Injection Sclerotherapy for Venous Malformations

Information for patients and families

Read this information to learn:

• what a venous malformation is
• how injection sclerotherapy helps
• what to expect
• who to call if you have any questions

What is a venous malformation?

A venous malformation is an abnormal group of veins that are large and sponge-like. They can look like purple or blue spots. They may cause pain, swelling, and skin ulcers (wounds).

Venous malformations can happen anywhere in the body. People with a venous malformation are born with them. But, they are usually not noticed until people become teenagers.

How do you find a venous malformation?

We find a venous malformation using a magnetic resonance imaging (MRI) scan. This scan uses a magnetic field to see body tissue. We inject contrast dye using an intravenous (IV) before the scan to help us see the body part better.
How do you treat venous malformations?

The most common treatments are:

- compression (wearing a tensor bandage around the area to decrease swelling)
- elevating (raising) the part of your body where it is
- pain medicine

Your doctor may suggest other treatments only when the symptoms affect your everyday activities. Removing the venous malformation with surgery is possible in a small number of cases. But, surgery will leave a scar and often the malformation will come back.

Injection sclerotherapy can treat symptoms of venous malformations without surgery.

What is injection sclerotherapy?

With the help of an ultrasound and x-rays, we inject a solution (type of fluid) directly into the veins where you have the malformation. The solution is called sodium tetradecyl sulfate. It destroys the abnormal veins. It also causes blood clots to form. These clots block blood from flowing to the area.

You will need more than 1 treatment of injection sclerotherapy. You will usually have at least 3 that are scheduled about 1 month apart.
How do I prepare for the procedure?

Before your procedure:

☑ Some medicines may increase your risk of bleeding during or after your procedure. Tell your doctor or health care provider if you are taking:
  
  • medicines such as acetylsalicylic acid (Aspirin), clopidogrel (Plavix), prasugrel (Effient), ticagrelor (Brillinta), ibuprofen (Advil, Motrin, Nuprin), naproxen (Naprosyn) or indomethacin
  
  • medicines such as warfarin (Coumadin), dalteparin (Fragmin), enoxaparin (Lovenox), tinzaparin (Innohep), fondaparinux (Arixtra), dabigatran (Pradaxa), rivaroxaban (Xarelto) or apixaban (Eliquis)

  Your doctor or health care provider may tell you to stop taking these medicines for a certain number of days before your procedure.

☑ Don’t eat anything after midnight the night before your appointment.

☑ You may take your other medicines as usual.

On the day of your procedure:

☑ Arrange for someone to take you home after the procedure.
   You can’t go home by yourself.

☑ Bring your health card (OHIP).

☑ Come to the Medical Imaging Reception Desk, East Wing – 3rd floor, Toronto Western Hospital. Please come 30 minutes before your appointment.

When you arrive, we will ask you to sign a consent form. This form means you agree to have the procedure. We will also answer any questions you may have.
What happens during the procedure?

1. We put in an intravenous (IV) to give you pain medicine and sedatives (medicine that will relax you) during your procedure.

2. We bring you into the procedure room. We then connect you to a monitor that shows your blood pressure, heart rate and oxygen level.

3. We clean the area of your body where we inject the solution. We place a small needle into the abnormal veins using ultrasound and x-ray machines to guide us to the right place.

4. We inject the solution into the veins and leave the needle there for a few minutes before it’s removed.

5. We press down on the injection site for a few minutes and then put on a dressing or tensor bandage.

6. We then transfer you to a stretcher and take you to the medical imaging day unit for about 45 minutes.

7. After about 45 minutes to 1 hour, you can home. You must have someone take you home from the hospital.

What can I do when I get home?

• For 24 hours after you get home:
  ▪ Don’t drive a car or use heavy machines.
  ▪ Don’t drink alcohol.
  ▪ Don’t make any financial or legal decisions.

• Relax for the rest of the day.

• Raise the area to reduce swelling.

• Take your pain medicine as prescribed for the pain. You will feel the most pain during the first 2 days. You should feel better in 5 to 7 days.

• Wear the tensor bandage for the next 7 days during the day. You can take it off at night.
What can I expect after the procedure?

Swelling
It is normal to have swelling where you were injected for 5 to 7 days after your procedure. Use the tensor bandage for 7 days to lessen the swelling. You may take the tensor bandage off at night and when showering. Raising the area will also help with the swelling.

Skin ulcers
If the venous malformation is on the skin, it's possible for the solution to break down the skin and cause an ulcer (an open wound on your skin). The ulcer will heal over time. Keep it clean and watch for signs of infection.

Temporary nerve damage
It’s possible that a small amount of the solution will leak into the tissues around the malformation. If there are nerves in the area of the leak you may feel a burning pain, numbness, or tingling in the area. This will go away over time.

What should I look out for?
Look out for signs that you have an infection. Getting an infection from injection sclerotherapy isn’t common, but it should be treated if it happens.

Look out for these signs of infection:
- you have a fever that is 38° C or 101° F or higher
- your pain isn’t getting better over time
- you have increasing redness around your injection site
- your injection site feels warm
- you have pus (yellowish liquid) coming out of open wounds
If you are worried about an infection please call one of the numbers below to make an appointment with the radiologist (the doctor who performed the procedure).

**Who can I call if I have any questions?**

If you have any medical questions or concerns, please call:
Clinical Nurse Coordinator
Phone: 416 603 5800 extension 6301

For clinical appointment booking and/or rescheduling, please call:
VIR Administrative Assistant
Phone: 416 603 6276

If you have medical concerns that cannot wait until regular business hours and you are not sure if you should go the Emergency Department, call the Interventional Radiologist fellow on call at 416 603 5800 extension 3155.

**Interventional Radiologists**
Dr. M. Simons
Dr. K. T. Tan