



Victorian Heart Centre

STENT PLACEMENT IN A CORONARY ARTERY

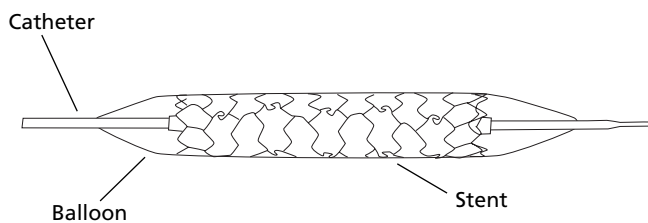
A guide for patients



Blood flow through a coronary artery can be improved by a procedure called balloon angioplasty, which reshapes the artery's inside wall. This procedure is explained in the patient education leaflet called "Coronary angioplasty – a guide for patients", available from your cardiac nurse or doctor.

After balloon angioplasty, your cardiologist may also insert a "stent" at the point of blockage to improve the diameter and strength of the artery. A stent helps to increase blood flow and reduces the risk of a recurring blockage. Stent placement also decreases the need for urgent coronary artery bypass graft surgery in case a major blockage has not responded to balloon angioplasty.

STENTS: A stent is a very thin and hollow cylinder made of metal mesh. When the stent is expanded outwards by the force of an inflated balloon, it takes on a new rigid shape. Stents come in a wide variety of designs, thicknesses and lengths to cater for different amounts of plaque and sizes of arteries.



The Procedure

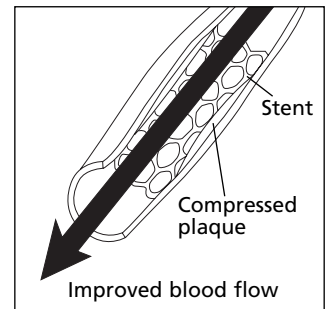
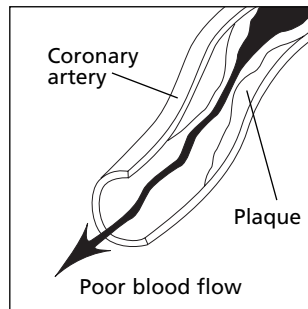
The procedure is performed in the Cardiac Catheter Lab by a cardiologist and a specialised team of nurses and technicians. The cardiologist inserts a balloon-tipped catheter into the femoral artery in the groin. Under X-ray imaging, the catheter is guided to the heart and into the diseased coronary artery. When the balloon is inflated, it flattens the plaque.

The cardiologist may see that the artery has not opened sufficiently. In such cases, one or more stents may be placed inside the artery; one or more arteries may need to be treated with multiple stents.

When the stent is placed, an anti-clotting drug is usually given to reduce the risk of blood clot formation over the stent. One or more anti-clotting drugs will be prescribed for the next few weeks or months during healing. It is important that you remember to take this medication.

The stent remains in the artery and becomes part of the artery's wall. This takes about one month. Avoid heavy exertion during this time.

PAIN AND DISCOMFORT DURING THE PROCEDURE: When the catheter to deliver a stent moves inside an artery, it does not cause pain. However, when the balloon is expanded inside a heart artery and the stent is placed, some chest pain may suddenly be felt because blood flow is briefly stopped to a small region of the heart.



EMERGENCY ANGIOPLASTY: Balloon angioplasty with the placement of one or more stents can also be used as an emergency procedure to open a heart artery blocked by a blood clot that is causing a heart attack.

Recovery after Stent Placement

After the procedure, you are moved to the Cardiac Unit. For several hours, a nurse will check your blood pressure, heart rate, the groin puncture site, and well-being. You can have a drink and a small bite to eat when you feel able. An overnight stay is usual.

Aspirin and clopidogrel will be prescribed. Take these medications as directed until your cardiologist says you can stop. Your doctor will recommend that you attend a cardiac rehabilitation program such as HeartSmart.

Possible Complications

As with all procedures, the placement of a stent does have risks, despite the highest standards of practice. Most people do not have complications. If a complication occurs, it is usually temporary. However, some complications may have permanent effects or may even be life threatening.

Specific risks of stents

- rarely, the treated artery may close off during or after the procedure
- rarely, the treated artery may rupture
- if the treated artery becomes closed or damaged, and blood flow cannot be restored, urgent coronary artery bypass graft surgery may be needed
- a clot may form over the stent, despite anti-clotting medication
- during healing, the inside wall of the artery may slowly grow over the stent too much and block off the artery (restenosis).

TALK TO YOUR DOCTOR OR NURSE

This leaflet is intended to provide you with information and is not a substitute for professional advice. It does not contain all of the known facts about coronary stents. There may be other possible side effects that are not listed in this pamphlet.

If you are not certain about the benefits, risks and limitations of treatment, be sure to ask your doctor or nurse.

It is important that you have enough information about benefits and risks so you can make an informed decision about having treatment.