

## Newly Detected Atrial Fibrillation: AAFP Updates Guideline on Pharmacologic Management

### Key Points for Practice

- Rate control is strongly preferred to rhythm control in most patients, using nondihydropyridine calcium channel blockers and beta blockers.
- Rate control to less than 110 beats per minute at rest (lenient control) is recommended over rate control to less than 80 beats per minute (strict control).
- Long-term anticoagulation should be prescribed for all patients with atrial fibrillation, with the exception of those who have contraindications or a low stroke risk.

From the *AFP* Editors

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► See related article at <http://www.aafp.org/afp/2016/0915/p442.html>.

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A collection of Practice Guidelines published in *AFP* is available at <http://www.aafp.org/afp/practguide>.

**CME** This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz on page 286. Author disclosure: No relevant financial affiliations.

Atrial fibrillation, which can be paroxysmal or persistent, is a common arrhythmia, occurring in up to approximately 6 million adults in the United States. It is responsible for more than 750,000 hospitalizations, 130,000 deaths, and \$6 billion in health care costs annually. Patients can present without symptoms or with any number of symptoms, including irregular heart rate, palpitations, and fatigue. Rate and rhythm control and thromboembolic episode prevention via medication, electrical cardioversion ablation, and surgery are possible management options.

The American Academy of Family Physicians (AAFP) has updated its 2003 guideline to provide guidance on atrial fibrillation treatment via medication in the primary care setting. The guideline focuses on adults with nonvalvular atrial fibrillation as diagnosed by electrocardiography; atrial fibrillation with a valvular or reversible etiology is not addressed in this update.

### Recommendations

Rate control is strongly preferred to rhythm control in most patients, using nondihydropyridine calcium channel blockers and beta blockers, which are superior to digoxin. Rhythm control with amiodarone, dronedarone (Multaq), propafenone (Ryth-

mol), or sotalol (Betapace) can be considered for persons in whom rate control is ineffective and based on symptoms, exercise tolerance, and patient preference. High-quality data indicate that there are fewer hospitalizations with rate control than with rhythm control. In addition, there are significant risks and adverse effects with medications to control rhythm.

Rate control to less than 110 beats per minute (bpm) at rest (lenient control) is recommended over rate control to less than 80 bpm (strict control). However, if there is no change in symptoms, physicians should consider stricter rate control. Low-quality data indicate that lenient control is associated with a lower incidence of stroke vs. strict control, and limited data indicate that there are no differences in mortality, hospitalization, heart failure symptoms, quality of life, thromboembolic episodes, or bleeding between the two. In addition, because strict control is more difficult to attain and more medication may be needed, it is associated with greater risk of harm from adverse effects.

The risk of stroke and bleeding should be discussed with patients when anticoagulation is prescribed. Stroke risk can be determined using the continuous CHADS<sub>2</sub> or CHA<sub>2</sub>DS<sub>2</sub>-VASc, with low-quality data indicating that both scores have a modest ability to determine the risk of stroke in persons with atrial fibrillation. Although the CHA<sub>2</sub>DS<sub>2</sub>-VASc includes additional risk factors for age, vascular disease, and female sex, it is not better than CHADS<sub>2</sub> in predicting stroke risk. HAS-BLED can be used to determine bleeding risk and is slightly better for identifying the risk in patients taking warfarin (Coumadin) vs. some other scales (i.e., HEMORRHAGES, BRI, ATRIA). It can be difficult to evaluate the potential benefits

and harms of anticoagulation, because risk factors for major bleeding and stroke often overlap.

Long-term anticoagulation should be prescribed for all patients with atrial fibrillation, with the exception of those who have contraindications or a low stroke risk defined as a CHADS<sub>2</sub> score less than 2. When selecting the anticoagulant (e.g., warfarin, apixaban [Eliquis], dabigatran [Pradaxa], edoxaban [Savaysa], rivaroxaban [Xarelto]), the history and patient preferences should be taken into account. Vitamin K agonists are the first-line option, with high-quality data indicating that they have a lower stroke risk and all-cause mortality vs. placebo. They do, however, have an increased risk of major bleeding and a narrow therapeutic window, as well as monitoring requirements and changes in diet.

High-quality data indicate that the direct thrombin inhibitor dabigatran, 150 mg, decreases stroke, embolism, and intracranial hemorrhage compared with warfarin, but it is also associated with a greater risk of gastrointestinal bleeding. In addition, moderate-quality data indicate that it is also associated with a greater risk of myocardial infarction.

Factor Xa inhibitors include apixaban, rivaroxaban, and edoxaban. High-quality data indicate that apixaban decreases stroke, intracranial hemorrhage, and major bleeding compared with warfarin, with moderate-quality data also indicating a decrease in all-cause mortality. In addition, there is a decrease in stroke compared with aspirin. Moderate-quality data indicate that rivaroxaban is similar to warfarin regarding stroke prevention and major bleeding, with high-quality data indicating similarity in all-cause mortality. Moderate-quality data indicate that edoxaban is similar to warfarin regarding stroke and systemic embolism prevention, with high-quality data indicating that it is associated with decreased risk of bleeding and cardiovascular mortality.

Direct oral anticoagulants, warfarin, and aspirin plus clopidogrel (Plavix) are better than aspirin alone for stroke prevention, but all are associated with a greater risk of bleeding, except apixaban, which is associated with a risk of bleeding similar to that of aspirin. Dabigatran is the only anticoagulant that has a reversal agent for major bleeding approved by the U.S. Food and Drug Administration. Vitamin K or prothrombin complex concentrates, however, can be used as a reversal agent for vitamin K antagonists.

Available data do not indicate if one anticoagulant is superior to another. For this reason, medication should be chosen using shared decision making, taking into account cost, harms, benefits, availability of a reversal agent, and contraindications.

Combination treatment with an anticoagulant and an antiplatelet agent is not recommended for most patients. Moderate-quality data indicate that combining warfarin with clopidogrel or aspirin is associated with greater risk of major bleeding vs. warfarin monotherapy; that combining warfarin with aspirin is associated with a greater risk of ischemic stroke; and combining warfarin with clopidogrel has the same risk of ischemic stroke.

**EDITOR'S NOTE:** An article entitled "Diagnosis and Treatment of Atrial Fibrillation" published in the September 15, 2016, issue of *AFP* (<http://www.aafp.org/afp/2016/0915/p442.html>) has been updated based on this guideline.

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