

Greenwich Hospital

What is Atrial Fibrillation

PATIENT/FAMILY INFORMATION SHEET

What is atrial fibrillation?

Atrial fibrillation (*AF, A-Fib*) is a disturbance in heart rhythm that occurs when the coordination in pumping between the upper and lower chambers of the heart becomes disorganized, resulting in a very irregular pulse. The pulse may be fast or slow.

What are the risks for developing atrial fibrillation?

Several factors can increase the risk of developing atrial fibrillation. Your risk increases if you have several of the risk factors at the same time. These risks include:

- Dysfunction of the heart's normal pacemaker (SA node)
- Chronic diseases of the lung such as emphysema
- Coronary or rheumatic heart disease.
- Pericarditis (a sharp pain in the chest related to breathing deeply)
- Problems with the mitral valve *in the heart*
- High blood pressure
- Hyperthyroidism
- Recent "binge drinking" of alcohol
- Recent heart attack or cardiac surgery

What are the symptoms of atrial fibrillation?

Symptoms of atrial fibrillation may start or stop suddenly. Not all patients will experience all of the symptoms

- Palpitations (an awareness of the heart beating)
- Fast or slow irregular pulse
- Dizziness/lightheadedness
- Fainting
- Fatigue.
- Confusion
- Shortness of breath
- Tightness in the chest

How is Atrial Fibrillation diagnosed?

Your doctor will obtain a medical history and will examine you to determine if atrial fibrillation is present. To verify the diagnosis, your doctor may also order one or more of the following special tests:

- **An electrocardiogram (ECG):** Evaluates electrical activity of your heart.
- **A Holter Monitor:** A continuous 24-hour tape-recording of your heart activity; this is used when you are experiencing atrial fibrillation sporadically.
- **Tests to rule out an underlying cause:**

1. An echocardiogram (to evaluate your heart valves)
 2. A cardiac catheterization (to evaluate the arteries which supply blood to your heart)
 3. An exercise treadmill ECG (to evaluate the effect of exercise on your heart rhythm).
- **Cardiac Electrophysiology (EPS):** In some complex or severe cases, an in-depth electrical evaluation of your heart and the rhythm may be preformed. This test yields information which cannot be obtained from a simple ECG.

How is Atrial Fibrillation treated?

With newly diagnosed and sustained atrial fibrillation, or atrial fibrillation with severe symptoms, the safest treatment is an electrical “cardioversion.” A cardioversion is a “brief” electrical shock delivered to the heart through the chest wall. This results in a regular heart rhythm. Patients are sedated prior to the procedure, so there is no pain associated with the shock and commonly, no memory of the event.

If atrial fibrillation becomes chronic, it becomes much harder to convert. The emphasis at this stage is to control the heart rate at a level comfortable for the patient. This is commonly done with medication. Such medications may include “beta blockers” (such as metoprolol), calcium channel blockers (such as verapamil), and digoxin. These medications slow conduction within the heart causing a more stable pulse.

Patients in chronic atrial fibrillation are at a higher risk of developing blood clots inside the heart. Since these clots can sometimes detach, patients are at a much higher risk to develop either a blood clot in the lung (pulmonary embolus) or brain (stroke). Because of this concern, patients in atrial fibrillation may have an anticoagulant or blood thinner ordered, both in the hospital and at home, depending upon individual needs and medical history.

The following medications are examples of the anticoagulants most commonly ordered:

- Heparin, which is given intravenously.
- Lovenox, also known as enoxaparin (a form of heparin), which is given by injection under the skin.
- Coumadin, also known as warfarin, which is a pill.

Your doctor may order alternate medications to help prevent clotting, such as aspirin, depending upon your individual medical needs.

Once home, it is important to take your anticoagulant as ordered. Your doctor may order follow-up blood work to check the effectiveness of your anticoagulant medication. If ordered, it is essential to have this blood work drawn. (Go to www.greenhosp.org and then “Patients & Visitors” to find additional Patient Education Fact Sheets for information on the specific anticoagulants listed above.)

Your anticoagulant prescription is: _____.

Source: Medline Plus, retrieved March 2006 from www.nlm.nih.gov

For more Patient Education Fact Sheets, see the Greenwich Hospital web site at www.greenhosp.org and click on Patients & Visitors, then Patient Education.

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