Joint European Atrial Fibrillation Guidelines Break New Ground
Caring for the Ages
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The 2016 joint European guidelines on management of atrial fibrillation break new ground by declaring as a strong Class 1A recommendation that the novel oral anticoagulants are now the drugs of choice – preferred over warfarin – for stroke prevention.

The joint guidelines from the European Society of Cardiology and the European Association for Cardio-Thoracic Surgery recommend that warfarin’s use be reserved for the relatively small proportion of atrial fibrillation (AF) patients who are ineligible for the 4 commercially available novel oral anticoagulants (NOACs). That’s mainly patients with mechanical heart valves, moderate to severe mitral stenosis, or severe chronic kidney disease.

The EAS/EACTS guidelines, taken together with the American College of Chest Physicians guidelines on antithrombotic therapy for venous thromboembolic disease released in 2016 suggest that the old war horse warfarin is being eased out to pasture. The ACCP guidelines recommend any of the four NOACs — apixaban, dabigatran, edoxaban, or rivaroxaban — be used preferentially over warfarin in the treatment of venous thromboembolism (Chest 2016;149[2]:315–52). Both sets of guidelines cite compelling evidence that the NOACs are significantly safer than warfarin yet equally effective.

The ESC/EACTS guidelines are a full rewrite containing numerous departures from the previous 2012 AF management guidelines as well as from current ACC/AHA guidelines. The report includes more than 1,000 references. 80% of the 154 recommendations provide Class I or IIa guidance. 2/3 of the recommendations are Level of Evidence A or B.

Targeted Screening

The guidelines issue a strong call for greater use of targeted ECG screening in populations at risk for silent AF, including stroke survivors and the elderly. And AF should always be documented before starting treatment, given that all of the treatments carry risk.

Once the diagnosis is established, it's essential to address in a structured way 5 domains of management:

• Acute rate and rhythm control;
• Management of precipitating factors, including underlying cardiovascular conditions such as hypertension or valvular heart disease; assessment of stroke risk using the CHA2DS2-VASc scoring system;
• Assessment of heart rate; and
• Evaluation of the impact of AF symptoms on the patient's life, including fatigue and breathlessness, using a structured instrument such as the modified European Heart Rhythm Association symptom scale.

Men with a CHA2DS2-VASc score of 1 and women with a score of 2 should be considered for anticoagulation. And the treatment should be recommended — not merely considered — for men with a score of >1 and women with a score of >2; that's a Class Ia recommendation. The use of a specific bleeding risk score is no longer recommended in AF patients on oral anticoagulation. The emphasis has shifted to reduction of modifiable bleeding risk factors, including limiting alcohol intake to <8 drinks per week, control of HTN, and discontinuing antiplatelet and anti-inflammatory agents.

Consideration of left atrial appendage occlusion devices should be reserved for the small percentage of patients who have clear contraindications to all forms of oral anticoagulation. The task force concluded that patients who have bleeding on oral anticoagulation can often be managed with local therapy and discontinuation of anticoagulation therapy for a day or 2 before resumption. However, decisions regarding resumption of a NOAC or warfarin after an intracranial bleed should be handled by an interdisciplinary panel composed of a stroke neurologist, a cardiologist, a neuroradiologist, and a neurosurgeon.
The guidelines include a proposal for the formation of AF heart teams along the lines of the heart teams central to decision making regarding transcatheter versus surgical aortic valve replacement. The AF heart team should be composed of a cardiologist with expertise in antiarrhythmic drugs, an interventional electrophysiologist, and a cardiac surgeon having expertise in surgical AF ablation. The purpose of these AF heart teams is to provide the best possible advice in challenging situations involving extensive catheter ablation or AF surgery, as well as reversal to a rate control strategy in severely symptomatic patients.

**Evidence-Based Options**

Evidence-based treatment options in patients with symptomatic AF after failed catheter ablation include minimally invasive surgery with epicardial pulmonary vein isolation, more extensive catheter ablation, and hybrid procedures. The guidelines state that the data supporting catheter ablation to achieve long-term rhythm control are now sufficiently strong so that this intervention should be considered as a first-line option alongside antiarrhythmic drugs as a matter of patient preference in the setting of symptomatic paroxysmal AF regardless of whether the patient has CAD, heart failure, valvular heart disease, or no structural heart disease.

Catheter ablation using radiofrequency energy or cryoablation should target complete isolation of the pulmonary veins. “Additional ablation lines do not provide demonstrable clinical benefit and the Cochrane group, which was commissioned by the guidelines task force. The Cochrane review of 8 published studies concluded that Maze surgery under such circumstances was associated with a twofold increased freedom from AF, atrial flutter, and atrial tachycardia (Cochrane Database of Systematic Reviews. doi:10.1002/14651858.CD012088).

The AF management guidelines are supported by the ESC Pocket Guidelines app, which includes an overall AF treatment manager developed by the European Union–funded CATCH ME (Characterizing Atrial Fibrillation by Translating its Causes Into Health Modifiers in the Elderly) project. The 17-member AF management task force was drawn from cardiology, stroke neurology, cardiac surgery, and specialist nursing. Only recommendations supported by at least 75% of task force members made it into the guidelines (Eur Heart J. 2016;37:2893–962).