



Coronary Angioplasty: Treatment for Heart Disease

Treatment of **heart attack** is one of the great success stories in modern medicine. A patient who suffered a heart attack in the 1950s was typically treated with weeks of bed rest, and survival rates were low. Now, approximately 96 of every 100 heart attack patients who receive treatment not only survive, but are usually released from the hospital and back to work within a week.

A number of innovations have made this dramatic progress possible. **Angioplasty**, a procedure for quickly restoring blood flow to the heart muscle, is one of these key innovations, and it is the best treatment for stopping a heart attack that is in progress.

You may have experienced a heart attack and want to know more about the angioplasty procedure that was used to treat you. Or you may be discussing heart disease symptom relief with your doctor and wondering if angioplasty is the treatment that will work best for you.

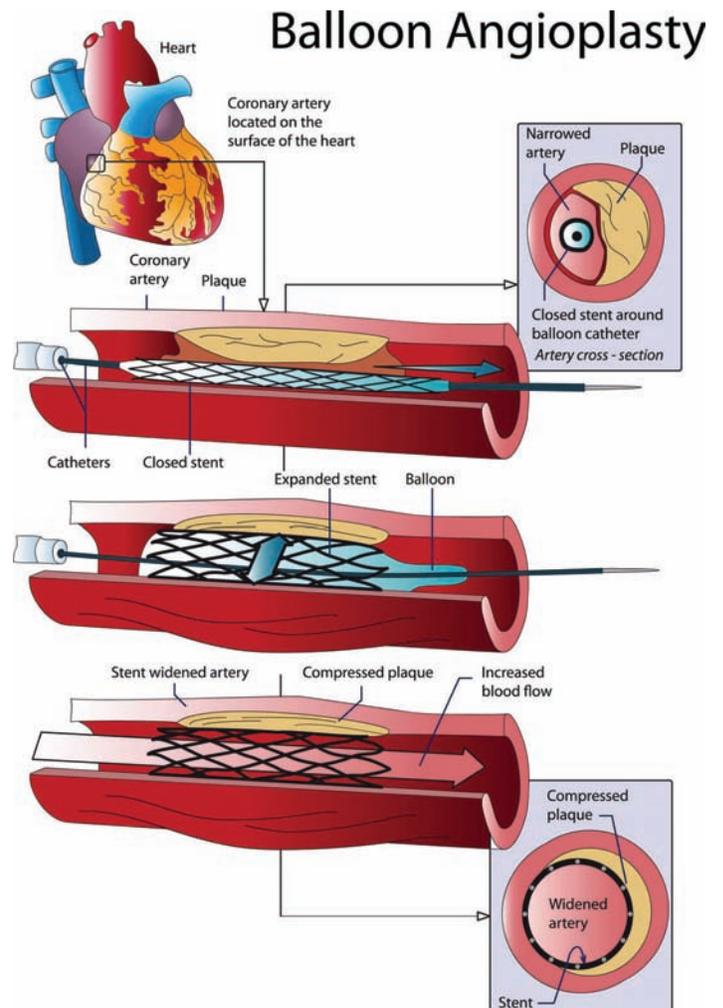
Read on to learn how angioplasty works and what to expect after the procedure.

What Is Coronary Angioplasty?

In the 1960s and early 1970s, the only treatment to improve blood flow to a heart with blocked arteries was **bypass surgery**. Even today, bypass patients spend most of a week in the hospital and a month in recovery. In 1977, coronary angioplasty was developed as an alternative method to open blocked heart arteries. Angioplasty can be used to clear significant artery blockages that may be causing heart disease symptoms, such as chest pain (**angina**) or shortness of breath. Reopening a blocked artery can stop a heart attack that is already in progress.

An angioplasty procedure is performed by an **interventional cardiologist**, a heart doctor with specialized education and training in using thin tubes called **catheters** that can be inserted into blood vessels to deliver treatments. Angioplasty is a **minimally invasive procedure**, meaning you do not have to have open-chest surgery. Angioplasty is a safe and effective treatment option for many patients, while others will be best treated with bypass surgery.

Note: The information contained herein does not, and is not intended to, constitute comprehensive professional medical services or treatment of any kind. This information should not be used in place of medical diagnosis or medical advice and must be considered as an educational service only.



During angioplasty, the interventional cardiologist inserts a catheter through a puncture site in the skin and into an artery of the heart. A special dye is injected through the catheter, allowing the doctor to see any blockages on the X-ray. If a significant blockage is found, a fine wire is steered through the blockage in the artery. A catheter with a small uninflated balloon at its tip is threaded over this tiny wire to the narrowed section in the artery. The interventional cardiologist then opens and closes the balloon several times to push the blockage in the artery aside and restore blood flow to the heart.



What are the Benefits and Risks of Angioplasty?

Angioplasty for heart attack treatment saves lives. The procedure quickly stops a heart attack and restores blood flow to the heart. For patients who do not require bypass surgery, angioplasty offers a shorter recovery time. While bypass surgery patients can expect to spend several days in the hospital and at least a month recovering at home, most angioplasty patients are discharged from the hospital within 24 hours and return to work within a week.

Angioplasty is not just for heart attacks. For patients with severe heart disease, angioplasty can offer effective, immediate improvement of debilitating symptoms such as chest pain, shortness of breath, and fatigue. In a survey released in 2012 by the **Society for Cardiovascular Angiography and Interventions** (the medical society hosting SecondsCount), heart disease patients overwhelmingly reported positive changes in many aspects of daily living: physical activity, socializing, sex life, participation in hobbies, ability to do chores and run errands, feelings of financial security, and relationships with loved ones.

Like all procedures, angioplasty carries risks. Bleeding, heart attack, stroke, or an allergic reaction to the dye may occur, or the procedure could need to be stopped and bypass surgery performed. The risk of complication is under 1 percent for most patients. Be sure to discuss the benefits and risks of angioplasty with your interventional cardiologist.

What Happens After Angioplasty?

Angioplasty can save your life during a heart attack, or it can ease or stop symptoms of heart disease. But, like all other treatments for heart disease, angioplasty cannot cure the disease. Why? Because heart disease is a progressive condition that involves the build-up of a waxy substance called plaque throughout blood vessels in the body. The angioplasty balloon opens the most severely blocked segments of the heart arteries; however, people with severe blockages typically have many other plaques that have begun to develop, but are not tight enough to restrict blood flow. But without medication and lifestyle changes, the plaques will continue to grow.

Heart disease treatment after an angioplasty procedure will aim to slow or reduce the disease process throughout the body's

blood vessels. Treatment often consists of a **structured exercise program** at your hospital, **medications**, improved **diet, exercise** at home, and close follow-up with your primary care physician, cardiologist, and interventional cardiologist.

What Questions Should I Ask My Healthcare Provider About Angioplasty?

- What are the **benefits and risks** of the procedure for me?
- How long will I need to **stay in the hospital**?
- How long after the procedure before I can get back to my **regular routine**?
- What limitations will I have after the procedure, both short and long term?
- What **follow-up** is necessary after the procedure? What do I need to do?
- What **medications** do I need to be taking and for how long?
- What **lifestyle changes** should I be making?
- Would I benefit from being referred to **cardiac rehabilitation**?

What Should I Do If I Have More Questions?

Ask them. Your heart health is of vital importance. Getting complete information if you are discussing a potential angioplasty procedure with your interventional cardiologist can help you determine if the procedure is right for you. Also, be sure to completely answer any questions your interventional cardiologist may ask of you, such as any medications you are taking or other conditions you have.

If you have already had an angioplasty procedure, asking questions is a key step in reducing the risk of complications. A discussion with your interventional cardiologist can help you with taking medications appropriately, getting adequate follow-up, and enrolling in a program for a heart-healthy future.

For more information, see SecondsCount's information sheet, "Heart Stents: Tools for Treating Blocked Blood Vessels," on www.SecondsCount.org.