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Stents

What is a Stent?

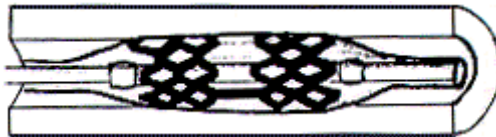
- Stents are tiny mesh-like tubes made from stainless steel. They are placed permanently inside an artery (blood vessel) to hold it open after a balloon angioplasty (PTCA).
- The actual procedure for placement of the stent is the same as an angioplasty with the addition of the stent placement.

Why is a Stent Used?

- A stent may be used to keep an artery open that has closed or partially closed after a previous angioplasty(ies) to improve the flow of blood.
- In some cases, stents are used when blocked bypass vein grafts are opened through angioplasty.

How is a Stent Placed?

- First, an angioplasty is done to open the blockage in the area.
- After the artery is opened, a catheter, which has a stent over a deflated balloon on the tip is reinserted into the artery up to the area previously opened by angioplasty.
- Once in place, the balloon is inflated, expanding the stent and pressing it against the artery wall.
- The balloon is deflated and the catheter and balloon are removed, but the stent remains expanded and in place to help keep the narrowed portion open after angioplasty.
- The stent will remain in the artery permanently.
- The artery will heal around the stent.
- The procedure lasts one to two hours.



What Symptoms May Be Experienced During the Procedure?

- A slight burning or stinging from the medicine used to numb the catheter insertion site
- A slight discomfort or pressure as the catheter is being inserted
- Slight nausea and/or extra heartbeats
- Chest pain may occur as the balloon catheter is being inflated, but it is temporary

What Happens After the procedure is Completed?

- After X-rays are taken, the balloon and catheter are removed.
- The sheath (IV) is usually left in place in the leg overnight until the blood thinning medications are discontinued and clotting time returns to normal.
- A bandaid or pressure dressing will be placed over the area where the catheter was inserted.
- The patient will be admitted to a special cardiac care unit (DOU or ICCU) to be closely observed.
- When the sheath is removed from the groin, (usually the following day), firm pressure is applied to the sheath insertion site for 15-30 minutes until the bleeding stops.
- If an artery in the arm is used, pressure will be applied over sheath insertion site for 15-30 minutes.
- The insertion site will be checked frequently for signs of bleeding.
- Blood pressure and the pulse in the leg (or arm) used will be checked frequently.
- A knot under the skin where the catheter was inserted may occur. This is only temporary.

- Bruising to the leg/groin area may occur where the catheter was inserted. The bruising may spread down the leg and is only temporary.
- Most patients are discharged in eight hours with minimal activity restrictions.

What Precautions Should Be Observed Following the Procedure?

- Avoid bending the leg at the hip (groin area) for six to eight hours after the catheter is removed.
- Hold the bandaid firmly if it is necessary to cough or sneeze.
- Avoid bending or using the arm for six to eight hours if it was used for the insertion of the catheter.

What Signs and Symptoms Should Be Reported Immediately?

- Discomfort or sudden pain at the insertion site
- A warm, moist and sticky feeling, or bleeding
- Any discomfort in chest, neck, jaw, arms or upper back, shortness of breath, weakness or dizziness

What Follow-up can be Expected After the Patient is Home?

- The patient will continue to have routine follow-up visits with the cardiologist after this procedure.

What Preparation Is Needed?

- Nothing to eat or drink after midnight.
- It is important for the patient to ask his doctor:
 - How to adjust insulin and food intake prior to the procedure if he is a diabetic
 - If he should take his regular medications the morning of the procedure
 - If taking blood thinners (ie. Coumadin), should this medication be withheld and, if so, how long prior to the procedure
- Leave all valuables at home.
- Plan to be admitted to the hospital overnight.
- Make arrangements to be driven home the following day.