



For more information please visit us online at: <http://www.osmh.on.ca/diagnostics/>

If you or your support person do not clearly understand the procedure, please ask for clarification



PICC LINE

What is it?

A peripherally inserted central catheter (PICC line) is a flexible tube inserted into a large vein in the upper arm and guided through the vein until it reaches a position near the right atrium of the heart. The external end remains outside the body for easy access. PICC lines are used for long-term medication, fluid administration, or blood draws, reducing the need for frequent needle sticks. They may have a single or double lumen, allowing for multiple treatments at once.

Why do I need it?

Having a PICC means you do not need to have a needle put into your arm each time you require IV therapy. It protects your veins from repeated needle pokes as well as irritating medications.

Your PICC can be used for:

- IV fluids
- Medicines, like chemotherapy and antibiotics
- Blood transfusion
- Drawing blood samples
- IV nutrient (food) – this is called Parenteral Nutrition
- Power Injection of IV contrast for CT or MRI scans



HOW IS THE PROCEDURE PERFORMED?

Before

For specific questions regarding the clinical need for this procedure, please contact your ordering provider.

Patient Preparation:

You should wear loose-fitting clothing that is easy to change out of. **It is recommended for someone to drive you home after the procedure.** One support person (spouse, friend, caregiver, family member) may accompany you on the day of your appointment, but not into the procedure room.

Please bring a list of the medications you are currently taking and a list of any drug/medication allergies you may have.

You can eat and drink normally before the procedure. You may take your usual medications prior to the procedure. See next page if you take blood thinners.

Please phone the Diagnostic Imaging booking line at **705-325-2201 ext. 3505** for cancellations or rebooking if you are unable to attend your appointment.



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Bloodwork²

Bloodwork is **usually not needed** for this procedure.

However, it is required if you:

- Take Warfarin (Coumadin®)
- Have **prolonged bleeding**, risk of **thrombocytopenia** or **known thrombocytopenia**

If the above applies to you then your doctor will order:

- INR (must be ≤ 2.5 , ≤ 2.0 for ports or tunneled catheters)
- PTT
- CBC (platelets must be $\geq 20 \times 10^9/L$ or greater)

The bloodwork results must be current within **4 weeks of the procedure**.

If you take Warfarin (Coumadin), you'll need a new INR drawn **the day before** your procedure.

Important: Missing bloodwork may delay or reschedule your appointment.

Blood Thinners / Anticoagulants / Antiplatelets Medications²

Stop the listed medications as per the below schedule before your procedure unless instructed otherwise. If unsure, then consult your doctor or healthcare provider about which medications to pause, for how long, when to restart them, and any concerns you may have.

Medication	Withholding	When to Stop	Restart After
Coumadin® (Warfarin) ^{*/**}	Based on INR	Based on INR	NA or same day re-initiation for bridged patients
Cangrelor (Kengreal)	Yes	Defer procedure until off medication; if procedure is emergent, withhold 1 h before procedure	multidisciplinary decision making
Abciximab (ReoPro)	Yes	Withhold 24 h before procedure	multidisciplinary decision making
eptifibatide (Integrilin) tirofiban (Aggrastat)	Yes	4–8 h before procedure	multidisciplinary decision making
* consider bridging with heparin (need admission) for high thrombosis risk cases			
** consider using reversal agent if emergent or STAT			

Important Notes

- Patients on Warfarin (Coumadin®) need an **INR** test the **day before** the procedure.
- Those with **prosthetic valves**, **prior clots**, or **stroke-related atrial fibrillation** may need bridging therapy to prevent thrombosis.
- **Do not** stop blood thinners if you have **coronary or brain stents**—consult your doctor first.
- If anticoagulation is stopped, your doctor must provide instructions.
- Applies only to elective procedures, not emergencies.



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Coming To The Hospital

You must first sign-in with **Centralized Patient Scheduling & Registration (CPSR)**, which is located immediately to your left when you enter the hospital from the main entrance (off Dunlop Street, across from the gift shop). You will receive a patient wristband and be directed to the **Diagnostic Imaging department**.

Please bring to the hospital your OHIP card and a list of current medications you are taking.

During

PICC Lines are inserted in the Interventional Radiology Department of Diagnostic Imaging.

The duration of your appointment time will vary from 60 minutes – 90 minutes.

1. You will change from above the waist into a hospital gown.
2. A medical radiation and imaging technologist (MRIT) will explain the procedure and answer any questions you have.
3. You will lie on your back on a procedure table and will be awake while the PICC is put in.
4. This is an aseptic procedure, and as such your arm will be cleaned using a hospital-approved cleansing agent, and sterile drapes applied.
5. An MRIT or radiologist will inject a numbing agent, called Lidocaine, into your arm. This freezes the area where the PICC goes in. This should be the only pain or discomfort during the procedure.
6. The operator will use a combination of ultrasound and x-rays, or ultrasound and ECG technology to insert the PICC line.
7. A StatLock is used to hold the PICC in place near the exit site. The exit site is then covered with a clear bandage to prevent infection. A gauze is placed underneath the clear bandage.

Notes / Questions *(write down any notes or questions you may have for your doctor, healthcare practitioner, or the care team in Diagnostic Imaging on the day of your appointment. You can also use this space to write down a list of your current medications):*



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WHAT TO EXPECT AFTER



Recovery & Going Home

You may leave once the procedure is completed, as long as you are feeling well.

We recommend having someone drive you home after the procedure.

Don't drive if you are taking strong pain medicine. If you were given medication to help you relax or manage pain during the procedure (not common), then you cannot drive for the next 24 hours.



Diet & Activity

- Spend the remainder of the day resting at home.
- Resume a normal diet. You may resume light activities after 24 hours.
- Avoid wearing tight clothing that puts pressure on the PICC line.
- Avoid lifting anything heavier than 4.5 kilograms (10 pounds) for the first week after your PICC line is put in place.
- Avoid activities where you repeat the same movements, like golfing, bowling, or vacuuming.
- Do not put pressure around your upper arm where the PICC is (such as using a blood pressure cuff).



Wound Care

- Your PICC line will be secured to your arm with a Stat-Lok device, and covered with a small gauze and dressing (called a Tegaderm).
- The dressing must be changed once a week, and the PICC line should be flushed once a week if it is not in use.
- We will contact Ontario Health atHome (Home Care) on your behalf to arrange for a dressing change within the first 24 hours. They will continue to provide care and maintenance of your PICC line.



Bathing

- **Do not** submerge your PICC line under water, such as in a bath. Submerging your PICC line underwater may promote infection.
- Take showers, instead, and cover the PICC line with a plastic wrap, such as Saran or Cling Wrap.
- Your Ontario Health atHome (Home Care) nurse will review best practices and techniques with you.



Medication

- **If your doctor or healthcare provider advised you to stop any medications for this procedure then consult with them first about the safety of when you can start your medications again;**
- Otherwise, resume your normal medication schedule.
- If you **normally** take acetylsalicylic acid (Aspirin™) or another blood thinner medication, ask your doctor or healthcare provider when to start taking it again. Make sure that you understand exactly what they want you to do;
- Otherwise, **do not** take (Aspirin™) or anti-inflammatory medicines (such as ibuprofen) for one **week** after the procedure.



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Safety Tips¹

- PICC lines can accidentally be pulled out or damaged on the outside. Be careful if you use any of the following:
 - Crutches (can put pressure on the PICC line)
 - Wheelchair (can snag the PICC line)
 - Walker (arm exertion while holding onto walker)
- The following safety tips should also be considered:
 - Wear loose clothing over the PICC line. When getting dressed, be careful not to pull on the PICC line. Avoid clothing that rubs or pulls on your catheter.
 - Don't bend or crimp the PICC line.
 - Always wash your hands before you touch your PICC line.
 - Never touch the open end of the PICC line if the blue cap is off.
 - Never use sharp objects (scissors, knives, etc.) near the PICC or other tubing.
 - Keep the PICC line clamped when you are not using it.
 - Fasten or tape the PICC line to your body to prevent pulling or dangling.

If your PICC gets broken or torn, fold it over between the damaged area and where it goes into your skin. Tape the PICC to your skin and cover it with a sterile dressing, if you can. Call your doctor or healthcare provider right away.

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WHEN TO SEEK HELP¹



Call 911:

If you believe you require emergency care – **call 911**. Reasons to call 911 include:

- You have passed out (lose consciousness), or become very dizzy, weak, or less alert
- You have severe trouble breathing
- You have a fast or uneven pulse
- You experience sudden chest pain and shortness of breath; and/or
- Significant bleeding from the procedure site (i.e. bright red blood that won't stop)¹



Call your doctor, healthcare provider, or Health Connect Ontario immediately if you experience¹:

- Increased pain, swelling, warmth, or redness in your face, chest, neck, or arm side where the PICC line is placed.
- A fever (more than 100°F / 38°C).
- Chills, with or without fever.
- Bright red blood has soaked through the dressing
- You have new or worse pain at the PICC line insertion site.
- Bruising or swelling at the PICC line insertion site that is getting bigger.
- An upset stomach and you can't keep fluids down (you're throwing them up).
- Your PICC line is leaking, cracked, or clogged
- Signs of a blood clot, such as bulging veins near the PICC line
- Resistance when you inject medicine or fluids into your catheter or are unable to draw blood off of the line
- Pain during infusion
- Leaking of fluid around the insertion site
- A partially pulled out PICC line (this may happen after severe coughing or vomiting, or if you pull on the PICC line).
- Any other concerns.



Health Connect Ontario may be reached 24-hours a day, including weekends, by:

- Calling 8-1-1
- Calling 1-866-797-0007 (TTY – teletypewriter service)
- Visiting <https://healthconnectontario.health.gov.on.ca/> and selecting “Chat with us”

BRING THIS INFORMATION PACKAGE WITH YOU SHOULD YOU URGENTLY NEED TO SEE YOUR DOCTOR OR GO TO THE EMERGENCY DEPARTMENT OF YOUR NEAREST HOSPITAL.

Use this material for your information only. It does not replace advice from your doctor or other health care professionals. Do not use this information for diagnosis or treatment. Consult with your health care provider about a specific medical condition.

References:

1. Peripherally Inserted Central Catheter (PICC): Care Instructions. Accessed January 10, 2023. MyHealth.Alberta.ca Network. <https://myhealth.alberta.ca/health/AfterCareInformation/pages/conditions.aspx?HwId=ug6122>
2. Patel et al. Society of Interventional Radiology Consensus Guidelines for the Periprocedural Management of Thrombotic and Bleeding Risk in Patients Undergoing Percutaneous Image-Guided Interventions—Part II: Recommendations. JVIR 2019; 30:1168–1184.

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