



## Coronary Stent

### What is a Stent?

Your cardiologist has probably told you that you have coronary artery disease. Coronary artery disease means that the blood vessels, which supply your heart, are either narrowed or blocked.

Coronary artery disease results in a reduction of blood flow to your heart muscle, which may result in angina or even a heart attack. There are a number of procedures available to treat coronary artery disease, and one of these is implantation of a coronary stent. The coronary stent is a small metal structure that is implanted to keep the coronary artery open. A stent helps to reduce the rate of re-narrowing of the treated segment of your coronary artery. Once in place, the balloon is inflated and the stent expands to the size of the artery, and holds it in place.

### How to Prepare and What to Expect

Several routine blood tests and an electrocardiogram will be performed. Your cardiologist will review the purpose, potential benefits and possible risk of a coronary stent. After you have discussed the procedure with your cardiologist, your nurse will cleanse and shave either your right or left groin, or both, in preparation for the procedure.

An intravenous catheter (IV) will be placed in a vein in your arm to administer medication and intravenous fluids. Food and fluids are restricted for several hours before the procedure. You will be given a mild sedative prior to the procedure. You will be taken to the cardiac catheterization suite in your bed or stretcher. While you are in the cardiac catheterization suite, your family will be encouraged to wait in the Coronary Care Unit waiting room. They will be able to visit you when you return to your room in the Coronary Care Unit after the procedure has been completed.

### The Procedure

The skin over the femoral artery in your groin (hip area) will be anesthetized (numbed) with a local anesthetic. A needle puncture into the femoral artery through a very small incision will be performed and a short plastic tube, called an introducer sheath, will be placed in the femoral artery. The introducer sheath allows appropriate catheters (long, thin tubes) to reach the coronary arteries in your heart.

The narrowed area in your coronary artery will be treated with a balloon angioplasty procedure before the stent is implanted in your coronary artery. After the artery is opened, the stent will be delivered to the narrowed area of your artery on an angioplasty balloon. The balloon will be inflated and the stent will be placed along the inner lining of the artery at the site of the narrowing or blockage. In approximately six months, healthy tissue from the lining of your artery will slowly grow and cover the stent.

You will be mildly sedated, but will be able to communicate with your cardiologist and the cardiac cath lab team assisting during the procedure. While the procedure is generally not uncomfortable, you may feel mild pressure in your groin and chest tightness or pressure when the balloon is inflated in your coronary artery. The procedure generally lasts from one to two hours.

### **After the Procedure**

When the procedure is completed, you will recover in the Coronary Care Unit. The introducer sheath in your femoral artery may remain in place for a period of time (up to several hours) after the procedure.

Your nurse will closely monitor your vital signs, the groin area where the femoral sheath is located, and the pulses in your feet. It will be important for you to notify your nurse if you have any chest discomfort or pain in your groin. You will be encouraged to drink plenty of fluids and your family will be welcome to visit as soon as your nurse settles you in your room.

At the time of removal of the sheath from your femoral artery, firm pressure will be held in the groin area for 20-40 minutes to seal the puncture site and prevent bleeding. Bedrest may be required for six to eight hours following removal of the sheath to ensure that no bleeding occurs from the femoral artery puncture site. It is common to experience mild-to-moderate low back discomfort during the six- to eight-hour recovery, because of the length of time you are on bedrest. Your nurse will change your position and provide back rubs and analgesics to help reduce the discomfort.

Following your recovery, your activity will be gradually increased over a short period of time until you are fully mobile. Prior to the hospital discharge, you will be given information about your medications, activity status, diet, and follow-up appointments with your cardiologist.

### **Medications**

Most patients receiving a coronary stent will be treated with a combination of aspirin and Plavix® or Effient® in addition to other medications specifically tailored for you by your cardiologist. Aspirin and Plavix® help suppress the activity of blood platelets (clotting components in the blood) that have a tendency to stick to the metal surface of the stent. Your nurse will provide a comprehensive review of all your medications, including aspirin and Plavix®, prior to your leaving the hospital.

**An Important Note on Risk Factors**

Coronary artery disease is associated with well-recognized risk factors. An important part of your treatment is the modification of any risk factors, which might result in progression of your coronary artery disease. Modification of these risk factors includes lifestyle changes and possibly medication, which will be discussed with you in detail by your cardiologist. Lifestyle changes known to have a positive impact on reducing your risks of progression of coronary artery disease include:

- Quit smoking completely
- Work to achieve and maintain an ideal body weight
- Regular physical exercise
- Low-fat, low-cholesterol diet
- Management of stress
- Treatment and control of high blood pressure and high blood cholesterol
- Treatment and control of diabetes

As your partner in health care, the staff at St. Luke's will be happy to provide you with information and guidance on how to reduce your coronary risk factors by making heart healthy lifestyle choices.

Published: 09/02/10 MDX146

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**Coronary Stent St. Luke's - General Information St. Luke's, English  
(SaveNote version)  
Generated on Wednesday, February 29, 2012 10:34:37 AM**

Smoking and second hand smoke are dangerous to one's health.  
Ask your health care provider for information to quit smoking.

El hábito de fumar y el humo de otros fumadores son dañinos para la salud.  
Pídale a su médico información para como dejar de fumar.