

R13 Inserting a Portacath

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You can get information locally from:

- Ealing Hospital main switchboard on 020 8967 5000
- Central Middlesex Hospital main switchboard on 020 8965 5733
- Northwick Park and St Mark's Hospitals main switchboard on 020 8864 3232
- Our website – www.lnwh.nhs.uk

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- At Northwick Park, St Mark's and Central Middlesex Hospitals on 020 8869 5118 or email PALS at LNWH-tr.PALS@nhs.net

- At Ealing Hospital and community services on Freephone 0800 064 1120 or 020 8967 5221 between 9.30 am and 4 pm or email PALS at LNWH-tr.ehPALS@nhs.net

Please note that this service does not provide clinical advice so please contact the relevant department directly to discuss any concerns or queries about your upcoming test, examination or operation.

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What is a port?

A port (or portacath) is a device inserted under your skin, usually on your chest. The device has a line (narrow plastic tube) that is inserted in the superior vena cava (one of the large veins that carries blood to your heart). The port can be used over a long period to give you medication or chemotherapy. The procedure is usually performed by a radiologist (doctor who specialises in x-rays and scans). They will use x-rays and ultrasound scans to help insert the port in the right position.

Your doctor has recommended inserting a port. However, it is your decision to have a port or not. This document will give you information about the benefits and risks to help you to make an informed decision. If you have any questions that this document does not answer, ask your doctor or the healthcare team.

What are the benefits of a port?

A port gives the healthcare team good access to your bloodstream over a long period. It is often used to treat repeated chest infections in people with cystic fibrosis or to give chemotherapy. Your doctor will be able to give you medication or chemotherapy that may otherwise irritate smaller veins and cause them to block.

Your doctor can also use the port to give you food into your bloodstream (total parenteral nutrition – TPN).

Are there any alternatives to a port?

It may be possible to give you chemotherapy and other medication through a tunnelled central line (also known as a Hickman line). This is more restrictive to your lifestyle and has more complications.

What will happen if I decide not to have a port?

Sometimes your doctor can use a drip (small tube) in a smaller vein in your arm. However, the drip will need to be moved into another vein at least every time you have a new course of treatment, as the medication or chemotherapy can cause smaller veins to block or collapse. There is a risk that, if you continue with your treatment in smaller veins, eventually the only option will be to have a port.

What does the procedure involve?

• Before the procedure

If you are female, the healthcare team may ask you to have a pregnancy test. They need to know if you are pregnant because x-rays are harmful to unborn babies. Sometimes the test does not show an early-stage pregnancy so let the healthcare team know if you could be pregnant. If you take warfarin, clopidogrel or other blood-thinning medication, let the radiologist know at least 7 days before the procedure. You will be admitted to hospital. The healthcare team will carry out a number of checks to make sure you have the procedure you came in for. You can help by confirming to the radiologist and the healthcare team your name and the procedure you are having.

The healthcare team will ask you to sign the consent form once you have read this document and they have answered your questions.

Do not eat or drink in the four hours before the procedure. If you have diabetes, let the healthcare team know as soon as possible. You will need special advice depending on the treatment you receive for your diabetes.

You may have an electrocardiogram (ECG) test to trace the electric activity of your heart over time.

The healthcare team will insert a small needle in your arm or the back of your hand. They will use the needle to give you medication during the procedure.

• In the x-ray room

Inserting a port usually takes about an hour. The radiologist will ask you to lie on your back. If appropriate, they may offer you a sedative or painkiller which they can give you through the needle.

The healthcare team will monitor your oxygen levels and heart rate using a finger or toe clip. If you need oxygen, they will give it to you through a mask or small tube in your nostrils.

The healthcare team will place sticky pads on your chest or arms so they can monitor your heart during the procedure.

The radiologist will keep everything as clean as possible and will wear a theatre gown and operating gloves. They will use antiseptic to clean the area where the port will be inserted and the area will be covered with a sterile sheet. Your face may be partially covered, so let the radiologist know if you are claustrophobic.

The radiologist will inject local anaesthetic into the area where they will make a pocket under your skin for the port, and where they will tunnel under your skin. This stings for a moment but will make the area numb, allowing the radiologist to put the line in with much less discomfort for you. The radiologist will create a pocket under your skin, usually just above your nipple, to insert the port in. You may feel a pulling sensation while they do this. The radiologist will secure the port to the deeper tissues using dissolvable stitches. The radiologist will usually insert the line in the internal jugular vein, in the lower side of your neck, or in the subclavian vein, just underneath your collar bone. The end of the line will sit in the superior vena cava near your heart and the other end is attached to the port (see figure 1).

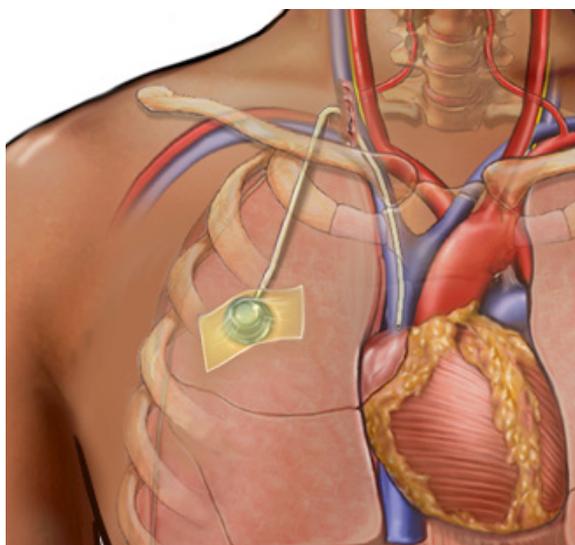


Figure 1
Inserting a port

If the subclavian or internal jugular veins are not suitable, the radiologist may need to use the femoral vein near your groin. The radiologist will usually use an ultrasound scan to help decide on the most suitable vein to use.

If the radiologist uses your internal jugular vein, they may tip the bed slightly head-down. This will make the vein get larger so it will be easier to insert the line.

The radiologist will insert the line using a needle and guidewire (thin flexible wire). The radiologist will make a cut over the vein and insert the needle into the vein. They will pass the guidewire through the needle and then remove the needle. The radiologist will use x-rays to help them insert the tip of the guidewire in the superior vena cava near your heart. The x-ray equipment will move around the table and come close to your chest but it will not actually touch you.

The radiologist will make a cut near your nipple, tunnel under your skin to where the guidewire enters the vein and pass the line into the cut and through the tunnel. They will trim the line so the tip will sit in the superior vena cava near your heart.

The radiologist will pass the line into the vein, so the tip reaches the right position. You will have an x-ray to check that the port is in the right position. The radiologist will close your skin with stitches and cover the area with a clear plastic dressing.

What complications can happen?

The healthcare team will try to make the procedure as safe as possible but complications can happen. Some of these can be serious and can even cause death. The possible complications of inserting a port are listed below. Any numbers which relate to risk are from studies of people who have had this procedure. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

1 Complications during or soon after the procedure

- Pain or discomfort where the port was inserted. This is easily controlled with simple painkillers such as paracetamol and usually settles within a few days.
- Bleeding after the procedure (risk: less than 1 in 20). This is easily treated by the radiologist or a nurse simply pressing firmly for a few minutes where the port was inserted. If the bleeding is heavy, you may need a blood transfusion or further surgery (risk: 1 in 100).
- Bruising where the port was inserted. This is common and usually fades in about three weeks.
- Allergic reaction to the equipment, materials or medication. The healthcare team is trained to detect and treat any reactions that might happen. Let the radiologist know if you have any allergies or if you have reacted to any medication or tests in the past.

- Pneumothorax, where air escapes into the space around your lung (risk: less than 1 in 500 if the jugular vein is used, less than 2 in 100 if the subclavian vein is used). A pneumothorax is usually small and does not cause any problems. If it is large, it can cause your lung to collapse. The air will need to be sucked out using a needle (aspiration) or let out by inserting a tube in your chest (chest drain). If you suddenly become short of breath or have severe chest pain while at home, call an ambulance.
- Failure of the procedure (risk: 1 in 20 if an ultrasound scan is used). The radiologist will try to insert the line into another vein.
- Radiation exposure (the extra risk of developing cancer over a lifetime: on average less than 1 in 3,000 – this is a small increase). The risk increases the younger you are. The radiologist will keep the number of x-rays as low as possible.
- Damage to surrounding structures such as blood vessels, your heart and lungs. The risk is higher if larger veins are used. You may need surgery to repair the damage.
- Change in heart rhythm, if the tip of the port is placed near your heart. Let the radiologist know if you feel faint or unwell. The port will need to be moved or replaced.
- Air embolus, where air enters your bloodstream. This is rare.
- Nerve damage, usually causing temporary numbness or pain. This is rare.

2 Late complications

- Infection where the port was inserted or where the tunnel was created under your skin (risk: 1 infection every 400 days). This is usually easily treated with antibiotics. Let your doctor know if you get a high temperature or feel unwell, or if your wound becomes red and painful. The port may need to be removed.
- Infection of your bloodstream or the port (risk: up to 1 in 2). This is common in people having chemotherapy. If the port becomes infected, it may need to be removed before you have finished your treatment (risk: 4 in 100). Let your doctor know if you get a high temperature or feel unwell. The risk of infection is less than if you have a Hickman line, where 5 times as many lines are removed caused by infection.
- Blood clot in the line (risk: less than 1 in 25). This is not serious. The line may need to be replaced if it cannot be unblocked with blood-thinning medication.

- Blood clot in a vein (risk: less than 5 in 100). You may need treatment with blood-thinning medication. A blood clot can move through your bloodstream to your lungs (pulmonary embolus), making it difficult for you to breathe. The healthcare team will assess your risk.
- Narrowed vein, where the flow of blood to your heart is reduced. The risk is higher if the radiologist performed the procedure using a larger cut. The problem usually gets better on its own as your body forms new veins around the narrowed area.
- Extravasation, where the contents of the port leak into surrounding tissues (risk: less than 1 in 100). If the fluid leaks around your heart or lungs, or into your abdominal cavity, it can cause serious problems. Let the healthcare team know if you notice any leaking from the port. You should discuss these possible complications with the radiologist if there is anything you do not understand.

How soon will I recover?

• In hospital

After the procedure you will be transferred to the recovery area where you can rest. The healthcare team will monitor your heart rate and blood pressure to check for any problems. You will have a chest x-ray to check that the line is in the right position and the healthcare team will check your wound for any bleeding. You will need to learn how to care for the port. The healthcare team will help you to practise keeping the line clear by injecting special fluid into it. They will also teach you how to change the dressing. You should be able to go home the same day or the day after. If you were given a sedative and go home the same day, a responsible adult should take you home in a car or taxi and stay with you for at least 24 hours. Be near a telephone in case of an emergency.

• Using the port

The port can be used straightaway and will stay in place for as long as you need it for your treatment. The healthcare team will use a needle called a Huber needle to access the port through your skin. Before the healthcare team uses the port, check that they are specially trained and are using a Huber needle.

• Returning to normal activities

If you were given a sedative, do not drive, operate machinery or do any potentially dangerous activities (this includes cooking) for at least 24 hours and not until you have fully recovered feeling, movement and co-ordination. You should also not sign legal documents or drink alcohol for at least 24 hours.

Do not have a hot bath for two to three days. Try not to soak your wound in a bath. Keep your wound dry for three weeks. Change the dressing once a week, and more often if it gets wet.

There is a small risk of bleeding. If this happens, ask someone to press firmly on your wound for 15 to 20 minutes and then gradually release the pressure. If the bleeding continues, keep pressing firmly on your wound and call an ambulance or go immediately to your nearest Emergency department.

It is important not to do strenuous exercise for about a week, particularly exercise that involves you moving your shoulder.

Do not have sex until you have recovered, usually after two to four weeks.

• Lifestyle changes

If you smoke, stopping smoking will improve your long-term health.

Regular exercise should improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

• Removing the port

When you no longer need the port, your doctor will remove it in a minor procedure under a local anaesthetic. You may feel a little bruised and any pain is easily controlled with painkillers.

Summary

Inserting a port is usually a safe and effective way of giving the healthcare team good access to your bloodstream over a long period to give you medication or chemotherapy. However, complications can happen. You need to know about them to help you to make an informed decision about the procedure. Knowing about them will also help to detect and treat any problems early.

Keep this information leaflet. Use it to help you if you need to talk to a healthcare professional.

Acknowledgements

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