



Superior Vena Cava Stent Insertion

This leaflet tells you about the procedure for inserting a vena cava stent. It explains what will happen before, during and after the procedure, and explains what the possible risks are.

What is a vena cava stent?

The superior vena cava (SVC) is the large vein that carries blood from the head, neck and arms back to the heart. If this vein becomes obstructed (narrowed) or blocked it can result in swelling of the face and arms, headaches and breathlessness. An SVC stent is a metal mesh tube that is placed inside the vein to hold it open and improve blood flow. The stent should result in a rapid improvement in your symptoms.

What will happen before the procedure?

The radiologist (specialist x-ray doctor) who will carry out the procedure will explain what he is going to do and you will have the opportunity to ask any questions that you may have. A nurse will look after you throughout the procedure and there will also be a radiographer present who will operate the x-ray equipment.

You will be asked to lie on your back on the x-ray couch. You will have a monitoring device attached to your chest and finger, and your blood pressure will be checked regularly during the procedure. It is important that everything is kept sterile, so your body will be draped with sterile towels. The radiologist will wear a theatre gown and gloves. You will be awake throughout the procedure.

The stent will be inserted through a vein in your groin. The area will be cleaned and then numbed with local anaesthetic. You may feel a stinging sensation as this is injected, but once the area is numb you should not feel any pain. A guide wire will be passed up through the vein until it reaches the area of narrowing. The x-ray machine will guide the placement of this wire. A catheter (fine plastic tube) will be threaded over this wire and the stent will be placed through this across the narrowed area of vein. Once in place the stent can be opened up further by inflating a small 'balloon' inside it. This may cause some discomfort in your chest. The catheter will then be removed from your groin but the radiologist will need to press this area firmly for a short time to prevent any bleeding.

The procedure will usually take around 1 hour, although this can vary.

What happens afterwards?

You will be taken back to the ward on a trolley. You will need to lie flat for around 2 hours after the procedure. Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no problems. They will check your groin to make sure that there is no bleeding from it. You will normally stay in bed for a few hours, until you have recovered. The decision to send you home will be taken by the medical team looking after you and will depend on what other treatment you are receiving.

Are there any risks or complications?

The insertion of an SVC stent is considered a safe procedure designed to provide relief from unpleasant symptoms related to narrowing of the SVC. However, as with any minor surgical procedure some complications can occur. You may develop a small bruise where the needle was inserted. This is quite normal. If this develops into a larger bruise there is a risk that this could become infected. This would need treating with antibiotics. There is also a chance that the stent could move or become blocked which may result in a return of your symptoms. Occasionally it may not be possible to place the stent at all and the procedure may have to be abandoned.

All x-ray procedures involve exposure to ionising radiation in varying amounts. The use of radiation is strictly controlled and is kept to the minimum required. For this examination the extra radiation is equivalent to what you would receive from the atmosphere (background radiation) over a period of around 18 months.

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As with any procedure unforeseen complications can occur, although this is very rare. Despite these risks it is important to remember that the risk to your health of not having this procedure could be much greater.

Who should I contact if I have any questions?

If you have any questions about the information in this leaflet or about the procedure itself please ask the nurse that is looking after you. We will do our best to make your visit to Medical Imaging as pleasant as possible.