

Take 3 – Practical Practice Pointers[®] October 22, 2018 Edition

The Atrial Fibrillation Edition: Guidelines, Co-Management, PAF

From the Guidelines

1) Atrial Fibrillation Refresher From 2 Guidelines

Atrial fibrillation (AF) affects more than 3 million American adults, and that number is expected to double over the next 25 years. AF is associated with a fivefold risk of stroke, threefold risk of heart failure, and twofold risk of dementia and mortality. Symptoms can range from nonexistent to severe.

Two guidelines for AF were released in 2014. One by the American Heart Association (AHA), American College of Cardiology (ACC), and Heart Rhythm Society (HRS), in collaboration with the Society of Thoracic Surgery, and the other from the American Academy of Neurology (AAN).

The AHA/ACC/HRS guideline contained four significant changes:

1) CHA₂DS₂-VASc Replaces CHADS₂

To estimate the risk of stroke in patients with nonvalvular AF, the guideline recommended replacing the CHADS₂ score with the more comprehensive CHA₂DS₂-VASc score, whereby one point is given each for CHF, hypertension, diabetes, vascular disease (prior MI, PAD, aortic plaque), age 65 to 74, and sex category (female), and two points each for aged 75 or older and prior stroke/transient ischemic attack (TIA)/thromboembolism. It was felt that this helped to better define risk.

2) Aspirin's Role Diminished

Aspirin carries with it a small but definable bleeding risk and many trials have shown either no benefit or weak benefit in terms of stroke reduction, so there's a diminished role, if any role, for aspirin to lower stroke risk.

3) New Anticoagulants Join Treatment Options

Whereas the only anticoagulant previously recommended was warfarin, the guideline now includes recommendations for the three new anticoagulants for nonvalvular AF that entered the marketplace in the past two years. For patients with nonvalvular AF with prior stroke, TIA, or a CHA₂DS₂-VASc score of 2 or greater, oral anticoagulants are recommended. Options include warfarin (INR 2.0–3.0) (LOE - A), dabigatran etexilate (Pradaxa) (B), rivaroxaban (Xarelto) (B), or apixaban (Eliquis) (B). Cost is a barrier to widespread use of the newer oral anticoagulants. Dabigatran and rivaroxaban are contraindicated in patients with end-stage renal disease or on hemodialysis. Apixaban has recently been approved for patients on hemodialysis, but there is almost no clinical experience with this yet. With a CHA₂DS₂-VASc score of zero, the guideline indicates a patient does not need anticoagulants. With a score of 1, anticoagulation should only be considered after a comprehensive discussion of known risks and theoretical benefits.

4) Rate Control Clarified

- Control of the ventricular rate using a beta blocker or nondihydropyridine calcium channel antagonist is recommended for patients with paroxysmal, persistent, or permanent AF (B)

- Intravenous administration of a beta blocker or nondihydropyridine calcium channel blocker is recommended to slow the ventricular heart rate in the acute setting in patients without pre-excitation. In hemodynamically unstable patients, electrical cardioversion is indicated (B)
- In patients who experience AF-related symptoms during activity, heart rate control should be assessed during exertion, adjusting pharmacological treatment as necessary to keep the ventricular rate within the physiological range. (C)
- A heart rate control (resting heart rate <80 beats per minute (bpm) strategy is reasonable for symptomatic management of AF (B)
- A lenient rate-control strategy (resting heart rate <110 bpm) may be reasonable as long as patients remain asymptomatic and left ventricular systolic function is preserved (B)
- Oral amiodarone may be useful for ventricular rate control when other measures are unsuccessful or contraindicated. (C)

5) More Prominent Role for Catheter Ablation

The guideline suggests a more prominent role for radio-frequency ablation, even as primary therapy in very symptomatic people. In patients with recurrent symptomatic paroxysmal AF, catheter ablation is a reasonable initial rhythm-control strategy prior to therapeutic trials of antiarrhythmic drug therapy, after weighing risks and outcomes of drug and ablation therapy (B).

In 2014, the American Academy of Neurology released level B and C recommendations on the prevention of stroke in patients with nonvalvular AF. The recommendations were congruent with the ACC/AHA guidelines providing more detail and better guidance about risk stratification through the use of the CHA₂DS₂-VASc score.

Comment:

The use of a risk calculator should now be common practice for these patients. See the link below. The trend toward less aspirin use goes along with the recent Take 3 Pointer regarding the use of aspirin for primary prevention of cardiovascular event.

References:

- January CT, Wann ST, Alpert JS, et al. 2014 AHA/ACC/HRS guideline for the management of **patients with atrial fibrillation**: Executive summary. *J Am Coll Cardio*; 2014; 28 March, 2014. [Article](#)
- Culebras A, Messe SR, Chaturvedi S, et al. Summary of evidence-based guideline update: Prevention of stroke in nonvalvular atrial fibrillation. *Neurology*. Feb 25 2014;82(8):716-24. [Article](#)
- CHA₂DS₂-VASc Risk Calculator can be found at [Calculator Link](#)

From the Literature and the Carilion Clinic Specialty Council

2) Guide for Co-Managing Patients with Atrial Fibrillation

Carilion Clinic is in the process creating a more explicit, collaborative, and consistent process for managing patients with atrial fibrillation (AF). Part of that process is the creation of “co-management agreements.” This pointer highlights the recently distributed AF co-management agreement and is certainly applicable beyond our system.

Primary Care Clinician Primarily Managed:

- Paroxysmal
- Asymptomatic
- None or minimal symptoms such as occasional palpitations
- New onset rate control and anticoagulation

Cardiology Primarily Managed:

- Persistent if rhythm control sought
- Permanent to seek decision on prognosis
- Moderate to severe symptoms
- For advanced care options such as ablation or pacemaker

Prepping and Documenting for referral:

- Signs and symptoms
- Medication List Updated
- Diagnostic testing:
 - TSH with reflex T4
 - Epworth sleepiness scale (See reference below)
 - Sleep Study (if needed) – in parallel with referral
 - Echocardiogram (consider)
 - Holter Monitor (consider)

My Comment:

As discussed above, this is a common problem and one that we in primary care should feel comfortable in co-managing. Of concern, a 2016 study found that despite the 2014 guidelines, in a real-world cardiac outpatient population of AF patients with a moderate to high risk of stroke, more than 1 in 3 were treated with aspirin alone without oral anticoagulation (OAC). Let's be sure our patients aren't part of that group!

See the link below for the Epworth Sleepiness Scale.

References:

Carilion Clinic Atrial Fibrillation Co-Management Agreement

Epworth Sleepiness Scale: [Link](#)

Hus J, et al Aspirin Instead of Oral Anticoagulant Prescription in Atrial Fibrillation Patients at Risk for Stroke. Journ Am Coll Card. June 2016; 67(25): 2913-23. [Link](#)

Question from a Colleague

3) Anticoagulation in Paroxysmal Atrial Fibrillation (PAF)?

Question: What is the recommended approach for anticoagulation in patients diagnosed with paroxysmal atrial fibrillation (PAF)?

Answer: By definition, PAF spontaneously reverts to sinus rhythm within seven days of onset. This classification applies to episodes of AF that last more than 30 seconds and that are unrelated to a reversible cause. If the AF is secondary to cardiac surgery, pericarditis, myocardial infarction, hyperthyroidism, pulmonary embolism, pulmonary disease, or other reversible causes, therapy is directed toward the underlying disease as well as the AF.

It is not known whether patients with infrequent episodes of PAF or episodes of short duration are at the same level of risk as those with longer or more frequent episodes. There are no good data to establish a threshold of duration or frequency of AF for the initiation of antithrombotic therapy. Expert opinion recommends that the decision to anticoagulate be dictated on an individual's CHA2DS2-VASc risk score and not be based on the frequency or duration of PAF. While this approach may have its limitations, this approach best minimizes an individual's risk for stroke. As with other medical therapies, this should be discussed with the patient and patient preference should be considered.

As a reminder, see Pointer #1 for anticoagulation recommendations.

Comment:

Ironically, this question also came up this past week with one of my patients as well! It demonstrates that even with disorders as common as atrial fibrillation, there is still so much that is not known and we must do the best we can in the midst of uncertainty and apply this uncertainty to the care of individual patients.

This is indeed the "art" of medicine.

Reference:

See Pointer #1

Feel free to forward Take 3 to your colleagues. Glad to add them to the distribution list.

Mark

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