

Central venous catheter insertion – venous ports

A central venous port (also known as portacath or “implantable venous access port”) is a small round plastic or metal chamber which is placed under the skin on the front of your chest which you will feel as a small bump when it is in place. The chamber has a tube (catheter) attached which is placed into a vein in the neck and passes from this point to one of the large veins in the middle of the chest.



An example of a venous port, also called a portacath

How will the procedure benefit me?

The major benefit is that you will not require repeated needle sticks for injections or cannulas (little tubes that are placed in the veins of the hands or arms, that have to be changed every few days).

Ports may be used for several purposes, including delivering long-term medications or nutrition, for taking blood tests and for injecting contrast in CT if you are having frequent scans. The port can be safely left in place for as long as it is needed.

How should I prepare for the procedure?

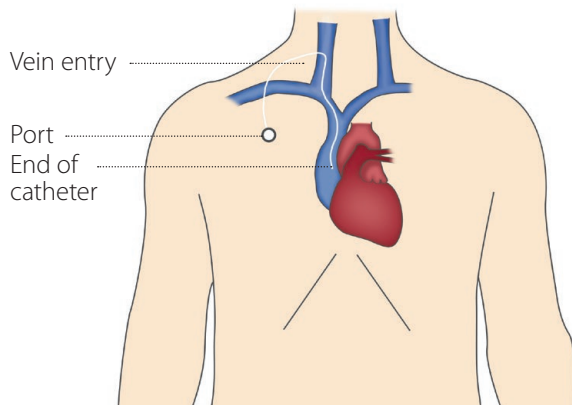
You may be asked to fast for 6-8 hours before the procedure. If you are taking any medication, please tell your doctor, as some medications may need to be stopped or changed beforehand, especially medications that affect the clotting of your blood.

The procedure

Often, the procedure is performed awake under local anaesthesia, but sometimes you may be given sedatives which will make you feel drowsy. Local anaesthetic is used to temporarily numb the skin. In babies and children, the procedure is often performed under general anaesthesia. Generally, the procedure takes 30-45 minutes.

After the skin is sterilised, local anaesthetic is given to the skin of your chest, and the chamber put in place. The catheter attached to the chamber is brought under the skin to the neck. A second tiny cut (incision) is made in the skin of the neck and a needle passed into the vein underneath, using ultrasound to watch the needle as it is advanced into position. A small wire is then passed to a vein in your chest using x-rays (fluoroscopy) for guidance. A small hollow tube is advanced over the wire, the wire is removed, and the catheter part of the portacath advanced into place in the vein.

The cut in the neck is closed with a single stitch or glue. The chest incision is closed with deep stitches and stitches or glue to the skin. Medical and nursing staff will then be able to deliver intravenous medications by feeling the ‘bump’ under the skin and then passing a needle through the skin into the chamber. Medications delivered into the chamber pass through the catheter into the central vein.



A venous port

Venous Ports (also known as “implantable venous access port”) This is a small round plastic or metal chamber with a catheter attached which is placed under the skin on the front of your chest; you will feel it as a small bump when it is in place. Putting this chamber in place requires a small incision. The catheter portion is passed into a vein in the neck. The chest incision is closed with stitches and/or glue. Medical and nursing staff will then be able to deliver intravenous medications by feeling the ‘bump’ under the skin and then passing a needle through the skin into the chamber. This can also be used for blood tests and for injecting contrast in CT if you are having frequent scans. At the end of the procedure the catheter is removed and site of access will be sealed. You may be asked to stay in bed for up to 12 hours in order to reduce the potential for bleeding from the artery that was punctured.

What are the risks?

There is a small risk of bleeding when the incisions are made. As the central venous device has direct access to the bloodstream, infection can be a risk after the procedure. There is also a small risk of puncturing the chest and causing the lung to collapse, but this is extremely rare and is easily treated, by passing another tube which allows the lung to reexpand. The line can also become blocked or dislodged, which can sometimes be corrected, but occasionally requires replacement.

What should I expect after the procedure?

You will return to a ward and the central venous catheter can be used immediately. If you have not had intravenous sedation, you may eat and drink soon afterwards. After general anaesthetic, some people feel sick, vomit or have a sore throat. The area where the catheter was inserted may feel temporarily uncomfortable, but this should be easily controlled with paracetamol (if not allergic).

How do I manage the dressings? What is the follow-up plan?

This depends on the type of dressings used. Steristrips (little sticky strips of paper) are often used and should stay in place for five days or so, at which time they are expected to drop off normally. If a stitch is used in the neck, it will need to be removed after 5-7 days. Some operators close the chest incision with absorbable stitches which do not need to be removed. The medical staff should give you clear directions as to when any stitches/dressings need to be removed and the wound inspected. This can frequently be performed by your general practitioner or their practice nurse, so that you don't need a separate trip back to the hospital.

The port will stay in place as long as you are getting treatment. When no longer needed, the port is removed under local anaesthetic (in children it is often removed under general anaesthetic). There is a small risk of bleeding when the port is removed, but this is minimised by the staff applying pressure to the area for a few minutes afterwards.

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