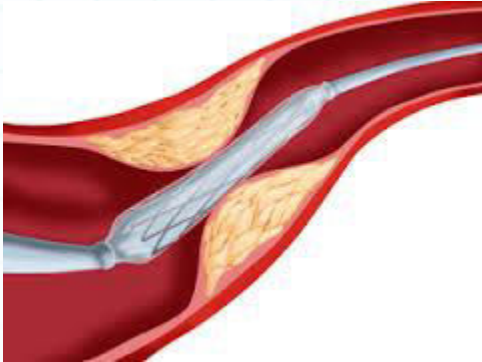


# Stable Angina



Angina pectoris is the medical term for chest pain or discomfort due to coronary heart disease. It occurs when the heart muscle does not get as much blood as it needs. This usually happens because one or more of the heart's arteries is narrowed or blocked, also called ischemia.

Angina usually causes uncomfortable pressure, fullness, squeezing or pain in the center of the chest.

You may also feel the discomfort in your neck, jaw, shoulder, back or arm. (Many types of chest discomfort — like heartburn, lung infection or inflammation — aren't related to angina.) Angina in women can be different from in men. View an animation of angina.

The most common cause of angina is coronary artery disease. Angina pectoris is the medical term for this type of chest pain.

Stable angina is less serious than unstable angina, but it can be very painful or uncomfortable.

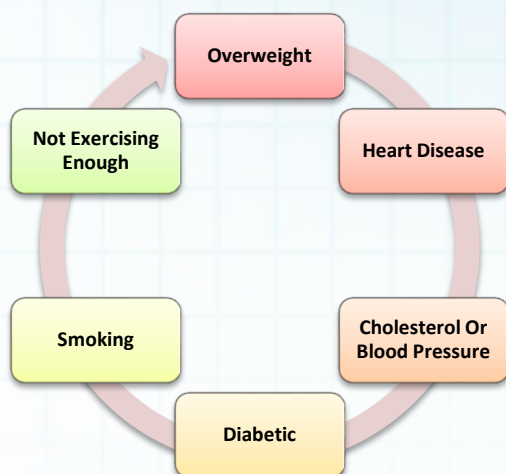
Angina often occurs when the heart muscle itself needs more blood than it is getting, for example, during times of physical activity or strong emotions. Severely narrowed arteries may allow enough blood to reach the heart when the demand for oxygen is low, such as when you are sitting. However, with physical exertion—like walking up a hill or climbing stairs—the heart works harder and needs more oxygen.

## Causes of Stable Angina

Stable angina occurs when the heart does not get the oxygen it needs to do the work it is being asked to do. When you exercise, lift heavy items, or otherwise stress your body, your heart works harder to accommodate the additional exertion.

Certain factors can impede your heart from receiving more oxygen, such as a narrowing of the arteries (atherosclerosis). Your arteries can become narrow when plaque (a substance made of fat, cholesterol, calcium, and other substances found in blood) builds up inside them, usually due to high cholesterol. Blood clots can also block your arteries and reduce the flow of oxygen-rich blood to the heart.

Additional risk factors can include any situation that requires your heart to need more oxygen. Big meals, prolonged exposure to extreme hot or cold weather, vigorous physical workouts, and emotional stress can also induce stable angina in some cases.



You can develop stable angina even if you do not have any of the signs of heart disease, such as shortness of breath and pain, numbness, weakness, or coldness in legs and arms. According to the National Institutes of Health, men are more likely to develop stable angina than women are.

### **Symptoms of Stable Angina**

Many people who have stable angina describe the pain as a large area of pressure on the chest. The pain can feel like a vice squeezing your chest and can radiate to your neck, arms, shoulders, and jaw. During an episode of stable angina, you may also experience

- shortness of breath
- nausea
- fatigue
- dizziness
- profuse sweating
- anxiety

Stable angina most often happens after you have exerted yourself physically. The symptoms tend to be short-lived, lasting up to 15 minutes in most cases. This is different from other forms of angina, in which the pain can be more severe and long lasting.

The NIH explains that you can have an episode of stable angina at any time of day. However, you are more likely to experience symptoms in the morning. The pain or discomfort:

- Occurs when the heart must work harder, usually during physical exertion
- Doesn't come as a surprise, and episodes of pain tend to be alike

- Usually lasts a short time (5 minutes or less)
- Is relieved by rest or medicine
- May feel like gas or indigestion
- May feel like chest pain that spreads to the arms, back, or other areas

### **Diagnosis of Stable Angina**

An electrocardiogram test measures your heart's electrical activity and beating pattern; an angiography is a type of X-ray that lets your doctor see how blood flows to your heart. These tests can determine if your heart is functioning properly and if any arteries are blocked. You may also be asked to take a stress test to diagnose stable angina. During a stress test, you exercise while your heart function is measured. Because stable angina usually happens while you participate in physical activity, this type of test helps your doctor see what triggers your symptoms.

Your doctor also might run blood tests to measure your cholesterol and levels of a protein called C-reactive protein (CRP). According to the National Heart Lung and Blood Institute, high levels of CRP can increase your risk of developing heart disease.

### **Treatment of Stable Angina**

Stable angina is treated through medical measures and lifestyle changes. You can usually predict when the pain will occur, so you can scale back on physical exertion as needed to manage your chest pain. Discuss your diet and exercise routine with your healthcare provider to determine how you can adjust your lifestyle in a healthy manner.

#### **Lifestyles**

Daily exercise can help you lose weight if needed, which also reduces your risk for chronic illness. Diabetes, heart disease, high cholesterol, and hypertension (high blood pressure) can all affect stable angina and other forms of heart disease. Quit smoking if you are a current smoker.

#### **Medication**

A medication called nitroglycerin is effective in relieving the pain of stable angina. Your doctor will tell you how much nitroglycerin to take when you have an angina attack. Place the nitroglycerin under your tongue, and let it dissolve to be absorbed into your body.

You might need to take other drugs to manage underlying conditions that contribute to stable angina. Consult your doctor if you have high blood pressure, high cholesterol, or diabetes. Medications to stabilize your blood pressure, cholesterol, and glucose levels can

reduce your risk of angina. Blood-thinning medication can prevent blood clots, a contributing factor in stable angina.

### **Surgery**

Arteries that are blocked may need to be repaired to prevent angina pain. During a procedure called angioplasty, a surgeon threads a very thin tube through your artery. At the end of the tube is a piece of mesh called a stent. The stent is permanently placed in your artery to keep the passageway open.

### **Reference:**

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