

ATRIAL FIBRILLATION GUIDELINE SUMMARY

The AAFP recently released an updated clinical practice guideline on the pharmacologic management of atrial fibrillation. An executive summary appears below.

Pharmacologic Management of Newly Detected Atrial Fibrillation: An Updated Clinical Practice Guideline from the American Academy of Family Physicians

Executive Summary

Atrial fibrillation (AF) is one of the most common arrhythmia types in adults worldwide, with an estimated 2.7-6.1 million people affected in the United States.¹ AF presents as a change in heart rate with an irregular pattern, with symptoms that may worsen/change over time. Symptom presentation can vary among patients, with some being asymptomatic and others complaining of irregular heart rate, heart palpitations, lightheadedness, extreme fatigue, shortness of breath, anxiety, and chest pain. In addition to an increased risk of mortality, myocardial infarction, heart failure exacerbation, and cardiomyopathy,²⁻⁵ patients who have AF have a significantly increased risk of stroke; almost a quarter of all strokes in the elderly are related to AF.⁶ Management options for AF involve rate control, rhythm control, and/or prevention of thromboembolic events. Stroke prophylaxis is a mainstay of management for individuals with AF who have additional risk factors for stroke. Until recently, the main treatment for stroke prophylaxis was vitamin K antagonists (VKAs) such as warfarin. Newer direct oral anticoagulants offer an alternative to VKAs for prevention of stroke in patients who have AF.

A guideline development group (GDG) consisting of family physicians and a consumer representative was convened to update the 2003 guideline *Management of Newly Detected Atrial Fibrillation*.⁷ Specifics on the guideline development panel and process can be found in the AAFP *Clinical Practice Guideline Manual*.⁸ The GDG reviewed the 2003 guideline and 2 comparative effectiveness reviews from the Agency for Healthcare Research and Quality (AHRQ).^{9,10} A targeted, updated literature search was completed using the methods outlined by the AHRQ evidence reports. The evidence from the systematic reviews was evaluated using

a modified version⁸ of the GRADE¹¹ system to rate the quality of the evidence for each outcome and to determine the overall strength of each recommendation. Guideline recommendations were finalized based on consensus of the GDG. Patient-oriented outcomes were prioritized in the guideline recommendations. Outcomes assessed included maintenance of ventricular rate and sinus rhythm; symptom relief; quality of life; all-cause and cardiovascular mortality; stroke; systemic embolism; cardiovascular events; hospitalizations; major and minor bleeding; and other adverse events due to medications. The recommendations were worded to reflect the strength and direction of the recommendation, and the quality of the evidence was listed parenthetically. Tables and quantitative risk information provided the risks and benefits of different medications as well as the evaluation of the evidence for patient-centered outcomes to facilitate shared decision-making between patients and their primary care clinicians.

The purpose of this updated guideline is to provide clinical recommendations for primary care physicians to pharmacologically manage atrial fibrillation based on the available evidence. While other treatments, such as surgery, were deemed outside the scope of this guideline, family physicians should be aware of the full range of options and discuss these with their patients. Symptoms in the majority of patients with AF can be managed pharmacologically using a lenient rate-control strategy. The preferred treatment options for rate control include non-dihydropyridine calcium channel blockers and beta blockers. In patients with atrial fibrillation and additional risk factors for stroke, chronic anticoagulation is recommended. Prior to initiating treatment, clinicians should discuss the benefits and harms of the different anticoagulants, including potential medication cost, lifestyle modifications, and risk of bleeding. Careful risk assessment is essential, as patients with a low risk of stroke may not be appropriate for anticoagulation. Due to the increased risk of bleeding, dual therapy with aspirin and anticoagulants should be avoided. The specific recommendation statements are outlined below.

Recommendation 1: The AAFP strongly recommends rate control in preference to rhythm control for the majority of patients who have atrial fibrillation (strong recommendation, moderate quality evidence). Preferred options for rate-control therapy include non-dihydropyridine calcium channel blockers and beta blockers. Rhythm control may be considered for certain patients based on patient symptoms, exercise tolerance, and patient preferences (weak recommendation, low quality evidence).

Recommendation 2: The AAFP recommends lenient rate control (<110 beats per minute resting) over strict rate control (<80 beats per minute resting) for patients who have atrial fibrillation (weak recommendation, low quality evidence).

Recommendation 3: The AAFP recommends that clinicians discuss the risk of stroke and bleeding with all patients considering anticoagulation (good practice point). Clinicians should consider using the continuous CHADS₂ or continuous CHA₂DS₂-VASc for prediction of risk of stroke (weak recommendation, low quality evidence) and HAS-BLED for prediction of risk for bleeding (weak recommendation, low quality evidence) in patients who have atrial fibrillation.

Recommendation 4: The AAFP strongly recommends that patients who have atrial fibrillation receive chronic anticoagulation unless they are at low risk of stroke (CHADS₂ <2) or have specific contraindications (strong recommendation, high quality evidence). Choice of anticoagulation therapy should be based on patient preferences and patient history. Options for anticoagulation therapy may include warfarin, apixaban, dabigatran, edoxaban, or rivaroxaban.

Recommendation 5: The AAFP strongly recommends against dual treatment with anticoagulant and antiplatelet therapy in most patients who have atrial fibrillation (strong recommendation, moderate quality evidence).

For further reading on the evidence and recommendations and to see the shared-decision making tables, please refer to the AAFP summary and full guideline here: <http://www.aafp.org/patient-care/clinical-recommendations/all/atrial-fibrillation.html>. For further information with notes from a guideline author, please refer to the *AAFP News* story here: <http://www.aafp.org/news/health-of-the-public/20170605afibguideline.html>.

Note: These recommendations are provided only as assistance for clinicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. All AAFP guidelines are scheduled for a review 5 years after completion, or sooner if new evidence becomes available.

Financial support: Financial support for this guideline comes exclusively from the operating budget of the American Academy of Family Physicians.

Conflicts of interest: authors report none.

Jennifer L. Frost, MD, FAAFP¹; Doug Campos-Outcalt, MD, MPA²; David Hoelting, MD³; Michael LeFevre, MD, MSPH⁴; Kenneth W. Lin, MD, MPH, FAAFP⁵; William Vaughan⁶; Melanie D. Bird, PhD¹

¹American Academy of Family Physicians, Leawood, KS; ²Mercy Care Plan, Phoenix, AZ; ³Pender-Mercy Medical Center, Pender, NE; ⁴Department of Family and Community Medicine, University of Missouri, Columbia, MO; ⁵Department of Family Medicine, Georgetown University, Washington, DC; ⁶Consumers United for Evidence-Based Healthcare, Baltimore, MD.

References

- Centers for Disease Control and Prevention. Atrial fibrillation fact sheet. http://www.cdc.gov/dhbsp/data_statistics/fact_sheets/fs_atrial_fibrillation.htm. Accessed Sep 13, 2016.
- Krahn AD, Manfreda J, Tate RB, Mathewson FA, Cuddy TE. The natural history of atrial fibrillation: incidence, risk factors, and prognosis in the Manitoba Follow-Up Study. *Am J Med*. 1995;98(5):476-484.
- Poole-Wilson PA, Swedberg K, Cleland JG, et al.; Carvedilol Or Metoprolol European Trial Investigators. Comparison of carvedilol and metoprolol on clinical outcomes in patients with chronic heart failure in the Carvedilol Or Metoprolol European Trial (COMET): randomised controlled trial. *Lancet*. 2003;362(9377):7-13.
- Maggioni AP, Latini R, Carson PE, et al.; Val-HeFT Investigators. Valsartan reduces the incidence of atrial fibrillation in patients with heart failure: results from the Valsartan Heart Failure Trial (Val-HeFT). *Am Heart J*. 2005;149(3):548-557.
- Wang TJ, Larson MG, Levy D, et al. Temporal relations of atrial fibrillation and congestive heart failure and their joint influence on mortality: the Framingham Heart Study. *Circulation*. 2003;107(23):2920-2925.
- Lloyd-Jones D, Adams RJ, Brown TM, et al.; WRITING GROUP MEMBERS; American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2010 update: a report from the American Heart Association. *Circulation*. 2010;121(7):e46-e215. Erratum in *Circulation*. 2010;121(12):e260. Stafford, Randall [corrected to Roger, Véronique L]; *Circulation*. 2011;124(16):e425.
- Snow V, Weiss KB, LeFevre M, et al.; AAFP Panel on Atrial Fibrillation; ACP Panel on Atrial Fibrillation. Management of newly detected atrial fibrillation: a clinical practice guideline from the American Academy of Family Physicians and the American College of Physicians. *Ann Intern Med*. 2003;139(12):1009-1017.
- American Academy of Family Physicians. Clinical Practice Guideline Manual. <http://www.aafp.org/patient-care/clinical-recommendations/cpg-manual.html>. Accessed May 24, 2016.
- Al-Khatib SM, Lapointe NA, Chatterjee R, et al. Treatment of atrial fibrillation. Comparative effectiveness review no. 119, Rockville, MD: Agency for Healthcare Research and Quality. AHRQ publication no. 13-EHC113-EF.
- Lopes RD, Crowley MJ, Shah BR, et al. Stroke prevention in atrial fibrillation. Comparative effectiveness review no. 123, Rockville, MD: Agency for Healthcare Research and Quality. AHRQ publication no. 13-EHC113-EF.
- Guyatt G, Oxman AD, Akl EA, et al. GRADE guidelines: 1. Introduction-GRADE evidence profiles and summary of findings tables. *J Clin Epidemiol*. 2011;64(4):383-394.