## The Basics of Superficial Venous Insufficiency

The superficial veins of the legs and feet play an important role in helping the blood move toward the heart. But when they are not functioning properly, it can lead to a common condition called superficial venous insufficiency (SVI). When people have SVI, Thin vessel walls where bulging the blood in their leg veins can pool and create surrounding

pressure and swelling internally.1

Because superficial veins are closer to the surface of the skin, this pressure and swelling can result in different types of enlarged blue, red, or flesh-colored veins that can be seen through the skin on the thighs, backs of the calves, or ankles. These are known as spider veins, reticular veins and varicose veins—venous conditions that affect approximately 25 million people in the United States.<sup>2</sup>

Similar to varicose veins, spider veins are small, feather-like veins that appear through the skin, but resemble tree branches with short, jagged lines. Another vein problem associated with SVI are reticular veins. Found deep in the skin, these veins can cause discomfort and can grow into bigger varicose veins.

If you notice changes in your legs and feet, don't wait for it to progress: take the step and see your doctor for help.



#### PVD and Me

#### Get Informed at PVDandMe.com

Still want to learn more? You can find information about SVI symptoms, diagnosis, and treatments by visiting PVDandMe.com. You'll also find:



Patient Stories Help Finding

a Doctor

- 1. Weiss et al. "Venous Insufficiency." Medscape. May 26, 2016
- 2. Eberhardt et al. "Chronic Venous Insufficiency." *Circulation*. 2014;130:333-346. July 21, 2014.
- 3. "<u>Varicose veins and spider veins</u>." Office on Women's Health. U.S. Department of Health and Human Services. January 04, 2017.
- 4. Lin et al. "<u>The Management of Varicose Veins</u>." *Int Surg.* 2015 Jan; 100(1): 185–189.
- 5. "<u>How Are Varicose Veins Diagnosed</u>?" National Heart, Lung and Blood Institute. U.S. Department of Health & Human Services. Feb. 14, 2014.
- "<u>Who is at Risk for Varicose Veins</u>?" National Heart, Lung and Blood Institute. U.S. Department of Health & Human Services. Jan. 29, 2016.
- 7. "What is CEAP?" American College of Phlebotomy
- 8. "<u>Minimally invasive treatments for bothersome leg veins</u>," Harvard Women's Health Watch. Harvard Medical School Publications. April 2011.

#### Disclaimer

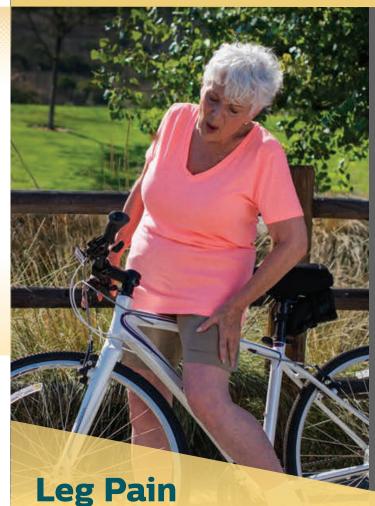
The opinions and clinical experiences presented herein are for informational purposes only. Individual results may vary depending on a variety of patient-specific attributes and related factors. Dr. Raghu Kolluri has been compensated by Philips for his services in preparing and providing this material for Philips further use and distribution.

Educational information made possible by Philips.

This brochure is not intended as a substitute for professional medical care. Only a health care professional can diagnose and appropriately treat your symptoms.

© Koninklijke Philips N.V., 2004 - 2017. All rights reserved. D000161155/B.

# **SVI** Superficial Venous Insufficiency



# Leg Pain Holding You Back?



#### Visit PVDandMe.com

## **Symptoms of SVI**

Superficial Venous Insufficiency is a progressive condition that may start with minimum signs and symptoms such as cosmetic changes like varicose veins. As venous disease worsens, people may develop more debilitating symptoms or more complications.

Common symptoms of SVI may include:<sup>3</sup>

- Swelling causing discomfort and pain in the legs, feet and ankles
- A warm feeling in the leg
- Tired, heavy legs that make walking and regular activity difficult
- Fluid that spreads, becoming trapped in the leg and ankle
- Skin changes, such as discoloration and redness
- Deep throbbing, diffuse pain after prolonged standing
- Sores or wounds on the legs, located above the ankle that won't heal well

If you notice any of these symptoms, you should talk to your doctor about these concerns. Getting screened for venous disease is important, especially to rule out potentially serious complications.

# What does progressive venous disease mean?

To understand how venous disease progresses, doctors usually refer to the **CEAP Classification**<sup>7</sup>, a common system that is widely used to diagnose and identify the severity of varicose veins as they progress with time. CEAP gives you an idea of how the disease can worsen and why it is important to seek help early on if you suspect SVI. Ask your doctor to see a CEAP Classification chart.

## Am I at Risk for SVI?



Although SVI is very common, some people carry a higher risk for developing the disease.

Risk factors may include:6

- Family history of venous disease
- **Previous trauma or injury** which can damage veins, making it more difficult for them to move blood
- **Gender** can play a role as women are twice as likely to develop the condition than men
- Medications such as birth control and infertility drugs can increase estrogen and progesterone—hormones that are associated with higher risks for spider veins
- **Pregnancy** can put pressure on a woman's pelvic area and veins, resulting in spider and varicose veins
- Other medical conditions such as obesity and being overweight
- **Prolonged standing** can increase the likelihood of venous disease due to immobility and increased pressure on the veins

If you are experiencing symptoms that bother you, discuss this with your doctor because they can potentially lead to leg ulcers.

# SVI Diagnostic Procedures and Treatments

Superficial venous problems may be visible on the legs, but it is important to let a doctor confirm a diagnosis. Why? Because sometimes SVI can indicate other serious problems in the deep veins that need immediate treatment.

To confirm an SVI diagnosis, a doctor may use a combination of physical exam, medical history and one or more of the following tools:<sup>5</sup>

- Duplex ultrasound to examine blood flow in the legs
- Venography, a type of x-ray, to obtain a detailed look at the veins

If your doctor discovers SVI, he or she may recommend changes like adopting a healthy diet and increasing exercise which can help reduce the pressure around the legs.

Other treatments may include:4,8

- Sclerotherapy which uses injected medications to block flow to the diseased vein
- Ablation therapy which uses lasers to shut down large varicose veins
- Phlebectomy, a surgical procedure to remove large veins

Still not sure about SVI diagnosis and treatment? Your doctor can provide more information and make recommendations based on the progression of disease. It is important to seek consultation because without treatment of venous disease, increased swelling and inflammation due to poor circulation can lead to serious complications and unpleasant skin changes.