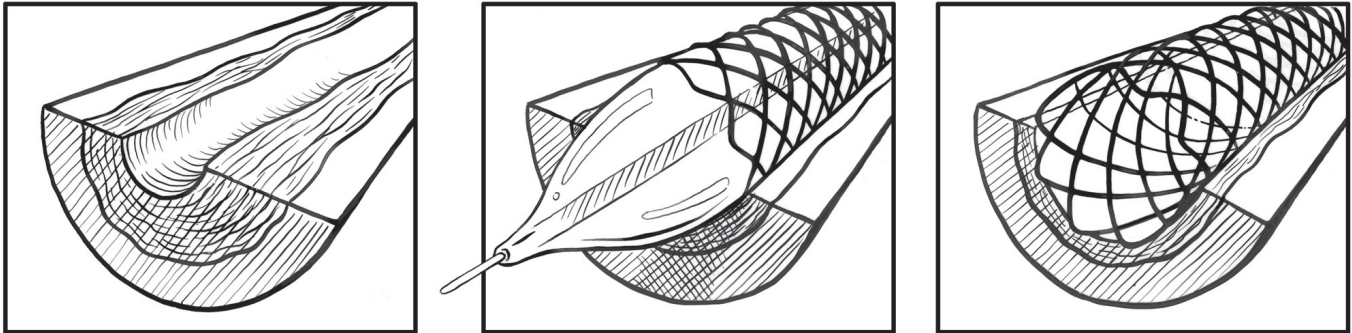


What is a Stent?

A stent is a tiny wire mesh tube. It props open an artery and can be left there permanently.



Why are stents used?

When an artery is narrowed by a buildup of fatty deposits called plaque, it can reduce blood flow. If blood flow is reduced to the heart muscle, chest pain can result. If a clot forms and completely blocks the blood flow to part of the heart muscle, a heart attack

results. If blood flow to part of the brain is shut off, a stroke results.

Stents help keep arteries open and reduce the chance of a heart attack or stroke.

How are arteries opened?

To open a narrowed artery, a doctor may do a procedure called an angioplasty. In it, a balloon-tipped tube called a catheter is inserted into an artery and advanced to the point of blockage. Then the balloon is

inflated. This compresses the plaque and opens the narrowed spot. When the opening in the vessel has been widened, the balloon is deflated and the catheter is withdrawn.

How are stents used?

When a stent is used, it's collapsed to a small diameter and put over the balloon catheter. It's then moved into the area of the blockage. When the balloon is inflated, the stent expands, locks in place and forms a scaffold. This holds the artery open. The stent stays in the artery permanently and holds it open. This improves blood flow to the heart muscle and relieves symptoms (usually chest pain).

Stents are used depending on certain features of the artery blockage. Factors that affect whether a stent can be used include the size of the artery and where the blockage is.

Stenting has become fairly common. About 70 to 90 percent of angioplasty procedures are done using stents.

What are the advantages of using a stent?

In certain patients, stents reduce the renarrowing that occurs after balloon angioplasty or other procedures that use catheters. Stents also help restore normal blood flow and keep an artery open if it's been torn or injured by the balloon catheter.

Patients who have angioplasty and stents recover from these procedures much faster than patients who have coronary artery bypass surgery. They have much less discomfort, too.

Can stented arteries reclose?

In about a third of patients who've had angioplasty, the artery that was opened begins to become blocked again over time. This reclosure is called restenosis.

Stents help prevent this, and in recent years doctors have used new types of stents. Some of these are covered with drugs that

help keep the blood vessel from reclosing. These new drug-coated stents have shown promise for improving the long-term success of this procedure.

If stents don't work and the arteries reclose, coronary artery bypass surgery may need to be done.

What precautions should be taken after a stent procedure?

Patients who've had a stent procedure must take one or more blood-thinning agents. Examples are aspirin and clopidogrel.

- Aspirin is used indefinitely.
- Clopidogrel is used for one or more months (depending on the type of stent) after the procedure.

- Clopidogrel can cause side effects, so blood tests will be done often.

For the next four weeks a magnetic resonance imaging (MRI) scan should **not** be done without a cardiologist's approval. But metal detectors don't affect the stent.

How can I learn more?

1. Talk to your doctor, nurse or other health-care professionals. If you have heart disease or have had a stroke, members of your family also may be at higher risk. It's very important for them to make changes now to lower their risk.
2. Call 1-800-AHA-USA1 (1-800-242-8721), or visit americanheart.org to learn more about heart disease.

3. For information on stroke, call 1-888-4-STROKE (1-888-478-7653) or visit us online at StrokeAssociation.org.

We have many other fact sheets and educational booklets to help you make healthier choices to reduce your risk, manage disease or care for a loved one.

Knowledge is power, so *Learn and Live!*

Do you have questions or comments for your doctor or nurse?

- Take a few minutes to write your own questions for the next time you see your healthcare provider. For example:

What are potential complications from this procedure?
