

Totally Implantable Venous Access Devices (port) – Information for patients

This leaflet tells you about the procedures for Totally Implantable Venous Access Devices (port). It explains what is involved and the common complications associated with this procedure. It is not meant to replace discussion between you and your doctor, but as a guide to be used in connection to what is discussed with your doctor.

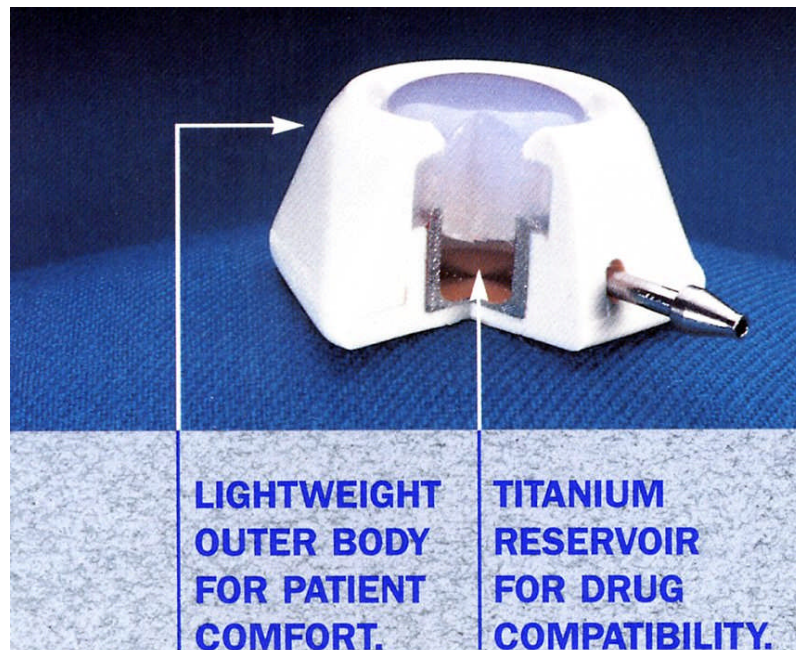
What is a Totally Implantable Venous Access Device (Port)?

A port is used for the administration of intravenous medications, blood products, fluids and for sampling of venous blood. It is a system that is completely implanted beneath the skin and is visible merely as a small raised area. Since the port is placed under your skin it is protected from water, bacteria and other irritants. Daily care is generally not required and should not limit you doing any of the activities that you normally enjoy.

A port is a small round chamber approximately one inch in diameter that contains a raised central dome called a septum. The septum is made of silicone and is seated in a titanium base.

The septum is where the needle is inserted for the delivery of medication. The medication is then carried from the port chamber into the bloodstream through a small flexible tube called a catheter.

Cross section of a port



Why do I need a port?

The main reasons for requiring a port are:

- When your peripheral cannulae is lasting only a few days
- When peripheral access is difficult
- You are having frequent and or prolonged courses of intravenous antibiotics

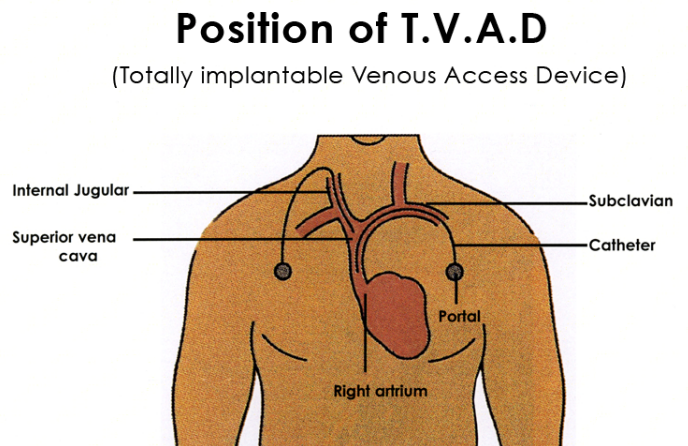
What happens once I decide to have a port?

Once you have decided along with the Cystic Fibrosis (CF) team to have a port fitted:

- You will be referred to a surgeon who has specialist knowledge of these types of devices.
- An outpatient appointment will be made as soon as possible for you to meet the surgeon and discuss the whole procedure, for example where you would like the device to be positioned and whether the procedure will be performed under a general or a local anaesthetic.
- Once a date has been decided for you to have the procedure, you will need to be seen in the CF clinic two weeks before. Your chest will be assessed to see if you require intravenous antibiotics prior to surgery.
- Depending on how your chest is, you may be admitted the day prior to surgery or several days before to allow for treatment.
- You will be unable to eat or drink for at least four hours before surgery

How is the port implanted?

The surgeon will place the device in a secure position under the skin, usually just below the collarbone. A small catheter will be placed in a large blood vessel leading to the right side of the heart. You will have a small incision with dissolvable stitches where the device has been fitted. The port can be accessed and used immediately.



During the first few days after surgery it is important that you avoid any heavy exertion or strenuous activities. The area around the port may feel tender for two to three weeks. Once the incision has healed, the site will no longer require any special care and you will be able to resume your normal activities.

How does the port work?

Once the port is implanted, it can be used to administer intravenous medication and fluids. It can also be used to obtain some blood samples.

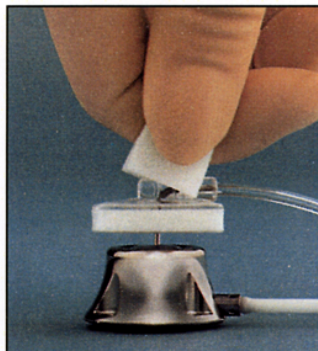
The port must be flushed with heparinised saline every 4 – 6 weeks to prevent it from blocking. This will be done by a CF nurse during a clinic visit or at home. The device must always be accessed by a person who has been trained in the management of this technique. You must never allow anyone who is not familiar with the system to try to flush or access the line.

Some people with CF wish to learn how to access their own port. If you would like to learn how to do this, inform the CF nurses who can discuss and arrange for you to become competent at flushing and accessing your port.

What happens when I need intravenous antibiotics?

When starting intravenous antibiotics, the CF nurse can place the needle in the port whilst you are in the outpatient's clinic. Once in place, it is covered with a clear sterile dressing, which will keep it clean and dry. Very strict hand hygiene must be used at all times when dealing with the port to avoid any infection occurring.

C.V.A.D Needle



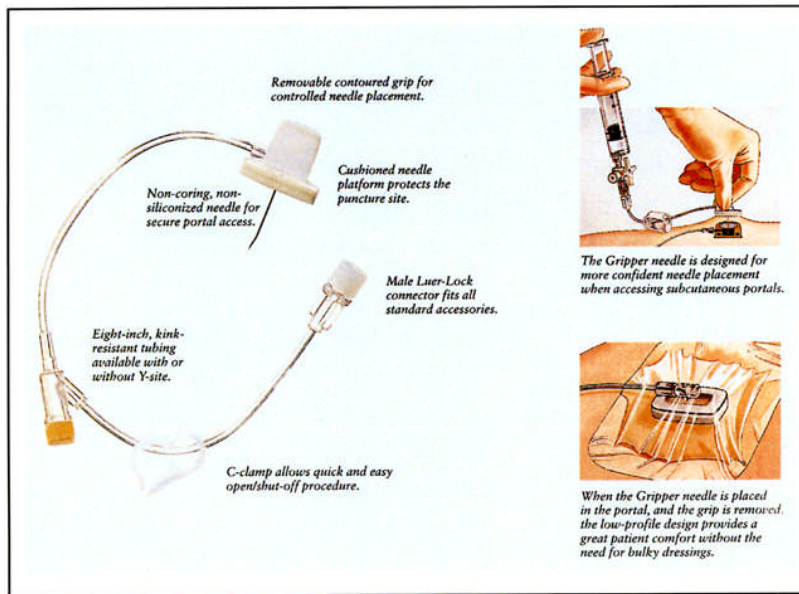
A Non-coring needle must always be used. Normally the gripper is chosen for Cystic Fibrosis patients

At the end of the course of treatment you can either:

- Return to the clinic or Ward 26 to have the needle removed.
- Remove the needle at home, providing you have been taught by the CF nurse

Never leave the needle in for longer than the course of treatment. If you are having more than three weeks of treatment the needle must be changed.

Information for Patients



Potential Complications

Whilst recognising the benefit of port's there are complications with the use of these devices. The most common are:

- **Infection:** This can occur at the needle entry point or in the catheter of the port.
- **Catheter occlusion / thrombosis:** This occurs when the tip of the catheter becomes blocked by a blood clot or fibrin sheath
- **Leak:** Leaks occur when there is a fracture in the catheter
- **Skin necrosis:** This can happen when the port necroses through the skin
- **Discomfort:** Sometimes the port can cause discomfort for no particular reason.
- **Catheter displacement:** When the catheter comes away from the port.

If you experience any of the following:

- Swelling around the port.
- Stiffness or blockage of the line
- Pain on administering medication
- High temperature or feeling unwell whilst giving intravenous medication or shortly after giving IV medication

You must stop using the port and contact the CF nurses immediately. If this is outside working hours (08.30-16.30 Mon – Fri) contact Ward 26 and speak to the nurse in charge.

If you have any further questions please contact the Cystic Fibrosis Nurse's during working hours (08.30-16.30 Mon-Fri)

Information for Patients

Contact us:

If you would like more information on this subject either speak to the nurse in clinic please do not hesitate to contact the C.F Clinical Nurse Specialists on 0121 424 2515.

References

Arrow, (1997) A Port Vascular Access Systems. Information Leaflet, Reading.

Mallett J & Bailey C, 1996, The Royal Marsden NHS Trust Manual Of Clinical Nursing Procedures, Fourth Edition, Blackwell Science, Oxford.

Additional Information Sources:

For more information on all aspects of living with Cystic Fibrosis you can visit the Cystic Fibrosis Trust web site at : www.cftrust.org.uk.

For local news and events the West Midlands Regional Cystic Fibrosis Unit based at Heartland Hospital has its own website at: www.heartlandscf.org.uk .

Our commitment to confidentiality

We keep personal and clinical information about you to ensure you receive appropriate care and treatment. Everyone working in the NHS has a legal duty to keep information about you confidential.

We will always ask you for your consent if we need to use information that identifies you. We will share information with other parts of the NHS to support your healthcare needs, and we will inform your GP of your progress unless you ask us not to. You can help us by pointing out any information in your records which is wrong or needs updating.

Please use the space below to write down any questions you may want to ask: