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Strict Heart Rate Control Provides No Advantage Over Lenient Approach, Study Finds

Strictly controlling the heart rate of patients with atrial fibrillation provides no advantage over more lenient heart rate control, experts report in a focused update of the 2006 guidelines for the management of patients with atrial fibrillation.

The new recommendations, published in *Circulation: Journal of the American Heart Association*, the *Journal of the American College of Cardiology*, and *HeartRhythm Journal*, are updates of the American College of Cardiology/American Heart Association/European Society of Cardiology 2006 Guidelines for the Management of Patients With Atrial Fibrillation. The 2010 focused update allows experts to swiftly incorporate significant new findings into the guidelines.

Atrial fibrillation is an irregular heart rhythm that occurs when the heart's two upper chambers beat erratically, causing the chambers to pump blood rapidly, unevenly, and inefficiently. Blood can pool and clot in the chambers, increasing the risk of stroke or heart attack. More than 2 million Americans live with the condition.

The heart rate recommendation, one of several in the update, states that strict treatment to control a patient's heart rate (at less than 80 beats per minute at rest and less than 110 during a six-minute walk) is not beneficial over a more lenient approach to achieve a resting heart rate of less than 110 in patients with persistent, or continuous, atrial fibrillation with stable functioning of the ventricles, (the heart's lower chambers).

"The evidence showed rigid control did not seem to benefit patients," said L. Samuel Wann, M.D., chair of the focused update writing group and director of cardiology at the Wisconsin Heart Hospital in Milwaukee. "We don't need to be as compulsive about absolute numbers, particularly doing exercise tests and giving multiple drugs based solely on heart rate. Patients with symptoms due to rapid heart

action need treatment, and the long term adverse effects of persistent tachycardia on ventricular function are still of concern."

The evidence-based updates, which reflect major advances in disease management, include:

- * Clopidogrel -- A combination of aspirin and the oral antiplatelet drug clopidogrel "might be considered" to prevent stroke or other types of blood clots in atrial fibrillation patients who are poor candidates for the clot-preventing drug warfarin. Although warfarin remains effective, it requires patients to have regular testing to monitor its effectiveness and dosage adjustment. "It's a minor inconvenience for most, but a major inconvenience for some," Wann said.

- * Dronedarone -- New research showed dronedarone, which is administered as a pill, could reduce hospitalizations for cardiovascular events related to atrial fibrillation. Dronedarone should not be given to patients with NYHA class IV heart failure or patients who have had an episode of decompensated heart failure in the past 4 weeks, especially if they have depressed ventricular function. Dronedarone is associated with less hospitalizations and less side effects than amiodarone.

- * Catheter Ablation -- Several new or revised recommendations support the role of catheter ablation as a treatment to maintain normal heart rhythm. In catheter ablation, a tube is inserted into a blood vessel and guided to the heart, where radiofrequency energy is applied that can destroy small areas of tissue responsible for an arrhythmia.

Ablation is useful when performed for selected patients at experienced centers (in which more than 50 cases are performed annually). For those patients with symptomatic paroxysmal atrial fibrillation (comes and goes on its own), who have not had success with drug treatment, do not have severe lung disease, and have a normal or mildly dilated left atrium and normal or mildly reduced function of the left ventricle, catheter ablation "is useful in maintaining sinus rhythm."

The treatment option is also reasonable for patients with symptomatic persistent atrial fibrillation, and it may be reasonable to treat symptomatic paroxysmal atrial

fibrillation in patients with significant enlargement of the left atrium or with significant left ventricle dysfunction.

"Catheter ablation is one of the most rapidly growing procedural areas in cardiology right now, and the evidence does support that," Wann said.

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