Coronary Angioplasty

Your healthcare team will talk to you about your heart problem and explain how angioplasty can help. Angioplasty relieves symptoms of coronary artery disease by improving blood flow to your heart. Chest pain (angina) can be caused by poor blood flow through a narrow or blocked artery that would normally supply oxygen and nutrients to the heart muscle. Not all blockages can be fixed by coronary angioplasty alone. You may need other treatments including medicines, surgery, or coronary stents to treat your coronary artery disease. A heart specialist called an interventional cardiologist does the angioplasty procedure. He or she has specialized training in using the equipment and in doing the procedure as safely as possible.

During the procedure

![Diagram of angioplasty procedure]

The balloon compresses the plaque against the artery wall.

Blood flow to the heart muscle increases.
A member of the team will numb the skin at the insertion site (usually the groin or the wrist) with a local anesthetic. Next, your doctor will make a needle puncture to insert the catheter.

Your doctor will insert a guide wire through the guiding catheter (a thin, flexible tube) and move it to the narrow spot in your heart artery. Your doctor will use an angiogram to see the blockage. An angiogram is an X-ray movie of blood flow through the heart arteries using contrast.

Your doctor will insert a balloon-tipped catheter through the guiding catheter and thread it over the guide wire. He or she will position it at the narrow part of the artery.

Next, he or she will inflate and deflate the balloon several times to press the plaque against the artery wall. You may feel pressure or chest pain when the balloon is inflated. Tell your doctor if you do.

Often, a stent is also placed in the artery. This is a small, metal mesh tube that helps prop the sides of the blood vessel open and keeps it from closing again.

Finally, your doctor deflates the balloon and removes the catheters and guide wire. The artery is now open, and blood flow to the heart muscle increases.

After the procedure

A member of the healthcare team will tell you how long to lie down and keep the insertion site still. The amount of time you must lie still may depend on whether a closure device such as a stitch or collagen plug was used to close the opening that was made in your artery. The time you must be still may be shorter if one of these devices was used. The amount of time will also depend on if there is any bleeding at the artery site.

A nurse will check the insertion site and your blood pressure. Before going home, you may have an electrocardiogram (ECG) or other tests.

You usually stay in the hospital for several hours or overnight.

Plan to have someone drive you home.

You may be started on new medicines to prevent blood clots from forming at the site in your artery where the angioplasty was done. Make sure you take this medicine as directed. Other medicines that are often prescribed are to prevent renarrowing of the arteries or to prevent a heart attack. These medicines commonly include a cholesterol-lowering medicine (statin), aspirin, and a medicine such as nitroglycerin to take if you have chest pain.

Your activity will be restricted while the puncture site (groin or wrist) is healing. Your healthcare team will tell you exactly how long though. It's often 3 to 7 days.

Keep the puncture site clean and dry until the skin heals in the area. Showering is OK. But you should not soak in a bathtub, hot tub, or swimming pool until the skin has healed.

It's normal to have a bruise or to feel a pea-sized bump under the skin at the puncture site. This bump may be a collagen plug or stitches that were used to close the artery. It should get smaller as time goes by. You should not have active bleeding or a growing bruise at the site.

When to call your healthcare provider

Contact your healthcare provider if you have any of the following:

- You have chest pain
- The insertion site has pain, swelling, redness, bleeding, or drainage
- You have severe pain, coldness, or a bluish color in the leg or arm that held the catheter
- You have blood in your urine, black or tarry stools, or any other kind of bleeding
- You have a fever of 100.4°F (38°C) or higher, or as directed by your healthcare provider