

Atrial Fibrillation

General

- Definition: a supraventricular tachyarrhythmia characterized by uncoordinated atrial activation with consequent deterioration of mechanical atrial function
- most common cardiac arrhythmia
- impairs cardiac function and increases stroke risk
- incidence increases with age

Epidemiology/risk factors

- 1% of patients under 60; 8% older than 80
- RF: HTN, CAD in developed countries; Rheumatic heart disease in developing countries

Symptoms

- most commonly palpitations, dyspnea, fatigue, lightheadedness, and chest pain.
- patients may be asymptomatic.
- may present with stroke, overt heart failure, or cardiovascular collapse. Because symptoms are nonspecific, they cannot be used to diagnose and determine the onset of atrial fibrillation.

Diagnosis

- EKG; Holter
- evaluate cardiac function and identify common comorbid conditions CBC, complete metabolic profile, TSH, CXR (pulmonary processes causing a fib?), echocardiography

Treatment and follow-up

Rhythm control - for patients in whom rate control is not possible or who are still symptomatic despite adequate rate control

- Data show that patients assigned to rhythm control have more hospitalizations from adverse cardiovascular events, more serious adverse effects from medications, and the same rate of thromboembolic events compared with patients assigned to rate control
- cardioversion: anticoagulation necessary around the time of procedure
- antiarrhythmics

Rate control - recommended for most patients- beta blockers and calcium channel blockers(non-dihydropyridine, verapamil, diltiazem); less strict rate control shown to be ok; less than 110 at rest as long as LV EF greater than 40%

Thromboembolism prevention

CHADS2 score for stroke risk: for nonvalvular AF: 1 point each for CHF, HTN, Age greater than or equal to 75, Diabetes; 2 points for h/o prior TIA, stroke, or thromboembolism; score of 2 or greater recommend warfarin

CHA2DS2-VASc score gaining acceptance: add point for females, h/o vascular disease and age 65 to 74;

dabigatran (Pradaxa) - direct thrombin inhibitor, recently approved by FDA for stroke prevention in nonvalvular AF; no need for INR monitoring; dose adjustment needed in renal impairment; no increased bleeding risk compared to warfarin

warfarin better than aspirin alone and better than aspirin + clopidogrel at preventing stroke.

Cardiology referral; Ablation

Ref:

Uptodate; American Family Physician; NEJM

AFFIRM trial NEJM 2002: rate control better than rhythm control

