certainly strike me as closer to what we see in practice on a daily basis,” added Dr. Cannom, director of cardiology at Good Samaritan Hospital, Los Angeles, and a past president of the Heart Rhythm Society. ■

Quality of Life Outcomes in SAFE-T Study

	Change From Baseline at 1 Year Sustained Sinus Rhythm Group	Persistent AF Group
Treadmill Test Results		
Resting heart rate	–23.2 bpm	–4.9 bpm
Peak heart rate	–40.4 bpm	–12.3 bpm
Exercise duration	+77.9 sec	+14.6 sec
Short Form-36 Subscales		
General health	–0.1	–5.6
Physical functioning	+2.7	–1.9
Social functioning	+1.0	–5.3
Vitality score	+3.8	+0.3

Source: Dr. Singh

Lipid-Lowering Therapy May Protect Against Atrial Fib, With 23% Lower Prevalence Noted

NEW ORLEANS — Lipid-lowering therapy appears to protect against the development of atrial fibrillation in patients with impaired left ventricular function, Ibrahim R. Hanna, M.D., reported at the annual meeting of the Heart Rhythm Society.

He presented data on 25,268 patients included in the Guidant-sponsored Advantent SM, a national registry of patients with impaired left ventricular function. The mean ejection fraction of the participants was 31%. Nearly three-quarters of them had ischemic cardiomyopathy.

Patients on lipid-lowering therapy—the vast majority of it consisting of statins—had a 34% reduction in the relative risk of having paroxysmal or persistent atrial fibrillation in a multivariate analysis controlling for potential confounders, according to Dr. Hanna of Emory University, Atlanta.

The prevalence of atrial fibrillation (AF) among patients treated with lipid-lowering therapy was 25%. This was a 23% lower rate than in patients not on

lipid-lowering therapy, regardless of whether they were hyperlipidemic.

Overall, 79% of the participants in Advantent SM were being treated with a β -blocker, whereas 82% were on an ACE inhibitor or angiotensin receptor blocker. These drugs also appeared to protect against AF. However, lipid-lowering therapy exhibited a protective effect independent of and additive to that of these other drugs.

The mechanism of lipid-lowering therapy's protective effect against AF is unclear so far.

Some recent studies have implicated oxidative stress in the etiology of the arrhythmia. Statins are known to have antioxidant properties, Dr. Hanna noted.

Elsewhere at the meeting, Peter R. Kowey, M.D., said one of the hottest areas in drug development for suppression of AF involves therapies already being used in other contexts for patients who have heart disease.

The drug classes being looked at most extensively are the statins, because of

their anti-inflammatory and other pleiotropic properties, and the ACE inhibitors/angiotensin receptor blockers.

The research conducted to date has predominantly involved retrospective evaluations of registry data or the landmark clinical trials that established the current indications for these drugs, said Dr. Kowey, who is a professor of medicine at Jefferson Medical College in Philadelphia.

“At every national meeting this year there have been at least three or four abstracts in which people have delved back into assorted databases to try to understand in a retrospective fashion if there was a signal of these drugs preventing atrial fibrillation. I think it's fair to say that what we've seen so far indicates that in fact there is a signal,” Dr. Kowey said.

“But I can also tell you that what we've seen so far as a treatment effect has certainly not been very robust,” he said.

“Unless we see some major increase in the amount of suppression of arrhythmias in these trials, it's unlikely that these drugs will be used as primary therapies, although they might be very useful accessory therapies in patients who are at risk,” Dr. Kowey added. ■

Rate of Atrial Fib Recurrence Higher For Women

NEW ORLEANS — The recurrence rate of persistent atrial fibrillation following cardioversion is significantly higher in women than men, Osnat Gurevitz, M.D., reported at the annual meeting of the Heart Rhythm Society.

The mechanism underlying this gender difference is unclear. It is well established, however, that repolarization time is longer in women than men. And repolarization is an important determinant of arrhythmogenesis, noted Dr. Gurevitz of the Mayo Clinic, Rochester, Minn.

She reported on 773 consecutive patients who underwent cardioversion for persistent atrial fibrillation (AF). Of the 486 men, 56% remained arrhythmia free at 1 year and 33% at 2 years, compared with 50% and 24%, respectively, of the women.

In a univariate analysis, men were 20% less likely to experience AF recurrence after controlling for potential confounding variables.

Women had a significantly greater AF recurrence rate despite their lower prevalence of significant coronary artery disease—22%, compared with 34% in men. On the other hand, 72% of the women carried the diagnosis of hypertension, compared with only 56% of men. ■