Coronary Stenting

Coronary stent implantation also known as coronary angioplasty or PCI (percutaneous coronary intervention) is a treatment that helps improve the blood supply to the heart muscle.

Prof Ruparelia may suggest a stent if there is evidence of a narrowing of one or more of your coronary arteries that are thought to be causing symptoms of angina (exertion chest pain / breathlessness) or a reduction of the blood flow to large areas of the heart (ischaemia) in spite of optimal medical therapy.

How should I prepare?

You can eat and drink up until the procedure. If you have an element of kidney failure, you may be asked to attend a little earlier than your planned procedure time so that you can be hydrated prior to the procedure. Please wear comfortable clothing.

It is important you following the specific instructions provided to you by Prof Ruparelia with regards to your medications (especially blood thinning and diabetes medications) prior to your procedure.

What are the risks?

Coronary stent implantation is generally very safe with the risk of a significant complication approximately 1%. The most common complication includes pain, bleeding, bruising of the puncture site. There is a very small risk of a stroke, heart attack, damage to heart artery or mortality. Prof Ruparelia shall explain each of these before the procedure.

The Procedure

On the day of your procedure you will be asked to attend. A small cannula is inserted in the arm through which any medication can be administered if required. Your medications will be checked to ensure that you are on the correct regimen - you may require additional anti-platelet therapy.

You are awake through the procedure and some sedation can be administered if you are nervous or anxious.

Local anaesthetic is administered to numb the skin in the wrist (the most common route - rarely Prof Ruparelia may suggest that the procedure is performed via the artery at the top of the leg - femoral artery).

Small tubes are then advanced through the artery through which contrast is administered to take pictures of the coronary arteries with X-ray.

A very thin wire is then advanced to cross the narrowing in the artery. This is then stretched open with the inflation of a balloon. A wire mesh stent is then implanted to maintain improved blood flow. Whilst the balloon is inflated or when the stent is being implanted, you may suffer some discomfort - this should only last a few seconds but if prolonged please inform Prof Ruparelia who can administer further pain relief as required. The procedure usually takes approximately one hour.

Commonly Prof Ruparelia will use intravascular imaging to optimise results to ensure the best possible results both acutely but importantly into the long-term.

Prof Ruparelia will explain the procedure and formulate an ongoing management plan (including any changes to medications) with you immediately after the procedure.

Recovery and post-procedural care

If the procedure has been performed via the wrist (radial artery) you are able to sit up immediately. A tight band is usually applied around the puncture site and is slowly loosened over two hours. Once the team are happy with the puncture site you will be allowed to go home (2-3 hours after the procedure). It is important that you have someone to take you home and be with your for the first night at home. You should take care of the wrist for a few days to facilitate healing.

Following a coronary stent implantation in accordance with DVLA guidelines you are not permitted to drive for 1 week.