Diagnosis and Treatment of Pelvic Venous Syndromes

By Robert Kiser, DO, MSPH

Vulvar varicosities are a source of embarrassment and pain for many women but they are often reluctant to discuss their condition or symptoms with their doctors. These varicosities can easily be missed in casual examination, as they are less obvious in the supine position and may not be seen until the patient stands or assumes an upright sitting or squatting position.

When evaluating lower extremity varicose veins, varicosities in the proximal inner thigh should prompt the physician to consider a pudendal origin. The question, “Do you have any varicose veins of the vulva or labia?” should be asked as well as questions about pelvic congestion symptoms. There are a variety of treatments that can help to improve or eliminate these symptoms.

Q: My patient has varicose veins and spider veins but is concerned about her insurer paying for evaluation and treatment. Is this a cosmetic procedure?

A: Most insurers, including Medicare, do pay for the evaluation and treatment of varicose veins and venous insufficiency. Varicose veins are enlarged veins (>4mm) below the skin surface that can be seen or felt. They are far more than a cosmetic problem, and can cause symptoms such as pain, throbbing, leg fatigue, swelling, and in later stages, chronic rashes or open sores of the legs.

Criteria vary by insurer, but most require that the patient have either symptoms of chronic venous insufficiency (CVI) such as leg pain or fatigue, or signs of CVI such as swelling, erythema hyperpigmentation, varicose vein hemorrhage, ulcers, stasis dermatitis, phlebitis or other inflammatory changes. Most insurers will not cover the treatment of telangiectasias, the thread-like red or blue “spider veins” at the skin surface that are usually not palpable.

We welcome your questions – email editor@centerforvein.com. We do reserve the right to edit for publication.
Writing the Rx
When writing a compression stocking prescription, the key components are:

- **Graduated Compression Stockings.**
The stocking should have a gradient pressure, with the strongest pressure at the ankle and less pressure at more proximal points of the lower extremity. Compression hosiery is classified according to the pressure level applied at the ankle in three classes: Class I = 20-30 mmHg; Class II = 30-40 mmHg; Class III = 40-50 mmHg. 4

- **Dispense Quantity.**
One pair may be sufficient, however, if both stockings are to be worn continuously during the day then 2 pair allows for laundering.

- **Fit to the Patient.**
To provide the correct compression, it is necessary that the stocking be properly fitted by a trained fitter. Most durable medical equipment providers have a trained fitter on staff.

- **Sig: Wear While Upright.**
Patient may generally remove the stocking at bedtime. Ideally the stocking should be donned prior to getting into an upright position.

- **Dx.**
Distributors and insurers will require a diagnosis for the stocking order, such as 454.1 varicose veins with inflammation or 671.2 superficial thrombophlebitis or 453.40 venous embolism and thrombosis of unspecified deep vessels of lower extremity.

Contraindications
Extensive wet dermatoses, burns or skin loss are obvious contraindications. Another contraindication is significant peripheral arterial disease (PAD). Avoid elastic compression if the ankle brachial index (ABI) is 0.8 or less. Patients with PAD are unlikely to tolerate strong compression, and there is a risk of worsening ischemia provoking skin necrosis or ulceration. 5 As a rule of thumb, if the foot pulses are not palpable, it is reasonable to obtain an ABI prior to stocking prescription.

Insurance Requirements
Many insurers will cover treatment of symptomatic varicose veins only after the patient has undergone a “trial” of graduated compression stockings. Exact requirements vary but it is commonly a duration of 3 months using 20-30 or 30-40 mmHg compression stockings.

Therefore, it is in the best interest of the patient with varicose veins to begin to wear graduated compression stockings as soon as possible. They will be able to get definitive treatment sooner, while having an immediate reduction in symptoms, swelling, and risk of thrombosis.

Length and Other Options
Choices in length include knee-high, thigh-high, pantyhose and men’s leotard. Knee-high stockings are the easiest to don, while thigh-high stockings are especially useful if the patient has considerable pathology, such as large varicosities or phlebitis above the knee.

Pantyhose or leotards are preferred by those who have large thighs with redundant adipose that causes the thigh-high stocking to creep downward. They may also be of some benefit for patients with gluteal, and to a lesser extent, pudendal varicosities.

Compression stockings come in a wide variety of colors, sheerness, and many styles. Taking these niceties into consideration can help to improve patient compliance with stocking use.

The Center for Vein Restoration offers comprehensive care for venous disease. Call 1-800-FIX-LEGS or 301-860-0930.

References

Patients will find compression garments in a wide variety of colors and styles at a price they can afford at Legsmatter.com.

To order by phone, call 1-888-997-9976.
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Background and Epidemiology

Vulvar varicosities occur in an estimated 4% of women\(^1\) and 15.8-23% of those with lower extremity varicose veins\(^2,3\). Most occur during pregnancy and resolve within a few months. When they do not resolve they may cause symptoms of pain, itching, burning, dyspareunia, and are perceived by some women as a cosmetic nuisance.

Vulvar varicosities may occur as isolated tributary varicosities or may be a sign of underlying pelvic venous insufficiency. They can also be associated with Pelvic Congestion Syndrome (PCS). PCS results from venous insufficiency (reflux) of the ovarian veins. This important but under-diagnosed condition is associated with symptoms of dyspareunia, chronic pelvic pain, feeling of pelvic fullness and discomfort\(^4\).

When signs or symptoms of PCS are reported, a diagnostic transvaginal ultrasound both supine and standing, with and without Valsalva may be ordered to quantify pelvic vein reflux. Magnetic resonance venography is also extremely sensitive to finding dilated gonadal veins and provides an abundance of anatomic information\(^5\). Consultation with an interventional radiologist or vascular surgeon for venography and possible coil embolization or fluoroscopy-guided sclerotherapy is warranted when found.

Compression Therapy

Any patient with symptomatic vulvar varicosities (pregnant or not) should be encouraged to try compression therapy. The company, Prenatal Cradle, makes the V-2 Supporter for the pregnant or non-pregnant woman with vulvar varicosities. This device is similar in appearance to a male athletic supporter, but is contoured to provide compressive support for the vulva, thus preventing the pooling of blood in the labial veins\(^6\).

Non-surgical and Minimally Invasive Techniques

For vulvar varicosities in the non-pregnant patient, remarkable improvement can be achieved with sclerotherapy. The visible varicosities are injected with a quantity of liquid or foam sclerosant, and the area is then compressed with a pad and the V-2 supporter or similar compression garment\(^7\). A few treatments can provide lasting relief and cosmetic improvement in vulvar varicosities. To minimize the risk of complications, the injecting physician should have extensive experience with vein sclerosis and a strong working anatomy of the pelvic venous system.

Persistent Pelvic Congestion Syndrome

For some patients, treatment of vulvar varicosities with a V-2 compression trial followed by compression sclerotherapy affords symptomatic improvement\(^8\). Patients with PCS who are not responding to compression should be evaluated by an interventional radiologist or vascular surgeon for possible coil embolization. Under fluoroscopy guidance, the refluxing ovarian veins can be embolized by endovenous insertion of a metallic coil.

After the pelvic venous insufficiency has been treated, if not previously addressed, the vulvar varicosities may be re-evaluated by a phlebologist who practices sclerotherapy to determine whether the varicosities and their associated symptoms have adequately resolved. If not, sclerotherapy of the visible varicosities may be provided if the patient wishes.

Help is available for your patients suffering with Pelvic Venous Syndromes. For more information, call 1-800-FIX-LEGS or 301-860-0930.

References

For a patient with venous disease, one of the more important and useful prescriptions a physician can write is for compression stockings. Patients who will benefit from graduated compression therapy include those suffering from:

- Superficial venous insufficiency or varicose veins
- Phlebitis, DVT or pulmonary embolism, or at risk of the same
- Lymphedema
- Leg fatigue, aching, or end-of-day edema
- Varicosities resulting from pregnancy

Compression therapy works by applying controlled pressure to the surface veins, keeping their diameter small, and forcing blood back into the deep vein system. For patients with venous disease, compression therapy may offer many of these benefits:

- Improve stamina
- Speed healing of ulcers and wounds
- Reduce edema
- Help reduce pain of superficial phlebitis and varicosities
- Augment calf-pump to reduce venous stasis
- Reduce the risk of venous thrombosis

### Compression Therapy Guide

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The Center for Vein Restoration, a nationally recognized vein center specializing in the treatment of varicose and spider veins recently opened in Kalamazoo/Portage, Michigan.

Robert C. Kiser, DO, MSPH joins the clinically award-winning team of cardiothoracic surgeons, vascular surgeons, and phlebologists to lead the Center for Vein Restoration clinic in the Kalamazoo area.

“The Center’s philosophy of caring, compassion and clinical excellence is what attracted me most,” he says.

Dr. Kiser grew up in Kalamazoo, Michigan, and attended the University of Michigan in Ann Arbor, graduating with honors. In 1993, he graduated from Michigan State University College of Osteopathic Medicine, and completed an internship in Family Practice at Riverside Osteopathic Hospital in Trenton, Michigan. Dr. Kiser’s residency followed in General Preventive Medicine and Public Health at the University of Colorado Health Sciences Center in Denver, where he also obtained a Master’s of Science in Public Health.

In 2003, Dr. Kiser underwent intensive training in the diagnosis and treatment of venous disease and began a full-time Phlebology practice in Mishawaka, Indiana and Okemos, Michigan. He served as the Director of Medical Consultation and Research for the largest vein practice group in the state of Indiana.

During this time, he successfully treated men and women with varicose veins, venous ulcers, and spider veins. Dr. Kiser uses a variety of effective, minimally-invasive treatment methods including injection and ultrasound-guided sclerotherapy, endovenous laser ablation, and ambulatory micro-phlebectomy. He is also an experienced practitioner of perforator vein closure and diagnostic ultrasound.

Board-certified in Phlebology, Dr. Kiser has been a Diplomate of the American Board of Phlebology since its inception in 2008. He is an active member of the American College of Phlebology and the American Venous Forum, and serves on the American College of Phlebology’s Research Committee.

Office-based procedures, covered by most insurance plans, are now being offered at the Kalamazoo/Portage location. To schedule a free screening or appointment, call 1-800-FIX-LEGS (800-349-5347).

Center for Vein Restoration Offers Free Screenings for Medical Professionals

Physicians and their medical staff are at high-risk for venous disease as a result of professional demands that require standing for long time periods.

If you’re a physician or medical office staff member who may be suffering from venous insufficiency, we can help.

Schedule a free screening by calling 1-800-FIX-LEGS (800-349-5347) or contact the Center for Vein Restoration location nearest you.
Our Physicians: Arvind Narasimhan, MD, Jaime F. Marquez, MD, FACS, PA, Sanjiv Lakhanpal, MD, FACS; Thomas C. Militano, MD, FACS, Luis A. Dibos, MD, FACS, Shekeeb Sufian, MD, FACS, Frank Sbrocco, MD, Jerrilyn M. Jutton, MD, FACS, Daniel Teklay, MD, Ken Nguyen, DO. (Not shown: Rajiv Jhaveri, MD, MBA, Michelle Thomas, MD, Eddie Fernandez, MD, J. Andrew Skiendzielewski, DO, Barry Levin, MD, Stephan Corriveau, MD, Paul Johnson, MD, Roy C. Byrne, MD, Robert Kiser, DO, MSPH)

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