

Amiodarone + Pacing Avoided Postop Atrial Fib

VITALS

Major Finding: Atrial fibrillation during hospitalization occurred in 19% of 26 patients on metoprolol, 11% of 35 on amiodarone alone, 9% of 32 on pacing alone, and none of 22 patients on both amiodarone and pacing.

Data Source: A prospective, single-center study of 115 patients randomized to prophylaxis with metoprolol, amiodarone, right atrial pacing, or amiodarone plus right atrial pacing.

Disclosures: Dr. Shea had no relevant financial relationships.

BY MITCHEL L. ZOLER

ATLANTA — Combined treatment with amiodarone and prophylactic atrial pacing cut the incidence of postoperative atrial fibrillation to zero in a randomized pilot study with 115 patients undergoing cardiac surgery at one center.

The results also showed metoprolol's relative lack of efficacy: Of patients treated with metoprolol, 19% had new-onset atrial fibrillation, Dr. Jennifer Shea said at

the annual meeting of the American College of Cardiology.

"Because the results were promising it made us want to do a larger study," said Dr. Shea, an internist at George Washington University, Washington.

Surgeons don't agree on the best way to prevent atrial fibrillation, the most common complication following cardiac surgery. Until now, cardiac surgeons at George Washington have used any of the three prophylactic treatments tested in the study: metoprolol, amiodarone, and atrial pacing. The findings suggest that, as a minimum, "maybe metoprolol shouldn't be used," she said.

The study included patients who were aged 18 or older with sinus rhythm and who were scheduled for coronary artery bypass surgery, isolated valve surgery, or both. After surgery, the patients were

randomized to one of four treatments: ▶ Oral metoprolol, starting with a test dose of 25 mg, followed by continued treatment at a level dependent on their heart rate (26 patients). Metoprolol was withheld when the pulse fell below 50 bpm or systolic pressure dropped below 100 mm Hg.

▶ Amiodarone alone, at a dosage of 400 mg oral amiodarone t.i.d for 7 days or until hospital discharge (35 patients). Patients on a beta-blocker prior to surgery continued to receive amiodarone to avoid atrial fibrillation triggered by beta-blocker withdrawal.

▶ Pacing prophylaxis (32 patients). During surgery patients received two epicardial pacing leads on the posterolateral wall of the right atrium. Pacing began on their postoperative arrival to the ICU and continued for 72 hours. The pacing rate was adjusted every 12 hours.

▶ Amiodarone and pacing (22 patients). The study's primary outcome, the incidence of atrial fibrillation during hos-

pitalization, occurred in 19% of patients on metoprolol, 11% of those on amiodarone alone, 9% of those on pacing alone, and in none of the patients on both amiodarone and pacing. The difference between the combination-therapy group and the metoprolol group was statistically significant. The end point occurred if atrial fibrillation continued for more than an hour, or if it was judged to require treatment.

Length of stay, a secondary outcome, averaged 7 days in the metoprolol patients, 6 days in those on amiodarone, 7.5 days in those paced, and 5.7 days in patients on the combined regimen.

Adverse events constituted another secondary outcome, and included death, myocardial infarction, tachyarrhythmia, bradyarrhythmia, and prolonged intubation. An adverse event occurred in 37% of the metoprolol patients, 16% on amiodarone, 12% managed with pacing, and 27% of those on combined therapy, Dr. Shea said. ■

Antiplatelet Agents Tied to Risk of Brain Hemorrhage

VITALS

Major Finding: Traumatic intracranial hemorrhage was seen in 6.2% of all trauma admissions in 1999-2000 and in 12.3% in 2007-2008, while the use of strong antiplatelet agents increased fivefold.

Data Source: Review of the hospital records for 526 patients admitted with intracranial hemorrhage.

Disclosures: Dr. Siracuse reported no relevant financial interests. The study was sponsored by Beth Israel Deaconess Medical Center, and the principal investigator was Dr. Carl J. Hauser.

BY RICHARD HYER

CHICAGO — Increasing rates of traumatic intracranial hemorrhage in elderly patients appeared to be related to the use of antiplatelet agents in a retrospective study.

The rise in traumatic intracranial hemorrhage (TICH) occurred without significant increases in diagnosis of atrial fibrillation or in use of warfarin (Coumadin), and overall mortality did not change, Dr. Jeffrey J. Siracuse said at the annual meeting of the Central Surgical Association.

"Patients with atrial fibrillation are at high risk for stroke and may also be at high risk for bleeding complications," said Dr. Siracuse of Beth Israel Deaconess Medical Center, Boston. These patients often are treated with anticoagulants based on their estimated risk of thromboembolism, and are likely to be taking antiplatelet agents.

The review of the hospital's trauma registry database of 5,371 patients examined records for all 526 admitted with intracranial hemorrhage during 1999-2000 (139 patients) and 2007-2008 (387

patients). Intracranial hemorrhages were considered traumatic if they were secondary to an identified external injury.

The principal cause of trauma in both groups was a simple fall from the standing position. In the 1999-2000 group, 6.2% of all trauma admissions were TICH patients; this doubled to 12.3% in the 2007-2008 group.

The study found little increase in warfarin use in either group. But the use of "strong antiplatelet agents, specifically

clopidogrel and Aggrenox, increased fivefold between the two periods," Dr. Siracuse said. In the earlier period, 27% of TICH patients were on aspirin, but by the later period, 48% were on aspirin.

Overall, the mortality of patients with TICH was unchanged between the two periods (12.4% vs. 12.2%), and there was no difference in the mean number of hospital- and ICU-free days.

"We did not see a large increase, as we thought we would, in atrial fibrillation or in Coumadin use in our TICH population. This could perhaps reflect [the fact] that Massachusetts has the highest patient/physician primary care patient ratio in the country," Dr. Siracuse said. This suggests that medical conditions were identified early and treated aggressively.

The vast majority of patients were injured by simple falls from standing, he said, and many patients on anticoagulation because of high risk for thromboembolism were also at high risk for falls. Increasing rates of TICH appeared to be associated with the use of strong antiplatelet agents rather than with increased warfarin use, he concluded. ■

Ablation Advantageous for Refractory Paroxysmal AF

BY MARY ANN MOON

In patients with paroxysmal atrial fibrillation that fails to respond to the first course of drug therapy, radiofrequency catheter ablation is superior to a different antiarrhythmic agent, according to a prospective, multicenter study.

The procedure was better than antiarrhythmic drug treatment, reducing the risk of recurrent arrhythmia and producing clinically meaningful improvements in symptoms and quality of life, said Dr. David J. Wilber of Loyola University, Maywood, Ill., and his associates.

Several studies have compared catheter ablation with drug therapy, but in small populations at a single or a few medical centers.

In their study, Dr. Wilber and his colleagues assessed 167 patients at 19 centers in the United States, Europe, Canada, and Latin America. The patients had not responded to one medication for frequently symptomatic atrial fibrillation and had not received other treatments. After randomization, 106 patients were assigned to undergo catheter ablation and 61 were given a different antiarrhythmic agent (including dofetilide, flecainide, propafenone, sotalol, or quinidine).

The patients were followed for about 1 year. The trial was halted when an interim analysis showed the clear superiority of catheter ablation, with 66% of that group showing an early treatment response that persisted during follow-

up vs. 16% of the drug therapy group.

By the end of the trial, "70% of patients treated by catheter ablation remained free of symptomatic recurrent atrial arrhythmia vs. 19% of patients treated with drug therapy," the researchers said (JAMA 2010;303:333-40).

VITALS

Major Finding: At 9 months, 66% of paroxysmal atrial fibrillation patients who received radiofrequency catheter ablation were free of treatment failure vs. 16% of patients who received drug therapy.

Data Source: A randomized, multicenter trial of 167 patients with symptomatic paroxysmal atrial fibrillation who did not respond to drug treatment.

Disclosures: Funding and ablation catheters provided by Biosense Webster. Dr. Wilber and several of the coinvestigators reported having financial ties to Biosense Webster and other device makers.

Of the 47 patients who failed to respond to the second course of drug therapy, 36 subsequently underwent ablation.

Major treatment-related adverse events occurred in five patients (4.9%) in the ablation group (one pericardial effusion, one case of pulmonary edema, one case of pneumonia, one vascular complication, and one case of heart failure). In the drug therapy group, five patients (8.8%) had life-threatening arrhythmias and disabling drug intolerance.

"These data strongly support the use of catheter ablation in patients with paroxysmal AF" who do not respond to initial antiarrhythmic drug therapy, Dr. Wilber and his associates wrote. ■