

Preparing for your office appointment

A doctor or cardiologist who sees you for heart-related signs and symptoms may ask:

- What are your symptoms?
- When did you first begin experiencing symptoms?
- Have your symptoms gotten worse over time?
- Do your symptoms include chest pain?
- Have you had any difficulty breathing?
- Does exercise or physical exertion make your symptoms worse?
- Are you aware of any history of heart problems in your family?
- Have you been diagnosed with any other health conditions?
- What medications are you currently taking?
- Have you ever been treated with radiation therapy?
- How much do you exercise in a typical week?
- What is your typical daily diet?
- Do you or did you smoke? How much?
- Do you drink alcohol? How much?

What you can do in the meantime

It is never too early to make healthy lifestyle changes, such as quitting smoking, eating healthy foods and becoming more physically active. These are primary lines of defense against coronary artery disease and its complications, including heart attack and stroke.

The doctor will ask questions about your medical history, do a physical exam and order routine blood tests. He or she may suggest one or more diagnostic tests as well, including:

- **Electrocardiogram (ECG).** An electrocardiogram records electrical signals as they travel through your heart. An ECG can often reveal evidence of a previous heart attack or one that is in progress. In other cases, Holter monitoring may be recommended. With this type of ECG, you wear a portable monitor for 24 hours as you go about your normal activities. Certain abnormalities may indicate inadequate blood flow to your heart.
- **Echocardiogram.** An echocardiogram uses sound waves to produce images of your heart. During an echocardiogram, your doctor can determine whether all parts of the heart wall are contributing

normally to your heart's pumping activity. Parts that move weakly may have been damaged during a heart attack or be receiving too little oxygen. This may indicate coronary artery disease or various other conditions.

- **Stress test.** If your signs and symptoms occur most often during exercise, your doctor may ask you to walk on a treadmill. This is known as an exercise stress test. In some cases, medication to stimulate your heart may be used instead of exercise.

Some stress tests are done using an echocardiogram. For example, your doctor may do an ultrasound before and after you exercise on a treadmill or bike. Or your doctor may use medication to stimulate your heart during an echocardiogram.

Another stress test known as a nuclear stress test helps measure blood flow to your heart muscle at rest and during stress. It's similar to a routine exercise stress test but with images in addition to an ECG. Trace amounts of radioactive material — such as thallium or a compound known as sestamibi (Cardiolite) — are injected into your bloodstream. Special cameras can detect areas in your heart that receive less blood flow.

- **Cardiac catheterization or angiogram.** To view blood flow through your heart, your doctor may inject a special dye into your arteries. This is known as an angiogram. The dye is injected into the arteries of the heart through a long, thin, flexible tube (catheter) that is threaded through an artery, usually in the leg, to the arteries in the heart. This procedure is called cardiac catheterization. The dye outlines narrow spots and blockages on the X-ray images. If you have a blockage that requires treatment, a balloon can be pushed through the catheter and inflated to improve the blood flow in your coronary arteries. A mesh tube (stent) may then be used to keep the dilated artery open.
- **CT scan.** Computerized tomography (CT) technologies, such as a CT coronary angiogram, can help your doctor visualize your arteries. CT scan, can detect calcium within fatty deposits that narrow coronary arteries. If a substantial amount of calcium is discovered, coronary artery disease may be likely. A CT coronary angiogram, in which you receive a contrast dye injected intravenously during a CT scan, also can generate images of your heart arteries.