What is angina and how will I know if I have it?

Angina, or angina pectoris, refers to symptoms such as chest pain or discomfort caused by reduced blood flow to the heart. Angina is often the first sign of heart disease.

The heart is a muscle that gets blood from blood vessels called the coronary arteries. If one or more of your coronary arteries has a blockage that reduces blood flow to your heart from time to time, you may have angina.

Narrowed and blocked arteries are usually due to a gradual buildup of fatty deposits called plaque inside the arteries. This process is called atherosclerosis.

People with angina usually feel discomfort (often a pressure-like pain) in or around the chest, shoulders, jaw, neck, back or arms. It may feel like a squeezing, pressing sensation in the chest. Angina pain is usually caused and made worse by exercise and eased by rest. The pain usually lasts 2-5 minutes. If you have this kind of chest pain, you should contact your health care provider. You can take medicine that will help your angina. If you suspect you might be having a heart attack (see warning signs below), call or have someone else call 9-1-1.

Not all chest discomfort is angina. For example, acid reflux (heartburn) and lung infection or inflammation can cause chest pain.
Here are some signs that your angina is very serious and you may be having a heart attack. If you have any of these signs, call 9-1-1 immediately:

- Pain or discomfort that is very bad, gets worse, and lasts longer than 20 minutes.
- Pain or discomfort along with weakness, feeling sick to your stomach, sweating, or fainting.
- Pain or discomfort that does not go away when you take angina medicine.
- Pain or discomfort that is worse than you have ever had before.

**Does angina mean I'm having a heart attack?**

Not necessarily. An episode of angina is not a heart attack, but it does mean that you have a greater chance of having a heart attack. Angina pain means that some of the heart muscle is not getting enough blood temporarily. A heart attack, on the other hand, occurs when the blood flow to a part of the heart is suddenly and permanently cut off, usually by a blood clot. This can lead to serious heart damage.

**Is all angina the same?**

No. There are two main kinds of angina—common or stable angina and unstable angina. Both kinds of angina mean an increased risk of heart attack, but unstable angina is often a major warning sign that a heart attack can happen soon.

People with common or stable angina have episodes of chest discomfort that usually occur in an expected pattern. Common angina occurs when you are exerting more than usual activity (such as running to catch a bus) or are under mental and emotional stress. The level of activity or stress that causes the angina is somewhat predictable, and the pattern changes only slowly. Resting or relaxing usually eases the discomfort.

Unstable angina, instead of appearing gradually, may first appear as a very severe episode or as frequently recurring bouts of angina. The chest pain of unstable angina is unexpected and usually occurs at rest, or may wake a person in the night. Sometimes an established stable pattern of angina may change sharply. For example, it may be provoked by far less exercise than in the past. Unstable angina should be treated as an emergency because it can lead quickly to a heart attack, dangerous heart rhythms, or even sudden death.

**Are there other types of angina besides stable (common) and unstable angina?**

There are two other forms of angina. One, Prinzmetal's or variant angina, is quite rare, but causes discomfort almost always when a person is at rest. It is caused by a spasm that narrows the coronary artery and lessens the flow of blood to the heart. The other is called microvascular angina. This type of angina occurs in people who have chest pain but have no apparent coronary artery blockage. The pain from microvascular angina results from poorly functioning blood vessels. Microvascular angina can be treated with the same medicines as common angina.
How is angina diagnosed?

Health care providers can usually find out if you have angina by listening to you talk about your symptoms and their patterns. They may also order some tests to further evaluate your angina. Tests may include x-rays; an electrocardiogram (ECG or EKG) at rest, and during and after exercise; a nuclear stress test; and coronary angiography. Variant angina can be diagnosed using a Holter monitor. Holter monitoring gets a non-stop reading of your heart rate and rhythm over a 24-hour period (or longer). You wear a recording device (the Holter monitor), which is connected to small metal disks called electrodes that are placed on your chest. With certain types of monitors, you can push a "record" button to capture a rhythm when you feel the symptoms of angina.

What should I do if I start to have unexpected chest pains while resting?

If you have unexpected chest pain at rest, seek immediate medical help. Call or have someone else call 9-1-1. This kind of pain may mean that clots are forming in an artery and are about to cause a heart attack. Medicine is available at the hospital that can stop clots from forming and dissolve existing clots.

How is angina treated?

Lifestyle changes and medicine are the most common ways to control stable angina. Although angina may be brought on by exercise, this does not mean that you should stop exercising. In fact, you should keep doing an exercise program that has been approved by your health care provider.

Risk factors for coronary artery disease should be controlled, including high blood pressure, cigarette smoking, high blood cholesterol, and excess weight. By eating healthfully, not smoking, limiting how much alcohol you drink, and avoiding stress, you may live more comfortably and with fewer angina attacks. You may need medicine to help lower your blood pressure or your cholesterol.

Drugs are often used to control angina. The most commonly used drug for angina is nitroglycerin, which relieves pain by relaxing blood vessels. This allows more blood to flow to the heart muscle and also decreases the workload of the heart. Nitroglycerin is taken when discomfort occurs or is expected. Your health care provider may prescribe other drugs to be taken every day to help reduce the heart's workload. Two types of drugs often used are called beta-blockers and calcium channel blockers.

What lifestyle changes can help with angina?

Talk to your health care provider about changes you can make to improve your heart health and your angina. You may benefit from:

- weight loss
- increasing your physical activity
- eating healthy foods and not overeating
- controlling stress in your life
- quitting smoking
- drinking less alcohol.
What if lifestyle changes and medicine fail to control angina?

If lifestyle changes and drugs fail to ease angina, or if your risk of heart attack is high, you may need additional tests and treatment. One common test is cardiac catheterization. This test involves inserting a catheter (a thin tube) into a forearm or groin artery and threading the catheter into the heart. A dye can be injected and tracked by computerized x-ray (coronary angiography or arteriography) to show where the arteries are blocked. Balloon angioplasty may be used to open up narrowed arteries. This procedure uses a tiny balloon that is inflated briefly inside the artery. Sometimes a stent (a tiny metal mesh tube) is put in to help keep the artery open.
For more information . . .

For more information on angina, contact the National Women's Health Information Center (NWHIC) at (800) 994-9662 (WOMAN) or the following organizations:

**National Heart, Lung, and Blood Institute, NIH, HHS**
Phones: (301) 592-8573 (Information Office), (800) 575-9355 (Blood Pressure & Cholesterol Information)
Internet Address: [http://www.nhlbi.nih.gov/index.htm](http://www.nhlbi.nih.gov/index.htm)

**American Heart Association**
Phone: (800) 242-8721
Internet Address: [http://www.americanheart.org/](http://www.americanheart.org/)

**Heart Information Service**
Phone: (800) 292-2221
Internet Address: [http://www.texasheartinstitute.org/](http://www.texasheartinstitute.org/)

**American College of Cardiology**
Phone: 1-800-253-4636
Internet Address: [http://www.acc.org/](http://www.acc.org/)

**The Heart Truth**
National Awareness Campaign for Women about Heart Disease
National Heart, Lung, and Blood Institute
Phone Number(s): (800) 793-2665

This information was adapted from fact sheets prepared by the National Heart, Lung, and Blood Institute, including "Facts about Angina" and "Facts About Heart Disease and Women: So You Have Heart Disease."

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