

## Introduction

A Portacath (Port) is an implanted device giving access to veins for patients who need regular long-term administration of antibiotics or chemotherapy drugs. Chemotherapy drugs can be toxic and often need to be delivered into a large central vein where the drugs are instantly diluted by the blood stream and distributed efficiently to the entire body. For patients with difficult veins, Ports can also be used for withdrawing blood for blood tests.

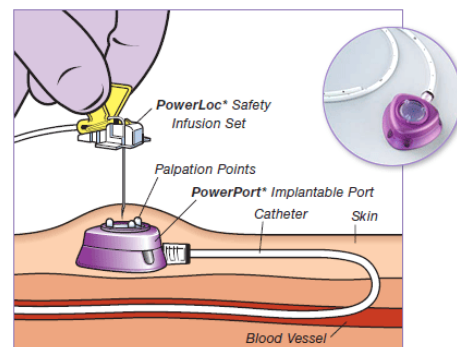
## What is a Portacath?

A Portacath system consists of two parts, the Port (reservoir) and the catheter (tube). The port which is a small rounded device made of titanium metal is implanted under the skin in the upper chest area. It has one chamber covered by a plastic membrane through which a needle can be inserted to deliver medication or take out blood. The tube which is connected to the port runs in the tunnel under the skin going over collar bone then enters the large vein in the neck, with its end lying in right side of the heart.

The plastic membrane is made up of self sealing plastic rubber; hence it can be punctured numerous times.

The Portacath can be left in place for several years. Monthly flushes with heparinised saline into the port will be required to avoid blocking.

The port has no electrical components and therefore can be used in any environment. It only has a small amount of metal and does not usually set off alarms at airports. But you may wish to carry a card with you explaining that you have this device in place. When the time comes for removal of the Portacath, this is usually a simpler procedure than inserting the catheter. It is removed under local anaesthetic as a day case / outpatient procedure.



## How is a Portacath inserted?

The Portacath insertion is under X-Ray control in Operating room.

1. The skin over the front of the chest and the side of the neck are cleaned well with disinfectant swabs.
2. Local anaesthetic is administered to the skin over the chest site.
3. Ports are usually placed on the chest wall. An incision of approximately 3 cm is made in skin on the front of the chest and a “pocket” is created under the skin for the port.
4. Local anaesthetic is administered to the side of the neck and using ultrasound guidance, access is gained to the vein in the neck, via a small (5mm) incision.
5. The tube (catheter) is then fed through the vein until the tip of the catheter is sitting in one of the large veins in your chest.
6. A small tunnel is made in the skin for the tube to pass through and the other end is connected to the port.
7. Correct positioning of the catheter is confirmed by fluoroscopy (using x-ray).
8. Wounds sutured and covered by sterile dressings.

## What will I experience during the procedure?

1. You will feel a slight pin prick when the needle is inserted into your vein on the back of your hand or in your arm, for intravenous line (IV) and when the local anaesthetic is administered to the chest wall and neck.
2. Devices to monitor your heart rate and blood pressure will be attached to your body.
3. You will be given sedation and pain relief through your IV to make you feel relaxed.
4. You may feel slight pressure when the device and catheter are inserted, but no significant discomfort.
5. As the contrast material passes through your body, you may get a warm feeling.
6. While you are in the hospital, your pain will be well-controlled with drug infused through your IV line.

**How should I prepare for the procedure?**

1. **Fasting:** You will likely be instructed not to eat or drink anything after midnight before your procedure. Your doctor will tell you which medications you may take in the morning.
2. **Allergies or previous reactions to contrast** (x-ray dye): Please inform staff at the time of booking your procedure if you have any known history of allergies, particularly allergies to x-ray contrast and seafood.
3. **Diabetes:** If you are a diabetic you should inform your doctor at the time of booking. You may need to discuss your insulin dose with your doctor.
4. **Medications:** Please inform your doctor about all the medication you are taking. Your doctor may advise you to stop taking some medications temporarily few days prior to your procedure e.g. blood thinners.
5. Please bring with you any medication and any recent blood test results or chest x-rays.
6. You may bring a favourite music as this can be played during the procedure. You are also encouraged to bring a friend or family member.
7. **On the day** of your procedure, please make your way to the Admission.

**What happens after the procedure?**

1. The area around the port may be swollen and tender following insertion.
2. When the anaesthetic wears off, you may feel some discomfort at the site of the incision and require some simple pain relief.
3. The Portacath system requires no daily care from you.
4. You will be asked to return to the hospital for removal or change of dressings.
5. If left unused the port needs to be flushed with heparinised saline once a month to prevent it from getting blocked.
6. You may shower 24 hours after the Portacath has been inserted with the waterproof cover in place, but if the dressing gets wet it will need to be changed. You may have a bath after 2 weeks.
7. Once the wound is healed no dressing will be required.
8. It is recommended that you do not perform any strenuous exercises or do any heavy lifting for 10 -14 days following the procedure.
9. Once the port is no longer required, it will be removed. The removal procedure will be similar to insertion, performed under local anaesthetic and sedation.

**What are the risks?**

1. Given the use of modern guidance technology (x-ray and ultrasound), the risks are minimal.
2. There is a slight risk of wound infection and / or vessel injury.
3. There is also the remote chance of allergy to medications used during the procedure.
4. You should contact your doctor or nurse immediately if you have any of the following: Chest pain; Pain, swelling, redness or drainage of pus around the port site or incisions; Swelling of the neck, face or arm on the side where the port is inserted; Shortness of breath or dizziness.

**Remarks**

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor. Evangel Hospital reserves the right to amend this leaflet without prior notice. We welcome suggestions or enquiries on the information provided in this leaflet. Please contact our Healthcare professionals so that we could follow up and make improvement.

**Reference**

Medical News Today: "Everything to know about portacaths" (2021)  
<https://www.medicalnewstoday.com/articles/portacath> (25-07-2023)