



What is a PICC/CVL insertion?

Your doctor has referred you for an insertion of a peripherally inserted central catheter (PICC) or a central venous line (CVL) because you require administration of medications or blood products on a regular basis over the following weeks to months. The use of a PICC or CVL can prevent scarring that can occur with the repeated puncturing of veins in your hands or arms. These catheters/lines can remain in place for a long time and can be easily removed when the need to access the vein has passed.

How long will the procedure take?



The procedure takes approximately 15 to 30 minutes. Our staff may monitor you in the department before you leave.

Please allow time to register at reception and up to 30 minutes for the procedure. You may be requested to wait up to 1 hour after the procedure so our staff can observe you to be sure that you are ready to be discharged home. In total, you may be in the department for 2 hours or more.

Is there any special preparation required?

Special preparation may be required. At the time of booking, our staff will provide you with preparation instructions such as limiting your food intake prior to the procedure.

You may wish to ask a relative or a friend to attend the appointment with you if you think that you may need support before or after the procedure; however they will not be allowed to stay with you during the procedure. It is common to experience some pain or tenderness following the insertion of the PICC or CVL. Therefore, we recommend that someone drives you home after the procedure and we advise you not to drive for the rest of the day.

When booking your appointment, it is essential that you inform our staff if you have any allergies, take blood thinning medication, or are pregnant or breastfeeding.

Please list or bring all of your prescribed medications, those medications that you buy over the counter, including herbal remedies and supplements.

If you take blood thinning medication, you may need to stop taking these for a few days or reduce your dose. **It is very important that you do not stop any blood thinning medications or change the dose without consulting with our radiology staff and your own doctor.** They will give you specific instructions about when to stop and restart the medication. These drugs are usually prescribed to prevent a stroke or heart attack, so it is very important that you do not stop taking them without being instructed to do so by your doctor or our clinical staff, or both. Aspirin is usually not stopped.

A blood test may be required to check your blood clotting on the day of the procedure. You should continue with pain medication and other medications as usual.

What do I need to do on the day of the procedure?

You may be asked to fast (go without food) for up to 6 hours before the procedure. If you have diabetes and require insulin, you will need to adjust your insulin dose accordingly. You will need to discuss this with your referring doctor.

On the day of your appointment, please ensure you bring:

- Your referral form (if you have it)
- All previous relevant scans or x-rays
- Medicare and healthcare cards (e.g. DVA card or concession card)
- List of all medications

What happens during the procedure?

The procedure is performed in a specialty procedure room within our radiology department under sterile conditions. An antiseptic solution is used to clean a large area of the skin around where the needle will be inserted and sterile drapes are applied to the area to reduce the risk of infection.

You will remain awake during the procedure, however you may be given some medication to make you drowsy. To prevent discomfort, the area where the needle will be inserted may be numbed using local anaesthetic. Local anaesthetic causes a pinprick and stinging sensation that is uncomfortable for a few seconds.

Ultrasound is used to identify the vein the catheter will be inserted into. A small needle will be inserted, then under X-ray guidance a small flexible guide wire will be moved through your arm vein into a large central vein near the heart, called the superior vena cava. The PICC/CVL catheter is then guided into position and the guide wire removed. The CVL/PICC is secured externally and a waterproof dressing is applied.

A chest x-ray may be performed to confirm that the internal tip of the catheter is in the correct position.

Are there any after effects from the treatment?

In most cases, there are no major after effects. Once the catheter has been inserted, medications can be administered painlessly over a long period of time.

You may be consciously aware of the presence of the catheter for a few days, but this sensation should quickly pass. Occasionally, you may have some bleeding at the site where the catheter was inserted. If this occurs, it is usually within the first hour after the procedure. The bleeding can be easily treated by medical staff, either a doctor or nurse, by pressing on the site of bleeding for a few minutes.

What happens after the procedure?

Our staff will provide you with clear written instructions on ways to look after yourself following the procedure. This includes information such as: avoiding strenuous activity for a few days and arranging a follow-up appointment with your referring doctor so that they can monitor your progress, in addition to the dressing and insertion site.

A compression bandage will be applied and needs to remain in place for 2 hours. Waterproof dressings should be changed as advised by your nurse or doctor, or if they become soiled or wet. If there are sutures, they can be removed in 1 week. The maintenance and care of each catheter is specific to the type and brand of catheter. You will be provided with an information sheet or booklet with this information, specific to your catheter.

What are the benefits?

Placing a PICC or CVL is a relatively simple procedure with very few potential complications. Once in place, a PICC or CVL is a safe, stable and effective way to deliver intravenous (IV) medications on multiple occasions over a period of time up to 6 months.

Some medications are potentially harmful to the inner lining of your smaller veins; PICC and CVL lines allow these medications to be delivered directly to larger veins that are less likely to be damaged.

Are there any risks?

In referring you for this procedure, your doctor believes that the benefits of this procedure for you are greater than the risks. There are some risks and complications associated with the procedure, however the use of X-ray and ultrasound guidance minimises these risks.

Common risks and complications include:

- Minor bleeding or bruising at the insertion site, this is more common if you take blood thinning medications.
- Infection around the insertion site requiring treatment with antibiotics.
- The catheter may become kinked or blocked or may be accidentally removed if pulled.
- Failure of local anesthetic which may require a further injection of anesthetic or a different method of anesthetic may be used.
- Nerve damage is usually temporary and should get better over a period of time. Permanent nerve damage is rare.

Less common risks and complications include:

- Infection or a blood clot within the catheter, requiring further treatment or the removal of the PICC/CVL.
- Damage to surrounding structures such as blood vessels, organs and muscles, requiring further treatment.
- Some people may have an allergy to the injected drugs or the procedure may not be possible due to medical and/or technical reasons.

Prior to the insertion of the PICC or CVL, our specialist, a radiologist or interventional sonographer, will discuss the procedure with you in detail, including any risks specific to you. You will be provided with the opportunity to ask questions. It may be necessary to do a formal consultation to make sure this procedure is the most appropriate for you.

When do I get the results?

Once the radiologist or interventional sonographer is satisfied that the PICC/CVL is positioned correctly, it can be used immediately.

The radiologist will send a report to your referring doctor confirming that the procedure has been completed and advising the details of the device inserted.

I still have questions, who can I ask?

Medical information can be complex and you may receive information that you do not fully understand. It is important for you to consider the risks and outcomes of the procedure, as well as your personal needs before making a decision to undergo the procedure.

If you have read this online information and are still unsure if this is the correct procedure for you; before you make a booking, you should discuss your questions or concerns with your referring doctor in the first instance. Your regular GP and/or your family may also be a useful resource. Your referring doctor can answer questions about the risks and benefits of not having the procedure and other alternative options for treatment.

If you have questions before your appointment about what is involved on the day, our staff would be happy to assist. Please contact the imaging centre where you have made your appointment.