



April 30, 2008

## **Cardiovascular News Update**

Dear Colleague,

Westside Medical Associates of Los Angeles (WMALA) in conjunction with Westside Medical Imaging (WMI) would like to provide you with this weekly update on important new developments in cardiovascular care.

### WMALA AND OUR COMPREHENSIVE APPROACH TO ATRIAL FIBRILLATION

WMALA's diagnostic rhythm monitoring and treatment capabilities include Holter monitoring, remote ambulatory transtelephonic monitoring, insertion of subcutaneous loop recorders, Echocardiography, and customized protocols for 64 slice cardiac CT imaging of atrial appendage and pulmonary veins. Our therapies for atrial fibrillation include Catheter Ablation by our expert electrophysiologist, Arshia Noori MD along with other medical therapies for rate and rhythm control.

### ACC/AHA/ESC 2006 Guidelines for Management of ATRIAL FIBRILLATION

These guidelines emphasize careful assessment of patients for stroke risk factors and indications for anticoagulant therapy. The multifactorial risk factors for stroke in patients with AF are: age, atherosclerosis, hypertension, thrombus in left atrial appendage, and complex thromboembolic mechanisms distinct from the rhythm disturbance. Except for selected younger patients with lone AF and no other risk factors for thromboembolism, all patients should receive anticoagulant therapy with the agent most appropriate for the clinical situation. Patients who have converted to sinus rhythm require assessment for overall stroke risk.

### Ideal Patient for Atrial Fibrillation Catheter Ablative Intervention

- Paroxysmal atrial fibrillation
- Symptomatic (palpitations...)
- Small left atrial size
- Younger
- Contraindication to long-term anticoagulation therapy

### Ablation Offers the Possibility of Cure for Atrial Fibrillation

Catheter ablation has proved to be a very effective treatment for AF and offers the possibility of durable cure. Greater operator experience and consistency of technique contribute to recent overall cure rates (without long-term drug therapy) that approach 80%. Cure rates, while not 100%, are 2 to 3 times higher than the highest rates achieved with AAM. The overall durability of cure during multiyear follow-up periods awaits clarification by long-term study data.

### Trial of Circumferential Pulmonary Vein Ablation (CPVA)

- 146 patients, mean age 57 years, with chronic AF
- Randomly assigned to amiodarone 200 mg/d with or without CPVA
- Control group (n = 69):
  - 67 patients (97%) underwent a second cardioversion for recurrent AF during the first 3 months

Early detection saves lives. That's what we do. Find out more at Westside Medical Imaging's website at [www.westside-medimaging.com](http://www.westside-medimaging.com)

- 53 patients (77%) crossed over to CPVA within 6 months
- At 12 months, 40 patients (58%) were free of AF and no longer taking AAM
- CPVA group (n = 77)
  - 18 patients (23%) underwent a second cardioversion for recurrent AF or atrial flutter during the first 3 months
  - At 12 months, 57 patients (74%) were free of AF and no longer taking AAM

## Treat it Early as "AF Begets AF"

With time, remodeling of atrial tissue and the conduction system causes chronic AF and makes conversion from AF to sinus rhythm more difficult. Lack of contraction leads to increased left atrial diameter; "mechanical remodeling" may result from atrial fibrosis. In 1995, elegant studies in the goat model of AF prove that "AF begets AF". The longer atrial tissues experience chaotic electrical activity, the more likely they are to remain in AF.

## Atrial Fibrillation Epidemiology

AF is the most common arrhythmia in the US adult population. 2.3 million Americans were affected in the year 2000; the number is expected to double by 2050. The incidence of AF doubles with each decade of life; the prevalence of the disease increases as the longevity of the population increases. In a large cross-sectional study (N = 1.89 million), AF prevalence increased from 0.1% of adults <55 years old to 9% of those ≥80 years; 3.8% of people older than 60 years had AF

## Acute Atrial Fibrillation

Acute AF constitutes an episode that is less than 48 hours. In two thirds of patients with acute AF, conversion to sinus rhythm occurs spontaneously within 24 hours, and in half of the remaining third within 48 hours. Paroxysmal AF occurs in fits, accompanied by rapid ventricular conduction. Permanent chronic AF is generally found to be a frequent outcome of paroxysmal AF, developing within a few years of the first arrhythmic episode

## AF and Risk for Stroke

The annual rate of ischemic stroke is approximately 5% among people with nonvalvular AF, 2 to 7 times that of people without AF. The rate of brain ischemia (TIAs and "silent" strokes) exceeds 7%. Long-term follow-up studies suggest the following: In the Framingham study, people with rheumatic heart disease and AF had a 17-fold increase in stroke risk compared with age-matched controls and a 5-fold increase compared with those who had nonrheumatic AF. The Manitoba Follow-up Study states that AF doubled stroke risk independently of other factors. The Whitehall and British Regional heart studies claims that people with nonrheumatic AF had relative risk for stroke of 6.9 and 2.3, respectively. The ALFA study had 2.4% incidence of thromboembolism over a mean 8.6 months of follow-up. It states that risk increases with age: in the Framingham cohort, annual attributable stroke risk was 1.5% for participants aged 50 to 59 years, 23.5% for those aged 80 to 89 years.

[Westside Medical Associates of Los Angeles \(WMALA\) and Westside Medical Imaging \(WMI\) are premier centers in cardiac diagnosis and treatment.](#)

Please feel free to contact

[Norman Lepor MD, Hooman Madyoon MD, Ivor Geft MD or Arshia Noori MD](#)

at (310) 289-9955

or check our website at [www.westsidemedimaging.com](http://www.westsidemedimaging.com).

If you would like these newsletters to be sent to other friends or colleagues, please note their names and corresponding email addresses by clicking [here](#)

If you do not wish to receive future newsletters, you can unsubscribe by clicking [here](#). Please include your full name and email address.