

Clinical haematology

Implanted double lumen (Vortex[®]) port

Information for patients, relatives and carers

Introduction

Your doctor or nurse has recommended an implanted double lumen port for you because your condition requires frequent access to your veins for blood tests and special treatments.

This information sheet has been given to you to help answer some of the questions you may have about Vortex[®] Ports. It explains what you can expect when the port is inserted as well as the benefits and risks of having a Vortex Port[®] and any alternatives. If you have any questions or concerns, please do not hesitate to speak to a doctor, nurse in the apheresis team or haemoglobinopathy clinical nurse specialist.

What is a double lumen port?

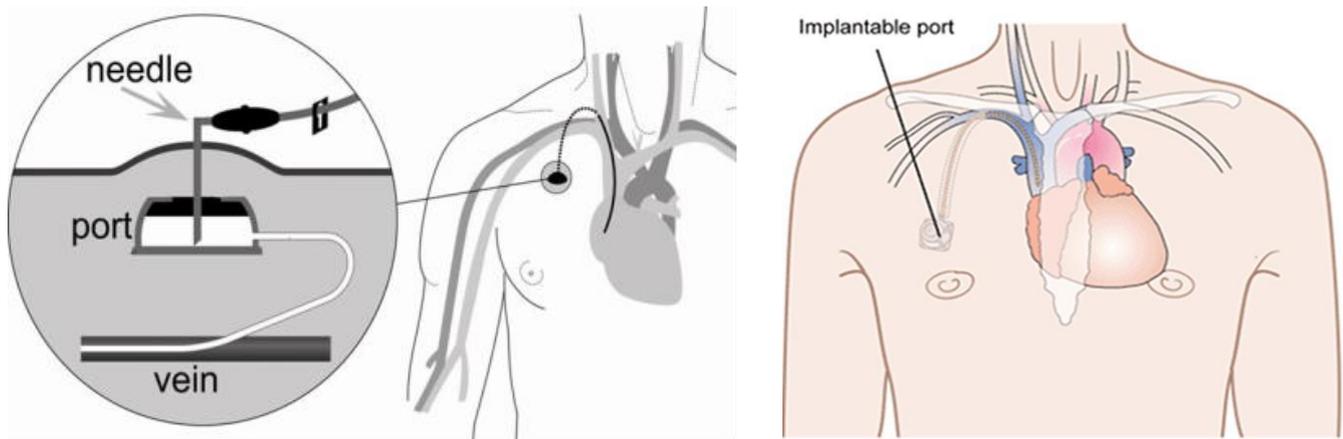
An implanted double lumen or Vortex[®] Port is a special device that is placed under your skin. It consists of a thin, flexible tube placed in a large vein, connected to a double chamber or 'port' implanted under the skin. The double chamber measures about 4cm long, 2cm wide and 1cm deep.

The port is usually placed under the skin on your chest just below your collarbone. It can be used for taking blood samples and for giving fluids or drug treatment without having to find a vein. A Vortex[®] Port can also be used for treatment such as automated red cell exchange or therapeutic plasma exchange.

When not in use, it is hidden under the skin and has no external parts. You will probably be able to see and feel it as a 'lump' under the skin.

The chamber has a raised centre or 'septum' which is made from a self-sealing rubber material and is visible as a small, raised area beneath your skin.

When we need to use it, we will insert a needle through the skin into the septum of the port. If you are having an exchange, two needles will be used, one for withdrawing and one for returning blood. When the treatment is finished the needles will be removed. There is no time limit on how long the Vortex Port[®] can stay in and you go home with it in place.



How the port is implanted

The implanted port is put in place during a brief surgical operation that is performed under local anaesthesia, by a special doctor called a radiologist.

It may also be done under general anaesthesia. You need to discuss this with your doctor or with one of the apheresis or vascular access nurses.

- Putting in a Vortex® Port takes about 45 minutes and is carried out in an operating theatre.
- X-rays will usually be taken during the procedure to check the Vortex® Port is in the correct place.
- You may also be attached to a heart monitor and fitted with an oxygen mask.
- Vortex® Ports are inserted under local anaesthetic but it may be possible to have an intravenous (through a vein) sedative as well.
- You may be allowed to return home on the same day.

How to prepare for your Vortex® Port appointment

- Your Vortex® Port insertion will usually be arranged by a haematologist or a haemoglobinopathy clinical nurse specialist. A member of the team will give you detailed information about the arrangements.
- If you decide to have an intravenous sedative, you may be asked to attend a pre-assessment clinic before the actual day of the procedure.
- Do not have anything to eat or drink for five hours before the procedure. This is an important safety precaution.
- If you are taking any medication to thin your blood, you may need to stop this temporarily before your port insertion. Please discuss talk to your haematology consultant and with the haemoglobinopathy clinical nurse specialist (CNS) before your Vortex® Port insertion appointment.

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- A red cell exchange transfusion will usually be arranged a few days before the insertion using your arm veins or a femoral line (a line put into a vein in your groin).
 - The new Vortex® port cannot be used for the first four weeks after it is inserted.

What happens after the procedure

If you are an inpatient, we will take you back to the ward after the procedure. If you are an outpatient, you will usually be able to go home on the same day providing there are no complications. You should arrange for a friend or relative to accompany you home. If you live alone, we advise that you ask someone to stay with you overnight.

After the procedure you may have some bruising and be a little sore for a few days because the line has been implanted under the skin. You can take a mild painkiller such as paracetamol for this.

Once the bruising has settled down the port should be painless, though you may feel some brief discomfort each time the port is used as the needle is inserted through the skin.

We advise patients to wait four weeks before the Vortex® Port is used for a red cell exchange. This will allow any swelling to settle. If you need an exchange sooner than this, we will usually suggest using your arm or femoral veins.

Caring for your port

During the first few days after your port is inserted, it's important to avoid any heavy exertion (physical exercise, heavy lifting, and so on). You will have two small dressings;

- one on the side of your neck
- one next to the port.

These and any stitches should be removed seven to ten days after your port is inserted. Until this time you should keep the dressings in place. If you have transparent dressings, you can shower or bath normally. Other types of dressings should be kept dry.

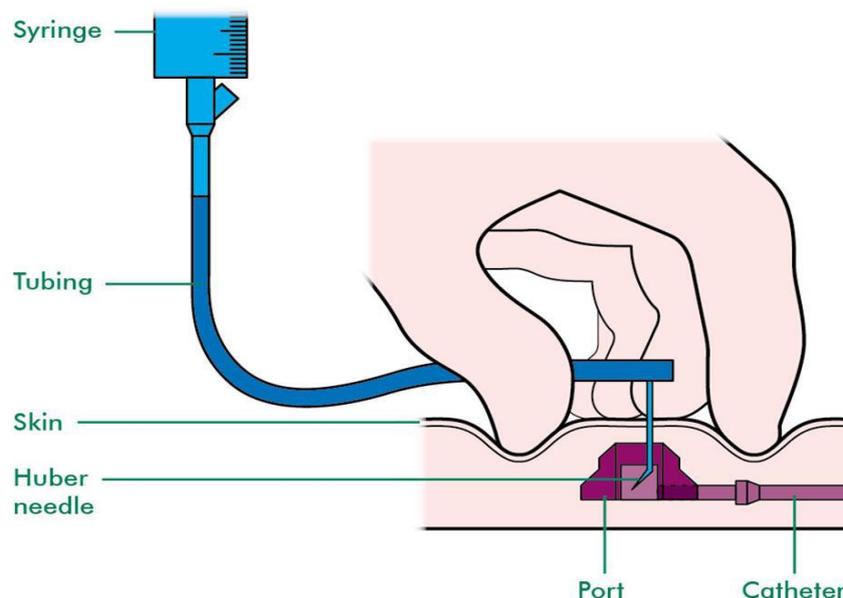
After the stitches are removed you will not need a dressing and can return to your normal activities including bathing and showering.

After each treatment, and every four weeks if the port is not used often, the port and catheter are flushed to stop them getting blocked. This flushing will happen in hospital and will be carried out by a specially trained nurse.

How does the port work?

When the port is used, a special needle (called a Huber needle) is inserted through the skin to the septum of the port. For most patients there is only a mild pricking sensation felt when the needle goes in. Some may need a topical numbing cream or a local anaesthetic injection before inserting this special needle. This needle is removed before you are sent home.

To reduce the risk of infection, we advise the Vortex® Port is just used for exchange transfusions. Alternative IV access can be used for routine administration of fluids and other medications.



Risks associated with having a Vortex® Port

Risks during insertion: Most Vortex® Port insertions go smoothly. Serious complications are extremely rare and can be discussed with you in more detail by the doctor who will be inserting your port.

Infection: Some patients develop an infection because of their Vortex® Port. When infections happen, they are usually treated with antibiotics and in some cases the port may need to be removed. Symptoms of infection include a high temperature, feeling shivery and redness or swelling around the port. You should let the hospital know straight away if you notice any of these symptoms.

Thrombosis (blood clot): Having a Vortex® Port can cause you to develop a thrombosis (blood clot) in the vein. Signs of a blood clot include swelling and pain in the shoulder, neck or arm, or veins that stand out on the neck or chest on the same side as the port. If you develop any of these symptoms, you should let us know straight away. If you develop a clot, we will usually give you medication to dissolve it. The port does not always need to be removed.

Malfunction: In a small number of cases the Vortex® Port does not work properly. This is usually due to the Vortex® Port being wrongly positioned or becoming dislodged beneath the skin. If this happens the port will need to be removed and replaced.

Blockage: Vortex® Ports can sometimes become blocked. We can usually unblock them by using a special flushing solution. Occasionally this fails and we will need to remove the Vortex® Port and replace it with another.

Scarring: Most patients will find they have a scar about 2cm long just to the side of the port. There will also be a small scar just above your collarbone. Some people are prone to more pronounced scarring called keloid scarring. It can happen to anybody but is particularly common in people with dark skin such as those who are African, African-Caribbean, Mediterranean and South Indian. If this is a problem that applies to you, it is likely that you will already be aware of it. Please discuss this with the doctor inserting the line. It may be possible to position the port so that the scars are less visible.

What to look out for at home

Contact the renal and haematology triage unit (RHTU) immediately on 020 3311 7755 if you experience any of the following:

- feeling unwell
- or experience excessive pain at the port insertion site
- a rise in body temperature
- chills
- swelling in your neck or near the port site
- breathing difficulties (fever)

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:
imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

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