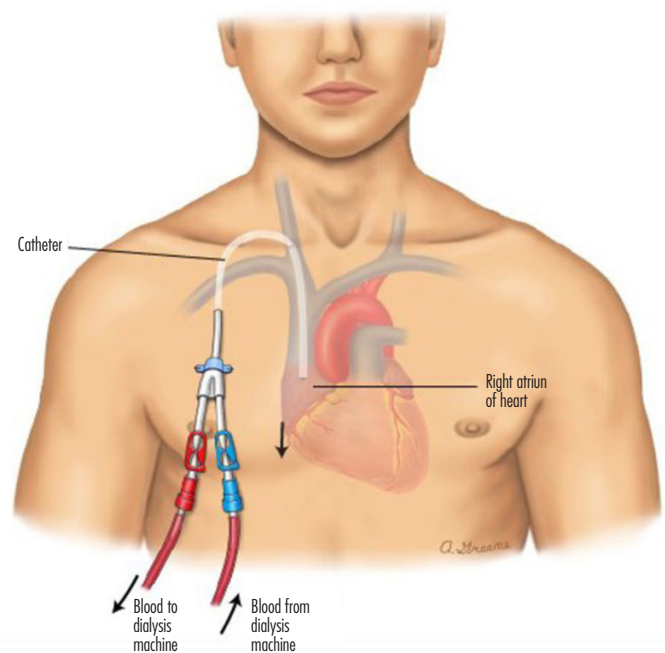


Types of Dialysis Access

**Why is the operation necessary?**

Permcath insertion is the placement of a catheter (special intravenous line) into the main vein in your neck or upper chest. This catheter is used for short-term dialysis treatment in patients with poorly functioning kidneys, and for giving chemotherapy or performing a bone marrow transplant in haematology patients.

What is the procedure?

The main vein in the neck is punctured with a needle using ultrasound guidance. A guidewire is passed through the needle into the main vein leading to the heart, using x-rays to make sure it is in the correct place. The catheter is then threaded into the right side of your heart (right atrium) and the wire is removed.

The other end of the catheter is tunnelled under the skin to an exit point on the chest wall. This tunnelling process reduces the risk of an infection and allows the catheter to remain in for a longer period (1-12 months). The procedure will take 15-45 minutes. After the procedure, a dressing will be applied to cover the insertion site.

Are there any alternative treatments available?

A non-tunnelled, short, temporary dialysis catheter can

be placed in the neck or leg vein. This can only be used for 1-2 weeks and is used if patients are too ill to tolerate a permcath procedure or the kidneys are expected to recover in that brief period.

In the ideal world, dialysis is performed via an arteriovenous fistula or an arteriovenous graft in the arm, without needing a catheter. This requires careful planning and monitoring of kidney function as it takes up to 2-3 months for a vein fistula to be usable and 2 weeks before a graft is ready to be used.

Is the operation safe?

Your surgery will be performed by a team of highly qualified and skilled professionals who will take all steps necessary to ensure a safe procedure and a successful result.

However, there are risks involved with all surgery even if these risks may be small.

What are the General Risks related to this procedure?

There are risks for developing complications which are general, and which may occur with any surgical procedure. Most complications related to this procedure are minor and transient. These complications include the risk of infection, bleeding, pain, wound

breakdown, or deep vein thrombosis

What are the specific risks related to this procedure?

The risks can be divided into early risks related to the insertion procedure and late risks related to having a long-term catheter in the vein.

a. Early Procedure Related Risks:

- Pneumothorax: air outside the lung causing collapse of the lung
- Bleeding due to injury to the artery or vein

b. Late Risks

- Infection
- Blockage of the catheter or mechanical malfunction
- Thrombosis or clot in the deep vein around the catheter
- Narrowing and/or blockage of the main vein leading to the heart.

What are the Anaesthetic risks involved?

You can discuss the type of anaesthetic you will have with your anaesthetist and the possible complications that may occur.

The procedure can be performed under a general anaesthetic or under local anaesthetic with conscious sedation.

What do I need to do before the operation?

You should not eat anything at least 6 hours before the operation and can drink clear fluids (water, apple juice) until 3 hours before the operation. You should take all your regular medication as usual on the day.

Your surgeon may want you to stop certain medication such as Xarelto, warfarin, or other blood thinning medicines before the operation.

Before you agree to the procedure make sure you know:

- The name of the procedure
- The reason you are having the procedure
- What results to expect and what they mean
- The risks and benefits of the procedure
- What the possible side effects or complications are
- When and where you are to have the procedure
- Who will do procedure and what that person's qualifications are
- What would happen if you did not have the procedure
- Any alternative procedures to think about
- Who to call after the procedure if you have questions or problems
- How much will you have to pay for the procedure

What happens when I get to the hospital?

Please report to the hospital reception on time for your admission. Please bring along all the documents that may be required such as your medical aid card, ID, and contact details. If you are not a member of a medical aid you will be required to pay a deposit or to sign an indemnity form.

As far as possible we will try to advise you about hospital costs before your admission. It may be best to complete some of the documentation beforehand at the hospital pre-admission clinic to save time on the day of your admission.

When you arrive in the ward, you will be welcomed by the nurses or the receptionist and will have your details checked. Some basic tests will be done such as pulse, temperature, blood pressure and urine examination.

You will be asked to hand in any medicines or drugs you may be taking, so that your drug treatment in hospital will be correct.

Please tell the nurses of any allergies to drugs or dressings. The surgeon will have explained the operation and you will be asked to sign your consent for the operation. If you are not clear about any part

of the operation, ask for more details from the surgeon or from the nurses.

The neck and upper chest will be prepped with an antiseptic solution. You will be taken on a trolley to the operating suite by the staff. You will be wearing a cotton gown, wedding rings will be fastened with tape and removable dentures will be left on the ward. There will be several checks on your details on the way to the operating theatre where your anaesthetic will begin.

How Long Does The Operation Take?
15-45 minutes

What Happens When I Wake Up?

You will spend half an hour in the recovery area in theatre prior to being transferred back to the ward. A chest x-ray will be taken to check the position of the catheter and that there is no air outside the lung.

Will I Have Pain?

There will be some mild to moderate discomfort related to the small cut in the neck and the tunnelling of the catheter.

How Soon After The Operation Can I Eat?
Immediately once you get back to the ward.

How Soon After The Operation Can I Get Out Of Bed?

As soon as you are back in the ward and fully recovered from

the anaesthetic.

How Long Will I Stay In The Hospital?

This procedure is done as a day case, and you go home the same day

What Happens When I Am Discharged From The Ward?

Your surgeon will check your chest x-ray and discharge you. You will be given some medication for pain. You will be given instructions on the dressings and how to care for the wound. You will also get an appointment for your follow-up if necessary. You should ask for a sick certificate if you need this for your employer.

What Should I Be Aware Of When I Get Home?

- **PLEASE do not shower or get the catheter wet.**
- Please inform your doctor of any fever or pain, redness, or drainage at the catheter site
- You may have a small amount of bleeding at the site. Report any bleeding that continues or increases to your surgeon
- You may have mild pain for one to two days. You may take whatever pain medications you use for minor aches and pains
- Do not remove the dressing until you are instructed to do so.

How Soon Can I Start Exercise?

You may resume your normal activities except performing heavy activities such as lifting.

Avoid exercises that involve excessive movement of the arm.

How Soon Can I Drive A Car?

You will be able to drive, but it is advisable to have someone to drive you home.

How Long Will I Be Off Work?

You should be able to return to work the following day

What should I do if the catheter does not work?

If the catheter is not working, the dialysis centre will notify your kidney doctor or surgeon to discuss further action or treatment.


How long will the catheter last?

The catheter will last anywhere from 1-12 months depending on its care, your freedom from any infections and how long it needs to be used. The catheter is often used while a new graft is healing and as a temporary measure for short term (less than six months dialysis).

Why must the catheter stay dry?

What should I do if it gets wet?

Getting the catheter wet increases the risk of an infection at the catheter site by allowing germs to enter or contaminate the catheter.

If the catheter becomes wet accidentally, promptly dry it off and cover it with dry sterile gauze dressing (available at any chemist). 

What About Payment?

The procedure and its associated costs will have been discussed with you, and a quote provided. Where procedures need to be unexpectedly altered during the procedure, the fee may change. Similarly, emergency procedures may incur an additional cost. Surgeons are highly trained, highly skilled professionals and throughout your care a member of the practice is available to attend to you 24 hours a day. In return we expect prompt payment of your account. Although accounts may be submitted to the medical aid, the patient is responsible for payment.