Royal Cornwall Hospitals NHS
NHS Trust

Inserting an implanted port

in the Interventional Radiology department

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What is an implanted port?

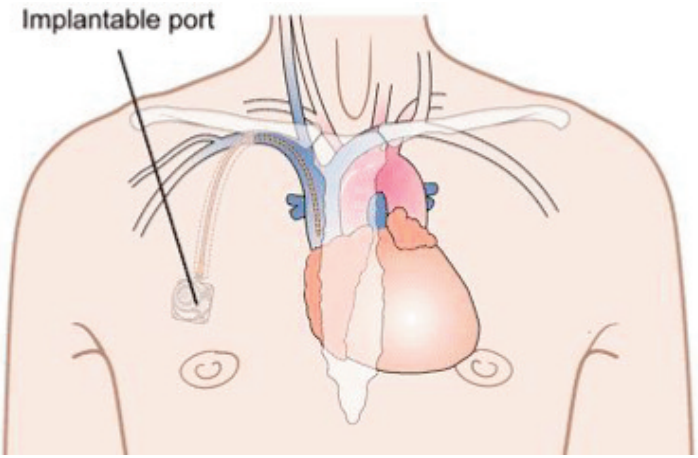
An implanted port is a small medical device that is inserted beneath the skin and connected into a large vein. It is made of two parts:

1. A soft, thin hollow plastic tube known as a catheter. The tube is tunnelled under the skin with the tip sitting in a vein just outside the heart.
2. A port or disc (2.5- 4cm in diameter), which is inserted under the skin in the chest and attached to the tube.

A port is a type of central venous access device (CVAD) and is often called this by medical professionals. Central venous access devices are small, flexible tubes placed in large veins for people who require frequent access to the bloodstream.

Once your port is in place and you attend for treatment, the skin over the port will be cleaned prior to use. A special needle is then pushed through the skin into the port. Treatment is then given via this needle into the port. The treatment goes into the port and flows into the catheter and your bloodstream.

The catheter tip will lie in a vein just above your heart and the other end connects to the port in the chest. The port shows as a small bump underneath your skin – the nurse will know where to insert the needle because it is possible to feel it under the skin.



What is an implanted port used for and what are the benefits?

Ports are often used to give intravenous medicines (medicines that need to go directly into a vein) or fluids to patients who have weak or very narrow veins, or to patients who require long-term treatment. They may also be used to take blood samples (avoiding needle puncture directly to the veins every time). Doctors recommend the use of implanted ports for patients who regularly have chemotherapy, long-term antibiotics and some infusions.

A port can be left in for a long period of time up to several years if necessary, so it can be used throughout your treatment.

There will be two small scars left on your skin. One small 'bump' over the skin where the port is and one 'bump' on the collarbone can be felt and might be visible.

Are there any alternatives?

One alternative would be a repeated needle puncture to the vein every time you have treatment. Use of small tubing (cannula) in a small vein (usually arm/hand) would be needed for each treatment. A new one needs to be placed and removed each time.

Another type of CVAD, for example a 'Hickman' or PICC line might be used. These have advantages and disadvantages comparable to implanted ports. Please talk to your doctor or nurse if you would like more information on these alternatives.

Are there any risks?

Serious risks and complications of having a port inserted are very rare. However, as with any procedure, some risks or complications may occur. For example:

- **Bruising** – this is quite common and normally settles a few days after the procedure.
- **Infection** – the insertion procedure is carried out in a sterile condition to eliminate or reduce any sources of infection. However, infection may still occur from local infection of the skin or from within the bloodstream at any

time while the port is in place. Infections can usually be treated with antibiotics. In rare cases however we may have to remove the port.

- **Thrombosis (blood clot)** – sometimes a clot of blood can form around tubing in the vein. This rarely causes any problem. However, it may prevent blood being taken from the port for a blood test. To avoid this problem, a blood thinning solution is usually locked inside the port and the catheter when it is not in use.
- **Lung puncture** – this happens when the lung is accidentally punctured during the procedure. It is a very rare complication and happens to one in every 1,000 patients. If this occurs, we may keep you in hospital for a few days until the lung has healed.
- **Blockage** – rarely, the tubing of your implanted port can become blocked. Regular flushing helps to prevent this – your port will be flushed in the ward or unit where you receive your treatment. Some patients learn to use ports themselves. Speak to your nurse specialist if you would like to arrange this.

  If the port comes blocked, sometimes it is possible to unblock it. Rarely, the port may need to be replaced.

The radiologist will discuss the possible risks with you before you have the procedure. Please ask them if you have any concerns or would like any further information.

How do I prepare for the procedure?

You can come into hospital, have a port inserted and go home the same day. You will usually need to have a blood test before the procedure. Your doctor or clinic nurse specialist will tell you how to arrange it when they recommend a port.

If you are currently receiving chemotherapy, a blood test is needed close to the procedure. If you are not currently on chemotherapy a blood test within a few weeks of the procedure is fine.

- Please let us know if you are taking any antiplatelet medicines (for example, aspirin, Clopidogrel, Prasugrel, Ticagrelor) or any medicines that thin the blood (for example, Warfarin, Rivaroxiban, Dabigatran), as these may need to be withheld temporarily before the procedure. Call the Interventional Radiology department for advice as soon as you get your appointment letter on 01872 252285 if you take any of these medications.
- If you have coronary stents or metal heart valves in place then you should not stop these drugs but please let the department know before to coming to the hospital. The numbers are given above and also at the end of this leaflet.
- You will need a responsible adult to take you home by private transport. We do not recommend that you use public transport as it is unsafe if you feel unwell.
- You will also need somebody to stay with you overnight.

What happens before the procedure?

After you have arrived at the radiology department, you will be examined and assessed by a radiology nurse and given a hospital gown to wear.

You will be given the opportunity to ask the Interventional Radiologist (a doctor who uses imaging machines to diagnose and treat illnesses) any questions you have.

Giving consent (permission)

The staff caring for you will ask your permission to perform the procedure. You will be asked to sign a consent form that says you have agreed to the procedure and that you understand the benefits, risks and alternatives. If there is anything you don't understand or you need more time to think about it, please tell the staff caring for you.

Remember, it is your decision. You can change your mind at any time, even if you have signed the consent form. Let staff know immediately if you change your mind. Your wishes will be respected at all times. If you would like to read our consent policy, please tell a member of staff.

How is the port inserted?

1. You will be taken into the Interventional Radiology theatre, and asked to lie on the table. The area for the insertion will be cleaned with antiseptic fluid and draped with sterile towels.
2. The radiologist will inject some local anaesthetic into your skin on your chest and neck to numb the area. This may sting a little as it goes in. After this you should only feel pressure not pain. Please let the nurse know if you are uncomfortable.
3. The radiologist will make two cuts in the skin which will leave two small scars. The catheter will be inserted into the vein in your chest via one of these cuts. It will then be tunnelled under the skin to the second cut.
4. The catheter is then connected to the port, which is fitted into a space created under the skin.
5. We will check the position of the catheter and port with the imaging machine. If it is satisfactory the cuts are then stitched and a dressing is put over the site.

Will I feel any pain?

The local anaesthetic injection will sting momentarily. The examination should then be pain-free but you may still feel pressure where the doctor is working. If you experience any pain during the procedure please tell the nurse so pain relief can be given to you.

Once the local anaesthetic wears off you may have some pain or discomfort. Pain medication such as paracetamol can be taken to ease the discomfort.

What happens after the port has been inserted?

After the insertion you will stay in radiology recovery or on the Headland unit for about an hour. Your blood pressure and pulse will be measured at regular intervals and a clip on your finger will measure the oxygen level in your blood. This is not painful.

We will provide light refreshment, such as tea or coffee. If you have any special dietary requirements, you are welcome to bring food and drink with you.

The nurse will tell you when you can get up and move around. You will have two dressings on the port site and on the base of your neck. These require changing after 48 hours and we will give you some dressings and advise on how to care for small wounds/scars. Dressings will usually be required for up to two weeks.

You will need a responsible adult to take you home by private transport. We do not recommend that you use public transport as it is unsafe if you feel unwell. You will also need somebody to stay with you overnight.

When can the port be used?

The port can be used after a week but sometimes it is not needed for several weeks.

How do I look after my port?

The port requires very little maintenance once the skin has healed, but avoid trauma to the area as much as possible.

Once the port has been inserted you cannot shower for 48 hours. You may then shower with a waterproof dressing over the wound.

Avoid strenuous activity for 7 days after your port has been inserted.
Your port will need flushing once every month when not in use.

How will I know if something is wrong with my port?

If you have a temperature, chills or feel unwell, please let the medical team looking after you know as soon as possible. This could be an early sign of infection. The tube is in a large vein close to your heart so it is important to treat any infection as soon as possible. If you have any concerns about your port, contact your nurse specialist or team looking after you.

How is the port removed?

When you no longer need the port it will be taken out. Local anaesthetic will be applied to the area. A small cut is then made over the port site and the port is removed. As the catheter is attached to the port, this will be removed at the same time. The wound will then be stitched and dressed.

Contact us

If you have any questions or need any further information, please contact us:

Interventional Radiology department
01872 252285

If you would like this leaflet in large print, braille, audio version or in another language, please contact the Patient Advice and Liaison Service (PALS) on 01872 252793

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