What Is Coronary Angioplasty?

Your heart’s arteries can become blocked or narrowed from a buildup of cholesterol, cells or other substances (plaque). This can reduce blood flow to your heart and cause chest discomfort. Sometimes a blood clot can suddenly form or get worse and completely block blood flow, leading to a heart attack.

Angioplasty opens blocked arteries and restores normal blood flow to your heart muscle. It is not major surgery. It is done by threading a catheter (thin tube) through a small puncture in a leg or arm artery to the heart. The blocked artery is opened by inflating a tiny balloon in it.

Why do I need it?

People with blockages in their heart arteries may need angioplasty if they are having lots of discomfort in their chest, or if their blockages put them at risk of a heart attack or of dying.

How is it done?

1. A doctor numbs a spot on your groin or arm and inserts a small tube (catheter) into an artery.
2. The catheter is threaded through the arterial system until it gets into a coronary (heart) artery.
3. Watching on a special X-ray screen, the doctor moves the catheter into the artery. Next, a very thin wire is threaded through the catheter and across the blockage. Over this wire, a catheter with a thin, expandable balloon on the end is passed to the blockage.
4. The balloon is inflated. It pushes plaque to the side and stretches the artery open, so blood can flow more easily. This may be done more than once.
5. In many patients a collapsed wire mesh tube (stent) mounted on a special balloon, is moved over the wire to the blocked area.
6. As the balloon is inflated, it opens the stent against the artery walls. The stent locks in this position and helps keep the artery open.
7. The balloon and catheters are taken out. Now the artery has been opened, and your heart will get the blood it needs.

Does angioplasty hurt?

• No, angioplasty causes very little pain. The doctor will numb the place where the catheter will be.
inserted. You may feel some pressure as the catheter is put in.
• You’ll be awake and alert but may be given medicine to help you relax.
• The place where the catheter was put in may be sore afterwards. Bruising is also common. If you notice any bleeding or increasing pain or swelling, tell your doctor.

What about afterwards?
• When the tube is removed from your leg or arm, a nurse or doctor will usually apply direct pressure for 15 minutes or longer to the place where the catheter was inserted to ensure there’s no internal bleeding.
• If angioplasty is done through the leg, for several hours you’ll lie quietly on your back and the doctors and nurses will check for any signs of bleeding or chest discomfort. If the procedure is done through the arm, you won’t need to remain in bed.
• You’ll almost always have to stay in the hospital for a night to rest. Sometimes a longer stay is required.
• There’s a small risk that a blood clot will form inside the stent, blocking blood flow in the artery. Your doctor will prescribe aspirin or other medicine to help prevent this.
• Avoid heavy lifting or vigorous physical activity for 1-2 days after the procedure.
• Learn about the risk factors you need to change to keep your heart healthy.