What Is Coronary Angioplasty?

Your heart’s arteries can become blocked or narrowed from a buildup of cholesterol and other substances, which form a sticky substance called plaque. This can reduce blood flow to your heart and cause chest discomfort. Sometimes plaque can rupture (break) and a blood clot can form and completely block blood flow, leading to a heart attack.

Angioplasty opens blocked arteries and restores normal blood flow to your heart muscle. It’s not major surgery. It’s done by threading a catheter (thin tube) through a small puncture in a leg or arm artery to the heart. The catheter places a tiny balloon at the site of blockage in the artery. When the balloon is inflated, it pushes the plaque flat against the artery wall. This widens the artery and improves blood flow.

Why do I need it?

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

How is coronary angioplasty done?

1. You may be given medicine to help you relax. Then, a spot on your groin or arm will be numbed and a catheter will be inserted 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, your heart specialist (cardiologist) 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. Then, 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. Sometimes a stent is placed over the balloon. A stent is a tiny wire mesh tube that expands with the balloon and stays in the artery when the balloon is removed.

6. As the balloon is inflated, it opens the stent against the artery walls. The stent stays in this position to help keep the artery open.

7. Once the artery has been opened, the balloon and catheters are taken out.

Does it hurt?

• Angioplasty causes very little pain. You will be numbed at 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 health care professional immediately.
What happens after the procedure?

- When the tube is removed from your leg or arm, a member of your health care team will apply direct pressure for 15 minutes or longer where the catheter was inserted to ensure there’s no internal bleeding.
- If angioplasty is done through the groin, you’ll lie quietly on your back for several hours and your health care team will check for any signs of bleeding or chest discomfort. If the procedure is done through the arm, you may not need to remain in bed depending on the instructions from your health care team.
- You may have to stay the night in the hospital to rest. Sometimes a longer stay is required.
- There’s a small risk that a blood clot might form inside the stent, blocking blood flow in the artery. So you’ll be prescribed aspirin or other medicine to help prevent blood clots.
- You’ll need to avoid heavy lifting or vigorous physical activity for 1-2 days after the procedure.

MY QUESTIONS:

How can I learn more?

1. Call 1-800-AHA-USA1 (1-800-242-8721) or visit heart.org to learn more about heart disease and stroke.
2. Sign up for our monthly Heart Insight e-news for heart patients and their families at HeartInsight.org.
3. Connect with others sharing similar journeys with heart disease and stroke by joining our Support Network at heart.org/SupportNetwork.

Do you have questions for your doctor or nurse?

Take a few minutes to write down questions for the next time you see your health care professional.

For example:

- Will I need angioplasty again?
- Could anything go wrong?

We have many other fact sheets to help you make healthier choices to reduce your risk for heart disease, manage your condition or care for a loved one. Visit heart.org/AnswersByHeart to learn more.