

Madigan Army Medical Center

Referral Guidelines

Atrial Fibrillation

Diagnosis/Definition

- Atrial fibrillation (AF) is the most common sustained arrhythmia affecting 1.5 million Americans.
- It is characterized by an irregular heart rate and disorganized atrial activity on electrocardiogram (EKG).
- Symptoms can vary considerably. Signs of cardiac decompensation (dyspnea or angina) may be present.
- Many patients will be asymptomatic.
- The sequelae of embolic stroke is the greatest danger of AF.
- Numerous studies have shown the efficacy of anticoagulation therapy in preventing embolic stroke.

Initial Diagnosis and Management

- History addressing hemodynamic consequences of arrhythmia, e.g., syncope, angina, dyspnea.
- History of congestive heart failure (CHF), hypertension (HTN), coronary artery disease (CAD), cerebral vascular accident (CVA) or thromboembolism. Symptoms of associated dz: (alcohol abuse, thyrotoxicosis, etc.).
- 12 lead EKG, PA and LAT CXR, electrolytes, lipids, thyroid function.
- Echocardiogram - valvular disease, left atrial size, LV function.
- Assess for hemodynamic stability, severity of symptoms.
- Address remedial causes (hyperthyroidism, hypoxia, CHF, ischemia, etc.).
- Prevention of thromboembolism: Consider aspirin - patients <70 & no risk factors (CHF, HTN, diabetes, mitral stenosis or prior CVA). Warfarin - mandatory for patients with mitral stenosis and atrial fibrillation. Warfarin preferred - patients with risk factors (CHF, HTN, diabetes, mitral stenosis or prior CVA) or >70 years. If warfarin contraindicated, use aspirin. Consult the **Coumadin Clinic** for assistance.
- Rate control: Drug of choice dictated by presence of underlying heart disease: digoxin - systolic dysfunction; beta blocker, diltiazem or verapamil - HTN, angina.
- Wolff-Parkinson-White syndrome (WPW) and acute AF - cardioversion or intravenous amiodarone..
- The role of cardioversion in stable AF is controversial. The probability of successful restoration of sinus rhythm is low in patients with AF of greater than one year duration, or h/o multiple recurrences despite therapy. Symptoms related to the arrhythmia and risk of anticoagulation also need to be considered.
- Patients with new onset AF are usually offered at least one attempt at cardioversion.

Ongoing Management and Objectives

- With rate control, expect a reduction in symptoms.
- With anti-thrombotic therapy, expect reduction in risk of stroke or embolism.

- With anti-arrhythmic therapy, expect restoration and maintenance of sinus rhythm (though often difficult to maintain).
- Catheter based pulmonary vein modification is an option for some patients as is the surgical Maze procedure (a procedure performed by a surgeon in which linear cuts are made into the atrial wall to block the atrial fibrillation from occurring).

Indications for Specialty Care Referral

- Patients with acute AF with cardiac compromise or symptoms due to fast ventricular response should be hospitalized.
- Stable patients with AF and significant valvular or structural disease.
- Stable patients with AF and disabling symptoms or in whom restoration of sinus rhythm is desired.
- AF and WPW.

Criteria for Return to Primary Care

- Patients on stable antiarrhythmic regimens with control of AF.
- Patients in chronic AF with adequate rate control and on appropriate anti-thrombotic therapy.

Last Review for this Guideline: **January 2010**

Referral Guidelines require review every three years.

Maintained by the Madigan Army Medical Center - Quality Services Division
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