

boembolism, converting to normal sinus rhythm, and prophylaxis to prevent AF in this population.”

The panel found conflicting data on anticoagulation therapy for postoperative AF; therefore its recommendations in this area were based on expert opinion. However, the panel did recommend anticoagulation therapy in optimally selected patients with chronic AF and in those patients in whom it is likely that AF will continue.

For patients with chronic AF, the panel recommended postoperative warfarin, giving the recommendation an “A” grade, and saying the net benefit was substantial.

For those with postoperative AF, the panel recommended postoperative heparin. The recommendation received a grade of “C,” with an intermediate net benefit.

The panel found no strong evidence as to duration of anticoagulation but said physicians should take into consideration the self-limiting nature of postoperative AF.

Studies comparing rates of atrial fibrillation in off-pump vs. on-pump coronary artery bypass graft procedures yielded conflicting results, the panel said. Therefore, it could not recommend off-pump procedures as a method of reducing postoperative AF.

Biatrial pacing after surgery was found to be effective in reducing the incidence of AF, and received a “B” grade, although evidence shows that the net benefit is probably small. Inconclusive evidence precluded the recommendation of isolated left or right atrial pacing.

The guidelines are meant to be just that—guidelines, Dr. McKeown said. “Evidence-based medicine gives you a rational way to treat people, but it’s just one more piece of information you have to incorporate into the mix. It’s still an individual choice that the physician must make based on the needs of the individual patient.” ■

## Amiodarone Cuts Postop Atrial Fib

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NEW YORK — Intraoperative and postoperative treatment with amiodarone was associated with a significantly lower incidence of atrial fibrillation in patients undergoing cardiac surgery, in a comparison of case series with a total of more than 1,000 patients.

And among patients who developed atrial fibrillation despite amiodarone treatment, their length of hospital stay for atrial fibrillation was significantly reduced, Keith B. Allen, M.D., and his associates reported in a poster at the annual meeting of the International Society for Minimally Invasive Cardiothoracic Surgery.

The study compared the atrial fibrillation outcomes of 476 consecutive patients

who underwent cardiac surgery in Indianapolis from July to December 2002 without amiodarone treatment, and 592 consecutive patients who underwent cardiac surgery with amiodarone treatment from January to June 2003. Aside

from amiodarone treatment, all other facets of their medical and surgical care were the same, said the report’s authors, who were led by Dr. Allen, a cardiothoracic surgeon at St. Vincent’s Medical Center in Indianapolis.

The amiodarone regimen began with an intraoperative dose of 150 mg administered intravenously. Treatment continued postoperatively until hospital discharge with a 200 mg oral dose administered t.i.d. All patients also received metoprolol postoperatively, and magnesium sulfate during and after their surgery.

During the postoperative period, 29% of patients who had surgery without amiodarone developed atrial fibrillation, compared with 16% of patients who received amiodarone, a 45% relative cut in the atrial fibrillation rate that was statistically significant.

A second analysis looked at the average duration of hospitalization for atrial fibrillation in those patients who had this complication. The mean length of stay was 13.1 days among those who did not receive prophylactic amiodarone, and 9.4 days among patients who received the drug, a difference that was just short of statistical significance.

In a multivariate analysis that adjusted for baseline clinical and demographic differences between the two groups of patients, routine use of prophylactic amiodarone was associated with a statistically significant, 35% cut in the incidence of atrial fibrillation, Dr. Allen and his associates said. ■

### METABOLIC SYNDROME: THE CLUSTER OF CARDIOMETABOLIC RISK FACTORS<sup>1</sup>

- Decreased HDL-C
- Elevated blood pressure
- Elevated triglycerides
- Elevated fasting glucose
- Increased waist circumference (excess adipose tissue)

### ADIPOSE TISSUE IS A METABOLICALLY ACTIVE ENDOCRINE ORGAN<sup>2</sup>

- More than just a storage facility for fat—it has metabolic effects<sup>2</sup>
- Associated with abnormal endocrine function—impacts secretions of bioactive substances that help regulate lipid and glucose metabolism<sup>2</sup>
- May lead to development of cardiometabolic risk factors like dyslipidemia, elevated blood glucose, and insulin resistance<sup>2,3</sup>

### A NEWLY DISCOVERED PHYSIOLOGIC SYSTEM

- The endocannabinoid system (ECS) impacts metabolic functions<sup>4</sup>
- Consists of signaling molecules and their receptors, including the cannabinoid receptors [CB<sub>1</sub> and CB<sub>2</sub>]<sup>5,6</sup>

### CB<sub>1</sub> RECEPTORS MAY IMPACT LIPID LEVELS AND INSULIN SENSITIVITY<sup>4</sup>

- Located centrally in the brain and peripherally in liver, muscle, and adipose tissue<sup>4,8</sup>  
—ECS overactivity in adipose tissue is associated with decreases in the hormone adiponectin, which may be linked to dyslipidemia, insulin resistance, and intra-abdominal adiposity<sup>4</sup>
- At the center of a cascade of events with potential impact on cardiometabolic risk<sup>4</sup>
- May assist in regulating physiologic processes, eg, lipid and glucose metabolism<sup>4</sup>

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