

Management of Newly Detected Atrial Fibrillation: Recommendations from the American College of Physicians and the American Academy of Family Physicians

Summaries for Patients are a service provided by *Annals* to help patients better understand the complicated and often mystifying language of modern medicine.

The full reports are titled “Management of Newly Detected Atrial Fibrillation: A Clinical Practice Guideline from the American Academy of Family Physicians and the American College of Physicians” and “Management of Atrial Fibrillation: Review of the Evidence for the Role of Pharmacologic Therapy, Electrical Cardioversion, and Echocardiography.” They are in the 16 December 2003 issue of *Annals of Internal Medicine* (volume 139, pages 1009-1017 and pages 1018-1033). The first report was written by V. Snow, K.B. Weiss, M. LeFevre, R. McNamara, E. Bass, L.A. Green, K. Michl, D.K. Owens, J. Susman, D.I. Allen, and C. Mottur-Pilson, the Joint AAFP/ACP Panel on Atrial Fibrillation; the second report was written by R.L. McNamara, L.J. Tamariz, J.B. Segal, and E.B. Bass.

Who developed these guidelines?

The American College of Physicians (ACP) and the American Academy of Family Physicians (AAFP) developed these recommendations.

What is the problem and what is known about it so far?

Atrial fibrillation is a common abnormal heart rhythm. In atrial fibrillation, the upper heart chambers (atria) contract rapidly. Only some of the atrial beats pass to the lower heart chambers (ventricles). The heartbeat becomes irregular, leading to inefficient pumping of blood. Sometimes the cause of atrial fibrillation is unknown, but it is often due to underlying heart conditions, high blood pressure, overactive thyroid, or too much alcohol. Some people with atrial fibrillation have no symptoms, while others have a fluttering sensation in the chest, lightheadedness, shortness of breath, or chest pain. A dangerous complication of atrial fibrillation is stroke. Stroke occurs because blood clots form in the atria and travel to the brain. Blood thinners (anticoagulation) can prevent stroke in atrial fibrillation. Other treatments include medications to slow the heartbeat (rate control) or to convert it to normal rhythm (cardioversion). Doctors can use medications (medical cardioversion) or electricity (electrical cardioversion) to change atrial fibrillation to normal rhythm.

How did the ACP and the AAFP develop these recommendations?

The authors reviewed studies about atrial fibrillation to identify the benefits of blood thinners to prevent stroke, of slowing heart rate versus converting to normal rhythm, and of using medications versus electricity to convert to normal rhythm. They also examined the role of testing and anticoagulation before cardioversion. In addition, they reviewed the use of medications to maintain normal rhythm after cardioversion.

What did the authors find?

Studies showed that medications to slow the heartbeat (rate control) and thin the blood (anticoagulation) are the best treatment for most patients with atrial fibrillation. Studies did not show that rhythm control was better than rate control in reducing complications and death. The medications that worked best for rate control during both exercise and rest included atenolol, metoprolol, diltiazem, and verapamil. Digoxin only controls rate at rest. Studies showed that the side effects of medications to keep patients in normal rhythm may be greater than their benefits.

What do the ACP and AAFP suggest that patients and doctors do?

For most patients with atrial fibrillation, slowing heart rate with atenolol, metoprolol, diltiazem, or verapamil is the most appropriate treatment. Patients with atrial fibrillation should receive blood thinners to prevent stroke unless they have a condition that would make anticoagulation dangerous (such as alcoholism with frequent falls). Patients who choose conversion to normal heart rhythm instead of rate control because of symptoms can select electrical or medical cardioversion. For patients who choose cardioversion, outcomes are similar whether patients have immediate cardioversion following a special test (transesophageal echocardiogram) to make sure no blood clots exist or if they delay cardioversion until blood thinners take effect. Most patients should not take medications to maintain normal rhythm after cardioversion.

What are the cautions related to these recommendations?

These recommendations are intended to help patients and their physicians make decisions. They may not apply to all patients in all circumstances.

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