



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



VENOGRAM

What is it?

A venogram is a diagnostic imaging test that uses fluoroscopy (live x-rays) and IV contrast (dye) to visualize the veins in your body. This procedure helps radiologists assess blood flow, detect blood clots, and identify abnormalities such as narrowed or blocked veins. During the test, the IV contrast is injected into a vein, making the veins visible on fluoroscopy images.

Why do I need it?¹

Your doctor may order a venogram in order to:

- Check the condition of a vein or system of veins.
- Detect blood clots within the veins.
- Assess varicose veins before surgery.
- Identify a healthy vein for use in a bypass procedure or dialysis access.
- Assist in placing an IV or a medical device, such as a stent, in a vein.
- Guide treatment for diseased veins.



HOW IS THE PROCEDURE PERFORMED?

Before

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

Patient Preparation:

**Tell your doctor or the OSMH booking clerk if you have a known allergy to IV contrast.
In such cases you will require pre-medication prior to the test.**

You should wear loose-fitting clothing that is easy to change out of. **You will need to arrange for someone to drive you home after you have recovered from 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.



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

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.



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

Diabetic Medications

If you take metformin, you will need to do the following:

- Stop taking metformin the day of your procedure and for the next two days.
- Before resuming, follow up with your doctor to get a blood creatinine test.
- If you don't have a family doctor or your doctor is unavailable, speak to the radiologist performing your procedure.
- If you have concerns about stopping your diabetic medication, contact your doctor or healthcare practitioner to discuss with them.

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

Venogram is done in the Interventional Radiology Department of Diagnostic Imaging.

The duration of your appointment time will vary from 30 minutes – 1 hour.

1. You will be asked to remove your clothing from above or below the waist and put on a hospital gown, depending on where your issue is.
2. A Medical Radiation and Imaging Technologist (MRIT) will explain the procedure and answer any questions you have before the procedure.
3. You will lay on your back on a procedure table.
4. An MRIT will insert an intravenous line (IV line) for injection of the IV contrast.
5. The radiologist will inject IV contrast through the IV line while using fluoroscopy to visualize your veins. They may do this multiple times. They may require you to move your body or arm/leg while on the table in order to better see the veins.
6. You will be required to sit in the waiting room for 15 minutes. If you feel well after 15 minutes, then the IV will be removed and a dressing / bandage applied.

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):*

| |
|--|
| |
| |
| |
| |
| |
| |



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

WHAT TO EXPECT AFTER



Recovery & Going Home

You may leave after the 15-minute waiting period, as long as you are feeling well. Occasionally, individuals may experience an allergic reaction to the IV contrast. If this happens then the radiologist will follow department protocols to care for your allergic reaction.

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

- There are no restrictions to your diet or activity after the procedure.
- Drink plenty of fluids to help flush out the IV contrast that was injected (unless your doctor instructs otherwise).



Wound Care

- Press on the skin where the IV had been placed after the procedure. This reduces the likelihood of bleeding. You can do this in the waiting room during the 15-minute monitoring period.
- Keep the dressing / bandage on for the next few hours.



Bathing

- You may shower after the procedure. Pat the site dry—do not scrub.



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.
- Speak with your doctor if you take diabetic medications such as Metformin (*see Diabetic Medication above*).

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

WHEN TO SEEK HELP²



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; you cough up blood, and/or
- Significant bleeding from the procedure site (i.e. bright red blood that won't stop)



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

- Nausea or a brief flushing sensation during the procedure (this should pass quickly).
- A delayed reaction to the contrast dye, appearing hours or days later, including:
 - Nausea and vomiting.
 - Headache.
 - Itchy skin.
 - Mild rash or hives.
- Moderate reactions, such as:
 - Rash or hives that become severe.
 - Wheezing.
 - Abnormal heart rhythms (arrhythmias).
 - High or low blood pressure.
- Severe reactions requiring immediate medical attention, including:
 - Trouble breathing.
 - Swelling in the throat.
 - Very low blood pressure.
- Any other concerns.

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

- Calling 811
- 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. RadiologyInfo.org. Venography. [Updated Jul 15 2023]. <https://www.radiologyinfo.org/en/info/venography>
2. Cleveland Clinic. Venography. [Updated Apr 26 2023]. <https://my.clevelandclinic.org/health/diagnostics/24929-venogram>
3. 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.

Icons supplied from <http://www.flaticon.com/>