

Sclerotherapy of Varicose Veins and Spider Veins

Sclerotherapy uses injections from a very fine, thin needle to improve the cosmetic appearance of spider veins, treat small varicose veins in the legs, and relieve related symptoms such as aching, burning, swelling and cramping. Each treatment session typically results in elimination of 50 to 80 percent of the injected veins.

Tell your doctor if there's a possibility you are pregnant and discuss any recent illnesses, medical conditions, allergies and medications you're taking, including herbal supplements and aspirin. You may be advised to stop taking aspirin, nonsteroidal anti-inflammatory drugs (NSAIDs), iron supplements, or blood thinners several days prior to your procedure. Do not apply lotion to your legs before or after sclerotherapy. Leave jewelry at home and wear loose, comfortable clothing. Since you may be asked to wear a gown, you may want to bring a pair of shorts to wear during the procedure.



What is Sclerotherapy of Varicose Veins and Spider Veins?

Sclerotherapy is a minimally invasive treatment used to treat varicose and spider veins. The procedure involves the injection of a solution directly into the affected veins, causing them to shrink and eventually disappear.

What are some common uses of the procedure?

Sclerotherapy is used to improve the cosmetic appearance of spider veins and to relieve some of the symptoms associated with spider veins, including aching, burning, swelling and night cramps. It is the primary treatment for small varicose veins in the legs.

How should I prepare?

Tell your doctor about all the medications you take, including herbal supplements. List any allergies, especially to local anesthetic (<http://www.radiologyinfo.org>) , general anesthesia (<http://www.radiologyinfo.org>) , or contrast materials (<http://www.radiologyinfo.org>) . Your doctor may tell you to stop taking aspirin, nonsteroidal anti-inflammatory drugs (NSAIDs (<http://www.radiologyinfo.org>)) or blood thinners before your procedure.

You may be asked to stop taking iron supplements.

Tell your doctor about recent illnesses or other medical conditions.

Ask your doctor about antibiotic medications you may be taking or ask for safe guidelines for discontinuing these medications.

No lotion should be applied to legs before or after sclerotherapy.

Plan to have someone drive you home after your procedure.

You may want to bring a pair of shorts to wear during the procedure.

What does the equipment look like?

The procedure uses a very fine, thin needle to inject a sterile sclerosing solution into the small veins.

How does the procedure work?

When the sclerosing solution is injected directly into the spider or varicose veins, it irritates the lining of vein, which causes it to swell and stick together. Over time, the vessel turns into scar tissue that fades from view.

How is the procedure performed?

This procedure is often done on an outpatient basis. However, some patients may require admission following the procedure. Ask your doctor if you will need to be admitted.

Using a very fine needle, your interventional radiologist will inject the vein-dissolving solution into the varicose and spider veins. As the procedure continues, you will feel small needle sticks and possibly a mild burning sensation. The number of veins treated in one session varies, and depends on the size and location of the veins.

The procedure is usually completed within 30 to 45 minutes.

What will I experience during and after the procedure?

You may experience a cramping sensation for one to two minutes when larger varicose veins are injected.

After the treatment you will be instructed to wear support hosiery or wraps to "compress" the treated vessels.

You may experience certain side effects after sclerotherapy. Larger injected varicose veins may become lumpy and/or hard for several months before resolving. Raised red areas may appear at the injection sites and should disappear within a few days. Brown lines or spots on the skin may be seen at the injection sites. In most cases, they disappear within three to six months, but can be permanent about five percent of the time. Bruising may occur around the injection site and can last several days or weeks.

In general, spider veins respond to sclerotherapy in three to six weeks, and larger veins respond in three to four months. If the veins respond to the treatment, they will not reappear. However, new veins may appear over time, and if needed, you may return for additional injections.

Who interprets the results and how do I get them?

After the procedure is complete, the interventional radiologist (<http://www.radiologyinfo.org>) will tell you whether the procedure was a success.

Your interventional radiologist may recommend a follow-up visit.

This visit may include a physical check-up, imaging exam(s), and blood tests. During your follow-up visit, tell your doctor if you have noticed any side effects or changes.

What are the benefits vs. risks?

Benefits

- Each sclerotherapy session typically results in elimination of 50 to 80 percent of the injected veins.

Risks

- Any procedure that penetrates the skin carries a risk of infection. The chance of infection requiring antibiotic treatment appears to be less than one in 1,000.
- Risks include the formation of blood clots in the veins, severe inflammation, adverse allergic reactions to the sclerosing solution and skin injury that could leave a small but permanent scar.

What are the limitations of Sclerotherapy?

Large varicose veins do not respond as well as small ones to sclerotherapy. A few (less than 10 percent) of people who have sclerotherapy do not respond to the injections at all. In these instances, different solutions or a different method, such as cutaneous laser therapy, may be attempted.

You will not be able to undergo sclerotherapy treatment if you are pregnant, breastfeeding, or are bedridden. You must wait at least three months after giving birth before you can be considered for this procedure.

Often, phlebectomy (<https://www.radiologyinfo.org/en/info/phlebectomy>) is used with a more comprehensive treatment plan, including additional procedures such as endovenous catheter ablation that use radiofrequency or laser energy.

Patients should discuss their individualized treatment plan with their interventional radiologist.

Disclaimer

This information is copied from the RadiologyInfo Web site (<http://www.radiologyinfo.org>) which is dedicated to providing the highest quality information. To ensure that, each section is reviewed by a physician with expertise in the area presented. All information contained in the Web site is further reviewed by an ACR (American College of Radiology) - RSNA (Radiological Society of North America) committee, comprising physicians with expertise in several radiologic areas.

However, it is not possible to assure that this Web site contains complete, up-to-date information on any particular subject. Therefore, ACR and RSNA make no representations or warranties about the suitability of this information for use for any particular purpose. All information is provided "as is" without express or implied warranty.

Please visit the RadiologyInfo Web site at <http://www.radiologyinfo.org> to view or download the latest information.

Note: Images may be shown for illustrative purposes. Do not attempt to draw conclusions or make diagnoses by comparing these images to other medical images, particularly your own. Only qualified physicians should interpret images; the radiologist is the physician expert trained in medical imaging.

Copyright

This material is copyrighted by either the Radiological Society of North America (RSNA), 820 Jorie Boulevard, Oak Brook, IL 60523-2251 or the American College of Radiology (ACR), 1891 Preston White Drive, Reston, VA 20191-4397. Commercial reproduction or multiple distribution by any traditional or electronically based reproduction/publication method is prohibited.

Copyright © 2026 Radiological Society of North America, Inc.