

Stroke Prevention Tops New Atrial Fib Guidelines

BY MITCHEL L. ZOLER
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New guidelines for managing patients with atrial fibrillation sharpened the definition of who should get antithrombotic prophylaxis and elevated the role for catheter ablation for this increasingly common disorder.

The atrial fibrillation (AF) guidelines, published in August by a committee assembled by the American College of Cardiology, the American Heart Association, and the European Society of Cardiology, "simplifies therapy and expands the indications for anticoagulation," said Dr. Lars Rydén, a cardiologist and professor emeritus at the Karolinska Institute, Stockholm, and cochair of the guidelines committee.

A revision of guidelines first released in 2001, "the new guidelines focus more on [each patient's] total risk for thromboembolism than the previous guidelines, and bring in a number of factors that in-

crease the risk," Dr. Rydén said in an interview. "We're telling people to look at a patient's total risk when deciding on anticoagulation. This risk may change over time, and there is a need to reevaluate patients." The revision also makes the AF guidelines more consistent with other guidelines that deal with antithrombotic treatment.

The new guidelines call for thromboembolism prophylaxis with aspirin, at a dosage of 81-325 mg/day, for all patients with AF who are not receiving warfarin (J. Am. Coll. Cardiol. 2006;48:854-906). The guidelines also identify five types of moderate risk factors that identify patients who could either receive aspirin or are candidates for prophylaxis with warfarin, with a target international normalized ratio (INR) of 2.5 and a range of 2.0-3.0.

Another three clinical findings were defined as high-risk factors that each mandate prophylaxis with warfarin as does having two or more moderate risk factors. (See box.) The INR target is the same.

The guidelines also identified four less-validated or weaker risk factors that don't warrant changing the basic aspirin regimen. These four factors are female gender, an age of 56-74 years, the presence of coronary artery disease, and the presence of thyrotoxicosis.

Universal prophylaxis with aspirin or warfarin marks a significant change in what's been standard practice in the United States, Europe, and elsewhere. "Presently, there is huge undertreatment in clinical practice for decreasing the risk of thromboembolism in patients with AF," Dr. Rydén said. "Proper management according to the guidelines will prevent a number of strokes and other manifestations of thromboembolism."

Another noteworthy change from the 2001 guidelines was the larger role given to catheter ablation of arrhythmogenic foci. The new guidelines say ablation is reasonable "when pharmacological therapy is insufficient or associated with side effects."

Setting catheter ablation as a second-line therapy reflected the rapid acceptance of the technique since it was first reported in the late 1990s.

The 2001 guidelines said that catheter ablation had produced promising results but had not yet been widely applied, and the method was listed as a tertiary option or lower.

"The guidelines underline that [ablation] is an interesting and very promising method, but there is still a need for much more exact information on the absolute benefits, risk/benefit ratio, and long-term complications," Dr. Rydén said.



Transesophageal echocardiographic image of a mobile and protruding thrombus (arrow).

Dr. Rydén said that a reasonable trial of pharmacotherapy would involve trying at least two different drugs or drug combinations, and giving each a reasonable interval to work. "At present, ablation is a technique [used] when other treatment modalities are contraindicated, stopped due to side effects, or have unsatisfactory value."

The new guidelines also provide a comprehensive sequence for dealing with AF patients.

"It is probable that patients with AF are sometimes subjected to many attempts to reestablish sinus rhythm. But many patients would do as well with proper rate control," Dr. Rydén said.

The guidelines say that at least one attempt to restore sinus rhythm is reasonable, but that further attempts should be based on the severity of arrhythmia-related symptoms balanced against the risk of using antiarrhythmic drugs.

Antithrombotic Prophylaxis for Atrial Fibrillation Patients

Risk Category	Risk Factors	Treatment for One Risk Factor
High	History of stroke, transient ischemic attack, or embolism; mitral stenosis; prosthetic heart valve; two or more moderate risk factors	Warfarin to target INR 2.5 (range 2.0-3.0)
Moderate	Age \geq 75 years, hypertension, heart failure, left ventricular ejection fraction \leq 35%, diabetes.	Daily aspirin or warfarin to target INR 2.5 (range 2.0-3.0)
All others	—	Aspirin 81-325 mg/day

Source: Journal of the American College of Cardiology

ELSEVIER GLOBAL MEDICAL NEWS

Groups Issue Guidelines on Ventricular Arrhythmia and SCD

BY ALICIA AULT
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In an attempt to pull together all the relevant data into one consensus reference guide, several prominent American and European cardiology professional organizations have issued guidelines for the diagnosis and treatment of ventricular arrhythmias and the prevention of sudden cardiac death.

The guidelines were issued by the American College of Cardiology, the American Heart Association, and the European Society of Cardiology, and were developed in collaboration with the European Heart Rhythm Association and the Heart Rhythm Society.

The joint statement consolidates at least 24 guidelines, papers, and statements, and incorporates evidence accumulated since publication of those various reports.

It addresses acute and chronic therapies, including pharmacologic interventions, surgery and revascularization, ablation, and implantation of implantable cardioverter defibrillators (ICDs), and other devices.

"We have consciously attempted to create a streamlined document that would be useful specifically to locate recommendations on the evaluation and treatment of patients who have or may be at risk for ventricular arrhythmias," Dr. A. John Camm, European cochair of the guideline writing committee, said in a statement. "We are pleased that this consensus document has the support of all the major cardiovascular societies in Europe and the U.S.," he said.

The guidelines are "an attempt to summarize the state of knowledge and put it into usable recommendations for the practicing clinician," Dr. Robert J. Myerburg, a spokesman for the ACC and a professor of medicine and physiology at the University of Miami, said in an interview.

"There will be new information coming out which will modify the approaches recommended in this document," he said, but he added that it is unlikely that the guidelines will be updated soon, inasmuch as it took 3 years to pull them together.

"So much effort went into it in terms of getting consensus and smoothing out the points where there were various viewpoints," he said.

One area where varying viewpoints were brought together: recommendations for prophylactic implantable defibrillator implantation.

"The inconsistencies occurred because clinical investigators chose different ejection fractions for enrollment in trials of therapy, average values of the ejection fraction have been substantially lower than the cut-off value for enrollment, and subgroup analyses of clinical trial populations based on ejection fraction have not been consistent in their implications," said Dr. Douglas P. Zipes, who served as cochair of the guideline writing committee.

"The result was substantial differences among guidelines," he added.

The joint guidelines make recommendations for ejection fractions less than or equal to a range of values.

For instance, in various guidelines issued over the last few years, European and American cardiology societies had each reached somewhat different conclusions on the

levels of evidence supporting ICDs as primary prevention for patients with left ventricular dysfunction due to a prior myocardial infarction, New York Heart Association class II or III heart failure, and ejection fractions of 30% or less, or of 30%-35%.

The ACC/AHA/ESC guidelines reached the consensus that for all patients with left ventricular dysfunction due to a prior MI, there is class

I, level A evidence that ICD implantation is an appropriate preventive therapy.

These are recommendations—not standards, Dr. Myerburg said.

And cultural, financial and societal considerations may impact how the guidelines are applied. The guidelines "take into consideration that not all therapies and recommendations are available in all segments of society" or everywhere in the world, Dr. Myerburg said.

The guidelines' executive summary is published in the societies' journals and online at the ACC, AHA, and ESC Web sites.

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