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May 21, 2010

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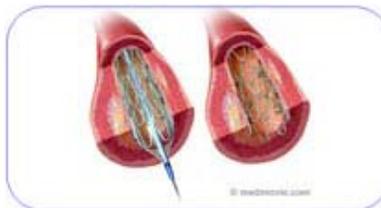
About Us

Local Info

Stent Procedure

What is a stent and how is one used?

A stent is a wire metal mesh tube used to prop open an artery during angioplasty. The stent is collapsed to a small diameter and put over a 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, holds it open, improves blood flow to the heart muscle and relieves symptoms (usually chest pain). Within a few weeks of the time the stent was placed, the inside lining of the artery (the endothelium) grows over the metal surface of the stent.



click to enlarge

When are stents used?

Stents are used depending on certain features of the artery blockage. This includes the size of the artery and where the blockage is. Stenting is a fairly common procedure; in fact, over 70 percent of coronary angioplasty procedures also include stenting.

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.

Can stented arteries reclose?

Yes. Reclosure (restenosis) is also a problem with the stent procedure. In recent years doctors have used new types of stents called drug-eluting stents. These are coated with drugs that are slowly released and help keep the blood vessel from reclosing. Stents that are not coated with drugs are called bare metal stents. As detailed below, it is very important that patients with either type of stent take their anti-clotting medicines as directed.

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. These medications help reduce the risk of a blood clot developing in the stent and blocking the artery. Some recent studies have suggested that blood clots may develop later on (more than a year after stent placement) in the drug-eluting stents. Therefore it is really important to stay on your medications as long as your cardiologist recommends. Aspirin is usually recommended for life, and clopidogrel is generally used for one to 12 months (depending on the type of stent) after the procedure. Clopidogrel can cause side effects, so blood tests will be done periodically. If you are taking this medication, it is important that you don't stop taking it for any reason without consulting your cardiologist who has been treating your coronary artery disease..

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.

See the Related Items box above for links to the Cardiology Patient Page in *Circulation*, *Journal of the American Heart Association*:

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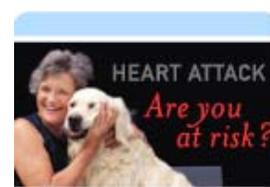
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