Statins May Improve Survival in Advanced HF

BY BRUCE JANCIN
Denver Bureau

ORLANDO, FLA. — Statin therapy may markedly improve survival in patients with advanced heart failure, regardless of whether the etiology is ischemic or nonischemic, Andrew D. Sumner, M.D., said at the annual meeting of the American College of Cardiology.

This enhanced survival appears to be due primarily to a reduced incidence of arrhythmic death, added Dr. Sumner of Pennsylvania State University, Hershey.

He presented a retrospective analysis of data from the previously reported prospective Comparison of Medical Therapy, Pacing, and Defibrillation in Chronic Heart Failure (COMPANION) trial. In COMPANION, 1,520 patients with advanced heart failure (HF) at 128 U.S. centers were randomized 1:2:2 to optimal drug therapy alone, in conjunction with a cardiac resynchronization pacemaker, or with a combined cardiac resynchronization pacemaker/implantable cardioverter defibrillator (ICD).

There were 313 deaths during a median 16 months of follow-up. Unadjusted all-cause mortality among the 40% of COMPANION participants on a statin was 18%, compared with 22% in those who weren't on a statin. After controlling for numerous variables—including New York Heart Association class, left ventricular ejection fraction, QRS duration, blood pressure, gender, age, diabetes and other comorbidities, HF duration and etiology, and treatment assignment—statin use was associated with a highly significant 28% reduction in all-cause mortality.

Looking more closely at the data, statin use was associated with an adjusted 33% reduction in all-cause mortality among patients randomized to device therapy, but with no gain in survival in patients who received only optimal pharmacologic therapy. Looking closer still, statin-treated patients on cardiac resynchronization therapy without an ICD had a 46% relative risk reduction in all-cause mortality and a 63% reduction in sudden cardiac death, compared with those not on a statin.

In contrast, statin therapy did not appear to have any effect upon all-cause mortality or sudden cardiac death in patients on cardiac resynchronization therapy plus an ICD. This is to be expected, since the ICD already protects against sudden cardiac death, which together with pump failure constitute the two chief causes of mortality in patients with advanced HF.

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DR. SUMNER

Dr. Sumner stressed that COMPANION participants were not randomized to statin therapy, and as a retrospective analysis, his study must be considered hypothesis generating. "Hopefully, there will be a randomized, placebo-controlled trial to confirm these observations," he added.

Although statins are best known for their potent LDL-lowering effect, they have a number of other actions believed to be important in preventing cardiovascular events. The drugs reduce markers of inflammation, normalize endothelial dysfunction, and improve production of nitric oxide.

"Because heart failure is characterized by decreased cardiac performance, with activation of neurohormones, release of proinflammatory cytokines, and abnormalities in nitric oxide biosynthesis, treating patients with chronic heart failure with statins is potentially attractive," the cardiologist observed.

Several prior studies support the notion of statins having an antiarrhythmic effect that could spell reduced risk of sudden cardiac death in patients with advanced HF. For example, statin users have been reported to have a reduced risk of developing atrial fibrillation, and statin therapy favorably affects defibrillation thresholds in animal studies of ischemic heart disease. ■

Start Hospitalized Heart Failure Patients on Meds Before Discharge

BY BRUCE JANCIN
Denver Bureau

ORLANDO, FLA. — Starting heart failure patients on a β-blocker and ACE inhibitor before hospital discharge sharply increases the likelihood that they will be on these key medications at follow-up 60-90 days later, Gregg C. Fonarow, M.D., said at the annual meeting of the American College of Cardiology.

"What this really tells us is that hospitalization can serve as a teachable moment for patients and clinicians regarding heart failure medications, that patients can be effectively initiated on these evidence-based therapies, and if they're started in the hospital they're much more likely to be on treatment during long-term follow-up," he said.

"We need to provide for all patients hospitalized with heart failure a systematic approach to ensure that the evidence-based therapies are started prior to discharge," said Dr. Fonarow, professor of cardiovascular medicine at the University of California, Los Angeles, and director of the Ahmanson-UCLA Cardiomyopathy Center.

He presented data on 4,434 patients with systolic heart failure (HF) treated at 86 hospitals participating in the Organized Program to Initiate Lifesaving Treatment in Hospitalized Patients with Heart Failure (OPTIMIZE–HF) registry, a national quality-improvement project.

None of the patients in this subset of the larger OPTIMIZE–HF database had contraindications to β-blockers or ACE inhibitors/angiotensin receptor blockers (ARBs). Of the 86% discharged on a β-blocker, 95% remained on β-blocker therapy at follow-up 60-90 days post discharge. In contrast, only 32% of patients who were not yet on a β-blocker at discharge were taking one at follow-up.

"That means two-thirds of these eligible patients [discharged without β blocker] remained untreated with what is our single most important life-saving therapy in heart failure: β-blocker treatment," said Dr. Fonarow, director of OPTIMIZE–HF.

The same was true for ACE inhibitors/ARBs: 84% of eligible patients were on one of these drugs at discharge, and 74% of this group remained on the medication at 60-90 days. Only 19% of patients not discharged on one of these drugs were taking one at follow-up.

"Many clinicians have kind of had the view, 'Well, we don't need to worry about starting treatment in the hospital, we'll get around to it on an outpatient basis.' There hasn't necessarily been a consensus that each of these therapies needs to be started prior to hospital discharge," he said.

A systematic approach helps to ensure that evidence-based therapies are started prior to discharge.

DR. FONAROW

But that's changing fast, in large part because of the evidence gathered in OPTIMIZE–HF. At the ACC meeting, the American Heart Association launched a new nationwide, hospital-based, quality-improvement project called Get With The Guidelines–Heart Failure (GWTG–HF). The program, aimed at accelerating adherence to ACC/AHA treatment guidelines, utilizes techniques similar to those employed in the OPTIMIZE–HF registry, including decision-support tools, customized patient education materials, real-time performance benchmarking, and collaborative workshops to help hospitals share best practices. Dr. Fonarow is chairman of the GWTG Science Subcommittee.

"We hope that hospitals across the country will sign up and participate. Already in place for more than 2 years has been a program called Get With The Guidelines–Coronary Artery Disease that has shown remarkable improvements in care and is currently in more than 300 U.S. hospitals," he said.

With 5 million Americans currently diagnosed with HF, and the ranks expected to swell further as baby boomers age, this type of systems approach is badly needed, according to John S. Rumsfeld, M.D., who chaired a session on quality-improvement programs at the ACC meeting.

""We can have all sorts of late-breaking clinical trials telling us about better care, but if we don't apply them, we won't actually be improving our population outcomes," noted Dr. Rumsfeld of the University of Colorado, Denver.

GWTG–HF and OPTIMIZE–HF are both funded by GlaxoSmithKline Inc. Dr. Fonarow is a consultant to and member of the speakers' bureau for the pharmaceutical company. ■

Pacing, ICDs Are Used More Aggressively in Men Than in Women

ORLANDO, FLA. — Men with heart failure and/or bundle branch block appear to be preferentially treated more aggressively with implantable devices than are women with similar health status, a review of nearly 11,000 cases suggests.

The 10,931 patients, of whom 4,138 (38%) were women, were listed in an administrative database and represented consecutive admissions to any of numerous hospitals owned by Hospital Corporation of America.

All had a diagnosis of heart failure and/or bundle branch block and underwent a primary procedure of pacemaker, cardiac resynchronization therapy pacemaker (CRT-P), implantable cardioverter defibrillator (ICD), or cardiac resynchronization therapy defibrillator (CRT-D) implantation, Robert Fishel, M.D., reported at an international conference on women, heart disease, and stroke.

Women received 52% of the pacemakers, 33% of the CRT-Ps, 22% of the ICDs, and 21% of the CRT-Ds implanted, said Dr. Fishel of the J.F.K. Medical Center, Atlantis, Fla. Logistic regression analysis showed that men were significantly less likely than women to receive a pacemaker (odds ratio 0.35) and more likely to receive an ICD (odds ratio 1.34) or CRT-D (odds ratio 1.48).

There was no significant difference in device utilization of CRP-Ps between sexes.

After controlling for device, diagnoses, age, and comorbidities, there were no significant differences between men and women in measured clinical outcomes, including mortality, postoperative stroke, postoperative infection, or ICD or pacemaker mechanical malfunction.

Further research is needed to determine if the differences in device use among men and women have any long-term effects on outcomes in women, Dr. Fishel said.

—Sharon Worcester