

FREQUENTLY ASKED QUESTIONS

Q: Is the ClosureFast procedure painful?

A: Most patients report feeling little, if any, pain during the ClosureFast procedure.⁴ Your physician should give you a local or regional anesthetic to numb the treatment area.

Q: How quickly can I resume normal activity?

A: Patients treated with the ClosureFast procedure may resume normal activities more quickly than patients who undergo surgical vein stripping or laser ablation. With the ClosureFast procedure, the average patient typically resumes normal activities within a few days.⁵ For a few weeks following the treatment, your vein specialist may recommend a regular walking regimen and suggest you refrain from very strenuous activities (heavy lifting, for example) or prolonged periods of standing.

Q: How soon after treatment will my symptoms improve?

A: Most patients report a noticeable improvement in their symptoms within one to two weeks following the procedure.⁴

Q: Is there any scarring, bruising, or swelling after the procedure?

A: Most patients report limited to no scarring, bruising, or swelling following the ClosureFast procedure using the ClosureFast™ catheter.⁴

Q: How is the ClosureFast procedure different from endovenous laser?

A: Although the ClosureFast procedure and 980 nm endovenous laser ablation are both minimally invasive procedures, a comparative, multicenter study showed that the ClosureFast procedure was associated with statistically significant lower rates of pain, bruising, and complications. Patients undergoing the ClosureFast procedure also reported improvements in quality of life measures up to four times faster than patients treated with 980 nm endovenous laser ablation.⁴

Q: How is the ClosureFast procedure different from vein stripping?

A: During vein stripping, incisions are made in the groin and calf, and a tool is threaded through the diseased vein to pull the vein out of the leg. With the ClosureFast procedure, only one small incision is made at the insertion site and the vein is then treated and left in place. This minimally invasive approach reduces the likelihood of pain and bruising associated with vein stripping surgery.^{6,7}

DO YOU EXPERIENCE DISCOMFORT FROM VARICOSE VEINS?

If so, you may be suffering from chronic venous insufficiency (CVI). More than 30 million people are affected by varicose veins or CVI in the U.S., with only 1.9 million seeking treatment annually, leaving the vast majority undiagnosed and untreated.^{1,2} Without treatment, those with the disease may experience progressive symptoms, such as swollen legs, skin damage and/or ulcers that can be debilitating and significantly impact their quality of life.

Fortunately, with proper treatment, that outcome is preventable.



ClosureFast™ System



REFERENCES:
* Statistics based on individuals over the age of 40
¹ Gloviczki P, et al. The care of patients with varicose veins and associated chronic diseases: clinical practice guidelines of the Society for Vascular Surgery and the American Venous Forum. JVS; May 2011.
² Lee, A. U.S. Markets for Varicose Vein Treatment Devices 2011. Millennium Research Group, Inc. (A Decision Resource, Inc. Company), www.mrg.net <http://www.mrg.net/>, May 2011.
³ Eberhardt R, J Raffetto. Chronic Venous Insufficiency. Circulation. 2005;111:2398-2409.
⁴ Almeida JJ, Kaufman J, Göckeritz O, et al. Radiofrequency endovenous ClosureFast versus laser ablation for the treatment of great saphenous reflux: a multicenter, single-blinded, randomized study (RECOVERY Study). J Vasc Interv Radiol. 2009;20:752-759.
⁵ L. H. Rasmussen, M. Lawaetz, L. Bjoern, B. Vennits, A. Blemings and B. Eklof, Randomized Clinical Trial Comparing Endovenous Laser Ablation, Radiofrequency Ablation, Foam Sclerotherapy and Surgical Stripping for Great Saphenous Varicose Veins. British Journal of Surgery Society Ltd., Wiley Online Library, www.bjs.co.uk, March 15, 2011.
⁶ Lurie F, Creton D, Eklof B, Kabnick LS, Kistner RL, Pichot O, et al. Prospective randomized study of endovenous radiofrequency obliteration. (Closure procedure) versus ligation and stripping in a selected patient population (EVOLVE Study). J Vasc Surg 2003;38:2:207-14
⁷ Hinchliffe RJ, et al. A prospective randomised controlled trial of VNUS Closure versus Surgery for the treatment of recurrent long saphenous varicose veins. Eur J Vasc Endovasc Surg 2006 Feb;31:2:212-218
⁸ "Chronic Venous Insufficiency." Vascular Web. Society For Vascular Surgery. Jan. 2011. Web. 17 Aug. 2011. <http://www.vascularweb.org/vascularhealth/Pages/chronic-venous-insufficiency.aspx>.
⁹ Proebstle TM, Alm BJ, Gockeritz O, et al. Five-year results from the prospective European multicentre cohort study on radiofrequency segmental thermal ablation for incompetent great saphenous veins. The British Journal of Surgery. Feb 2015;102(3):212-218.

IMPORTANT: Indications, contraindications, warnings and instructions for use can be found in the product labeling supplied with each device.

FIND RELIEF FROM VARICOSE VEINS



ClosureFast™ Procedure

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THE VENOUS SYSTEM ANATOMY

UNDERSTANDING VENOUS REFLUX DISEASE

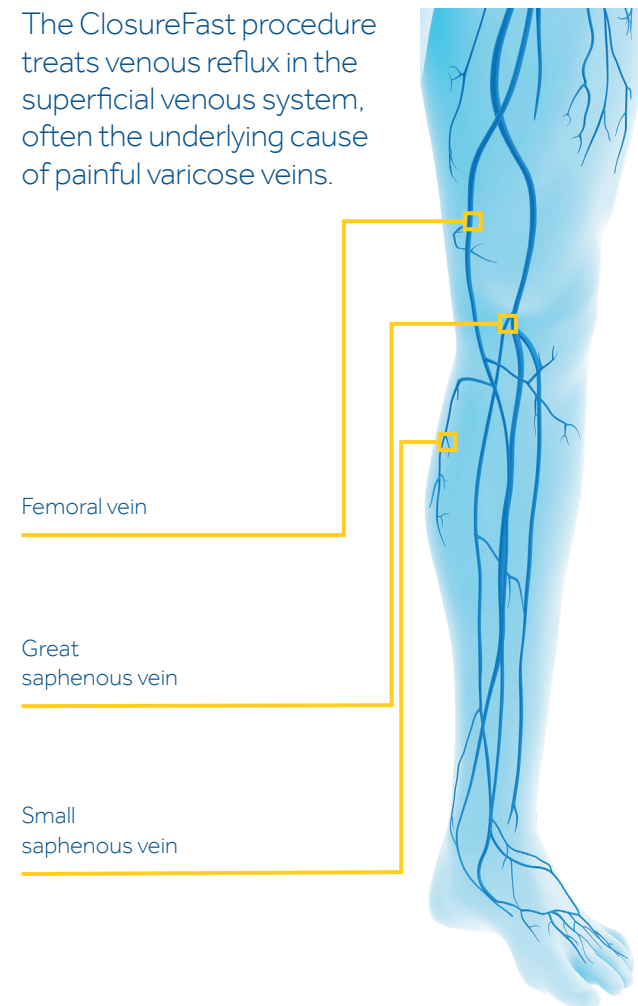
EXPERIENCE THE CLOSUREFAST PROCEDURE

RESULTS MATTER

The venous system is made up of a network of veins, including:

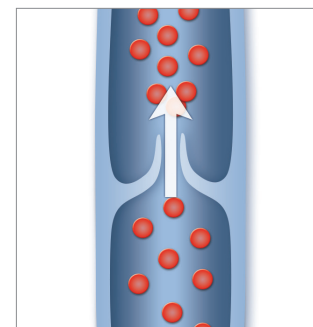
- **Superficial veins**- veins located close to the surface of the skin
- **Deep veins**- larger veins located deep in the leg
- **Perforator veins**- veins that connect the superficial veins to the deep veins

The ClosureFast procedure treats venous reflux in the superficial venous system, often the underlying cause of painful varicose veins.

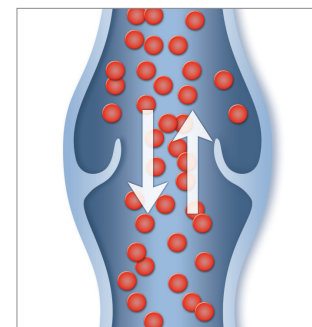


Healthy leg veins contain valves that open and close to assist the return of blood back to the heart. Venous reflux disease develops when the valves that keep blood flowing out of the legs and back to the heart no longer function, causing the blood to pool in the legs, and leading to these signs and symptoms:¹

- **Varicose veins**
- **Leg or ankle swelling**
- **Leg heaviness and fatigue**
- **Leg pain, aching or cramping**
- **Burning or itching of the skin**
- **Restless legs**
- **Skin changes or rashes**
- **Ulcers, open wounds, or sores**



Healthy valves keep blood moving in one direction.

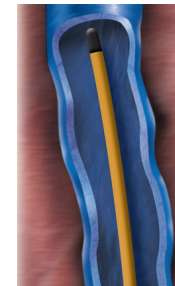


Diseased valves cause blood to move in both directions, elevating venous pressure.

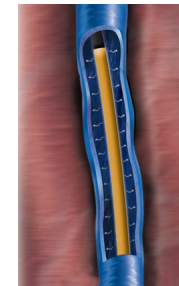
Venous reflux disease is a progressive medical condition and if left untreated, may worsen over time and develop into a more serious form of venous disease called chronic venous insufficiency (CVI).³

The ClosureFast procedure is performed on an outpatient basis. Using ultrasound, your physician will position the catheter into the diseased vein through a small opening in the skin. The small catheter delivers heat to the vein wall, causing it to shrink and the vein to seal closed. Once the diseased vein is closed, blood will reroute itself to other healthy veins.

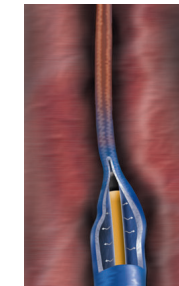
Disposable catheter inserted into vein



Controlled heat collapses vein



Catheter withdrawn, closing vein



Following the procedure, a simple bandage is placed over the insertion site, and additional compression may be provided to aid healing. Your doctor may encourage you to walk, and to refrain from extended standing and strenuous activities for a period of time. The average patient typically resumes normal activities within a few days.⁵

Studies have shown:

- **Relief of symptoms after two days⁴**
- **Less pain than laser** - an outpatient procedure with local or general anesthesia⁴
- **Proven results** with positive patient outcomes and experience^{4,9}
- **Rapid recovery** - on average patients resume normal activities with in a few days⁵

Pretreatment



3 months post treatment*



* Individual results may vary.

Photo courtesy of Vein Institute of the North Shore, Beverly, MA

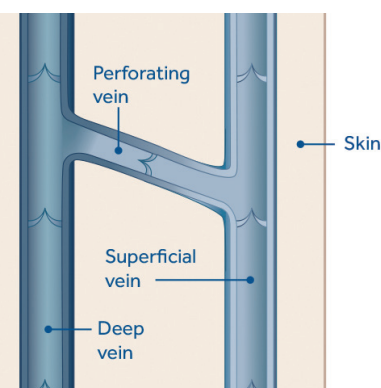
Are you suffering from venous reflux disease?

Many factors contribute to the presence of venous reflux, including:⁸

- Age
- Gender
- Family history
- Heavy lifting
- Multiple pregnancies
- Obesity
- Prolonged standing

Using ultrasound to scan your leg(s), your physician will determine if venous reflux is present.

See what the ClosureFast procedure can do for you.



Perforating veins connect the deep system with the superficial system.

Varicose Veins



Swelling and Skin Discoloration



Skin Color and Texture Changes



Venous Ulcers



Photos courtesy of Rajabrata Sarkar, MD, PhD