Omega-3 Failed to Prevent Recurrent Atrial Fib

BY PATRICE WENDLING

FROM THE ANNUAL SCIENTIFIC SESSIONS OF THE AMERICAN HEART ASSOCIATION

VITALS

Major Finding: At 24 weeks, the primary end point of symptomatic recurrence of atrial fibrillation or flutter in patients with paroxysmal AF occurred among 52% of those randomized to prescription omega-3 and 48% of those given placebo.

Data Source: Double-blind, prospective randomized trial of 663 patients with paroxysmal or persistent atrial fibrillation.

Disclosures: GlaxoSmithKline funded the P-OM3 trial. Dr. Kowey has served as a consultant for Reliant Pharmaceuticals and GSK. Dr. Albert disclosed consulting fees and honoraria from Novartis and research grants from Siemens and St. Jude Medical.

CHICAGO – High-dose, prescription omega-3 fatty acids did no better than placebo in preventing the recurrence of symptomatic paroxysmal atrial fibrillation episodes in the P-OM3 trial.

At 24 weeks, the primary end point of symptomatic recurrence of atrial fibrillation (AF) or flutter in patients with paroxysmal AF occurred in 52% of those receiving prescription omega-3 and 48% of those given placebo, a nonsignificant difference.

Those results were consistent across all prespecified subgroups, including age; gender; smoking status; and use of ACE inhibitors, angiotensin II receptor blockers, or statins, Dr. Peter R. Kowey reported.

In addition, the median annualized numbers of AF/flutter rescue episodes were similar: 2.17 in the placebo group vs. 2.24 in the prescription omega-3 group.

Patients with symptomatic paroxysmal AF made up the majority (82%) of the 663-patient trial, as this group was thought most likely to respond to omega-3 polyunsaturated fatty acids.

All patients were without substantial structural heart disease and in normal sinus rhythm at baseline without the use of antiarrhythmic drugs.

Secondary analyses showed no statistically significant differences in the rates of symptomatic AF or flutter among patients with persistent AF treated with prescription omega-3 (50%) or placebo (33%), and between treatment groups when both the paroxysmal and persistent AF patients were combined (52% vs. 46%, respectively), he said.

Although previous trials have produced mixed results regarding the efficacy of omega-3 fatty acids in atrial fibrillation, the current trial "demonstrated incontrovertibly" that patients with paroxysmal AF who received this drug did no better than those who received placebo, Dr. Kowey, chief of cardiovascular disease at Main Line Health, Lankenau Hospital in Wynnewood, Pa., said during a press briefing.

Dr. Christine Albert of Brigham and Women's Hospital in Boston, an invited discussant, said that the current data are sorely needed because of the large number of patients taking omega-3 fatty acids, but that patients should wait before abandoning the popular drug.

She pointed out that observational studies of fish intake and AF have shown a benefit in elderly patients as well as a potentially negative effect in younger patients. Those results indicate that omega-3 fatty acids may have different effects in different patient populations.

This raises the question of whether subtypes of patients with AF may still benefit from omega-3 fatty acids, including people with post-operative AF, older patients with chronic heart failure or structural heart disease, and those with persistent or chronic AF, Dr. Albert said.

The phase III OPERA trial is currently testing whether perioperative omega-3 fatty acids will decrease the occurrence of postoperative AF, compared with placebo, in patients undergoing cardiac surgery.

Dr. Albert also noted that the P-OM3 trial did not address the longer-term effects of omega-3, whether lower doses could be more effective, and whether omega-3 fatty acids could be useful in the primary prevention of AF.

"The take-home point is that right now we really don't have any evidence that these omega-3 fatty acids prevent symptomatic atrial fibrillation in paroxysmal patients," Dr. Albert said. "I do think there is a role for further large-scale randomized trials, which are ongoing."

As expected, prescription-grade omega-3 was extremely well tolerated in P-OM3, with a very low incidence of any adverse event and no difference in rates of serious adverse events, Dr. Kowey said. In all, 5% of the placebo group and 4% of the omega-3 group discontinued therapy because of an adverse event.

The trial randomized 542 patients with symptomatic paroxysmal AF and 121 patients with persistent AF to 8 g/day of prescription omega-3 for 7 days and 4 g/day thereafter or placebo. Of these, 527 paroxysmal patients and 118 persistent AF patients were evaluable, with the remainder lost to follow-up, excluded for lack of ECG monitoring data, or withdrawing. ■

Home Telemonitoring Was a Flop in Heart Failure Trials

BY BRUCE JANCIN

FROM THE ANNUAL SCIENTIFIC SESSIONS OF THE AMERICAN HEART ASSOCIATION

CHICAGO – Two major new clinical trials have failed to show improved outcomes for home telemonitoring of patients with heart failure, prompting a critical reappraisal of this once-promising disease management strategy.

"I think this is an important moment in our understanding of the contribution of this novel intervention in the overall management of heart failure – and I think the weight of evidence demonstrates that it is noncontributory," Dr. Clyde W. Yancy said following presentation of the two randomized trials at the meeting.

"Evidence-based, guideline-driven therapy is the standard of care and should always be our first priority in the treatment of heart failure. The benefit of telemonitoring that has been demonstrated to be present has always been less in the few randomized controlled trials than the cohort studies, and we've allowed hyperbole and excitement to guide our judgment, rather than evidence," added Dr. Yancy, medical director of the Baylor Heart and Vascular Institute and chief of cardiothoracic transplantation at Baylor University Medical Center in Dallas.

One of the studies presented at the AHA meeting was the Telemonitoring to Improve Heart Failure Outcomes (Tele-HF) trial, a National Heart, Lung, and Blood Institute–funded study involving 1,653 U.S. patients enrolled less than a month after discharge for acute decompensated heart failure.

After 6 months of daily remote telemonitoring using the commercially popular Tel-Assurance system marketed by Pharos Innovations, death and rehospitalization rates in patients using the automated telephone monitoring system were similar to those in controls receiving usual care, Dr. Sarwat I. Chaudhry of Yale University, New Haven, Conn., reported.

Similarly, the 2-year Telemedical Interventional Monitoring in Heart Failure (TIM-HF) trial, which enrolled 710 German patients with mild-to-moderate heart failure, failed to show that 24/7 access to remote telemonitoring improves all-cause mortality or heart failure hospitalization rates compared with usual care, according to Dr. Stefan D. Anker, professor of cardiology at Charite University Hospital, Berlin.

"There's no need to parse the data any further," commented Dr. Yancy, a former AHA president. "There was no benefit seen in either of these well-designed clinical trials on outcomes that are important to patients with heart failure."

'There was no benefit seen in either of these well-designed clinical trials.'

DR. YANCY

The findings in these two definitive randomized trials underscore the limitations of meta-analyses based upon small studies with heterogeneous results, including a Cochrane Collaboration review published just a few months ago, he added. The Cochrane report, based upon 11 studies involving 2,710 patients, concluded that telemonitoring programs for patients with chronic heart failure reduced the risk of all-cause mortality by one-third and all-cause hospitalization by 21% (Cochrane Database Syst. Rev. Aug. 4, 2010;CD007228.Review).

Health systems are under mounting pressure to reduce hospital readmissions, pressure that will intensify under the Patient Protection and Affordable Care Act. In this regard, Dr. Yancy noted that his recent Google search of the terms 'telemonitoring and heart failure' brought up 87,000 entries. The entire first page consisted of commercial advertisements for available systems.

"Every commercial application I opened had an implicit promise, almost a guarantee, of reduced costs and better outcomes for your patients with heart failure. We need to retard this kind of unbridled rush to a technology," he concluded.

Another discussant of the trials, Dr. Lynne Warner Stevenson, stressed that telemonitoring for heart failure isn't dead, but for it to be effective the right physiologic variables related to fluid balance need to be monitored. What's being monitored now – changes in body weight and symptoms – are inadequate as harbingers of decompensation. Ambulatory hemodynamic monitoring via implanted devices, now under study, holds more promise.

With more responsive physiologic measures and improved electronic technology, it should be possible for heart failure patients to monitor their disease status and adjust their own diuretic therapy without the labor-intense daily remote involvement of physicians and nurses, predicted Dr. Stevenson, professor of medicine at Harvard Medical School and director of the cardiomyopathy and heart failure program at Brigham and Women's Hospital, both in Boston.

Dr. Chaudhry, Dr. Yancy, and Dr. Stevenson declared having no relevant financial interests. The TIM-HF trial was funded by the German Federal Ministry of Economics and Technology in partnership with several technology companies. Dr. Anker disclosed that he serves as a consultant to one of those companies, Robert Bosch Healthcare. ■