The *Heart* Specialists

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CORONARY STENT

What is it?

When a narrowing in a coronary artery is dilated with a balloon the cholesterol material is compressed into the artery wall and the artery is stretched. After ballooning the artery can recoil and the cholesterol material can be dislodged to produce renarrowing. Stents are a tubular sleeve of stainless steel which are placed inside the narrowed coronary artery to prevent early renarrowing in the same way that a tunnel is shored up by wood to prevent cave-ins. It is mounted on the balloon catheter and expanded inside the artery at the point of disease. It remains permanently inside the artery. Depending on the type of stent used, it may take months to a year before the natural lining of the artery covers the stent, but until then, it is exposed as a foreign material. For this reason blood thinning drugs are used to help prevent blood clots forming which may block the stent.

What are the risks?

The risks of stent angioplasty are slightly lower than with balloon alone. The chances of a successful result are greater than 98%. In a small number of patients the artery cannot be opened successfully and urgent bypass surgery is needed. This occurs in less than 1% of cases. Rarely the stent can become dislodged before it reaches the correct area. As the stent is a foreign material inside the artery until it is covered by the healing process it can induce a blood clot which could block the artery. This is rare, occurring in less than 1%. It is most likely to occur in the first week. If you develop **severe chest pain** resembling your original angina you should call the ambulance and be assessed in hospital. The great advantage of stents is a reduction in the chance of renarrowing after angioplasty. With balloons alone this occurs in one third of patients in the first 6 months. With stents the incidence of renarrowing and recurrent pain falls to less than one in six.

What tablets are required?

Following your coronary angioplasty and stent insertion - your cardiologist usually recommends the medication Clopidigrel (Plavix / Isocover) to be taken for either one month or one year. Clopidigrel helps prevent clot formation within the stent. It is very important you take this medication for the duration as directed by your cardiologist. If you need to stop this medication for planned or unplanned surgery, please inform your treating cardiologist. Aspirin will also be prescribed life long, unless you have had a previous reaction. In this instance, Clopidigrel alone is the drug of choice.

Cholesterol lowering medications will continue long term – regardless of your present cholesterol level.

Other medications that have also been used in patients with coronary artery disease are betablockers (such as metoprolol or Atenolol) and ACE inhibitors (such as perindopril or ramipril). Your cardiologist will advise you as to whether these will also be necessary.

What follow up is needed?

You should see your local Doctor in the first week after discharge and your Cardiologist at three - four weeks post procedure. You will be referred to a Cardiac Rehabilitation Program and this should commence approximately 2 weeks following discharge. You should contact your Cardiologist if chest pains recur at any time.