

# Angina

Angina is discomfort caused by inadequate oxygen delivery to the heart muscle. Angina is a response to blockage or narrowing of the coronary arteries. It alerts you about a blood flow problem to your heart. New, more frequent or severe angina is a warning signal for you to seek medical care right away.

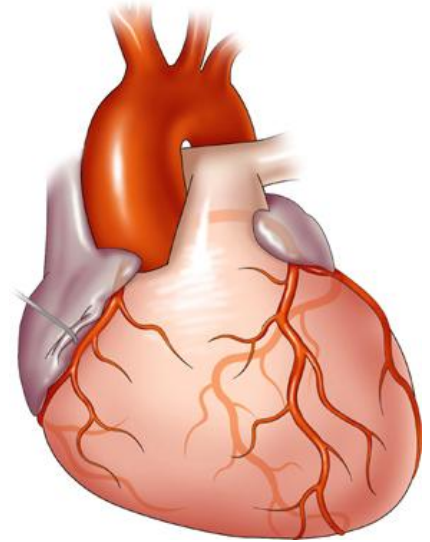
## CAUSES

The coronary arteries supply blood and oxygen to the heart muscle. The heart muscle needs a constant supply of oxygen in order to pump blood to the body. These arteries often become blocked by hardened deposits of blood products (*plaque*) including fat and cholesterol. The following contribute to the formation of plaque:

- High cholesterol.
- High blood pressure.
- Smoking.
- Obesity.
- Diabetes.

## SYMPTOMS

- The most common problem is a deep discomfort in the center of your chest. The discomfort may also be felt in, or move to your:
  - Arms (especially the left one).
  - Throat.
  - Jaw.
  - Back.
  - Upper stomach
- Angina may be brought on by exercise, emotional upset, heavy meals, or extremes of heat or cold.
- It may resolve within 5-10 minutes after a period of rest.
- Angina symptoms vary from person to person.
- If you have angina and it is treated, it may resolve. If you feel it again, the symptoms may be the same in both type and location.



## DIAGNOSIS

- Emergency room evaluation or hospital admission may be needed to determine if there are any blockages of your coronary arteries.
- Blood tests, EKG's, and chest x-rays may be done.
- Further testing may include a stress test or an angiogram.
- A heart specialist (*cardiologist*) may be asked to assist with your evaluation.
- Other conditions that may feel like angina, but are not a problem with the heart include:
  - Muscle strain in the chest wall.
  - Blood clots in the lung.
  - Anxiety.
  - Acid reflux from the stomach.

## RISKS AND COMPLICATIONS

Angina that is not treated or evaluated can lead to a decline in oxygen delivery to the heart muscle, a heart attack or even death.

## TREATMENT

Depending on severity of the blockages and on other factors, angina may be treated with:

- **Lifestyle changes** such as weight loss, stopping smoking, appropriate exercise, or low cholesterol and low salt diet.
- **Medications** to control or to treat the risk factors for angina.
- **Procedures** such as angioplasty or stent placement may allow the blockages to be opened without surgery.
- **Open Heart Surgery** may be needed to bypass blocked arteries that cannot be treated by other methods.

## HOME CARE INSTRUCTIONS

- If your caregiver prescribed medication to control your angina, take as directed. Report side effects. Do not stop medications or adjust the dosages on your own.
- Regular exercise is good for you as long as it does not cause discomfort. Avoid activities that trigger attacks of angina. Walking is the best exercise. Do not begin any new type of exercise until you check with your caregiver.
- You may still have a sexual relationship if it does not cause angina. Tell your caregiver if it does.
- Stop smoking. Do not use nicotine patches or gum until you check with your caregiver.
- If you are overweight, you should lose weight. Eat a heart-healthy diet that is low in fat and salt.
- If your caregiver has given you a follow-up appointment, it is very important to keep that appointment. Not keeping the appointment could result in a heart attack, permanent heart damage, and disability. If there is any problem keeping the appointment, you must call back to this facility for assistance.

#### **SEEK MEDICAL CARE IF:**

- Your angina seems to be occurring more frequently or seems to be lasting longer.
- You are having problems that you think may be side effects of the medicine you are taking.

#### **SEEK IMMEDIATE MEDICAL CARE IF:**

- You have severe chest discomfort, especially if the pain is crushing or pressure-like and spreads to the arms, back, neck, or jaw.
- You are sweating, feel sick to your stomach(*nausea*), or short of breath.
- You have an attack of angina that does not get better after rest or taking your usual medicine.
- You wake from sleep with chest pain.
- You feel dizzy, faint or experience profound fatigue..
- You have chest pain not typical of your usual angina. **THIS IS AN EMERGENCY.** Do not wait to see if the pain will go away. **Get medical help at once.** Call 911 or 0 (operator). **DO NOT** drive yourself to the hospital.

#### **MAKE SURE YOU:**

- Understand these instructions.
- Will watch your condition.
- Will get help right away if you are not doing well or get worse.