



A treatment  
option for  
varicose veins.

**Venefit™**

Targeted Endovenous Therapy

*Formerly known as the VNUS Closure™ procedure*



**COVIDIEN**

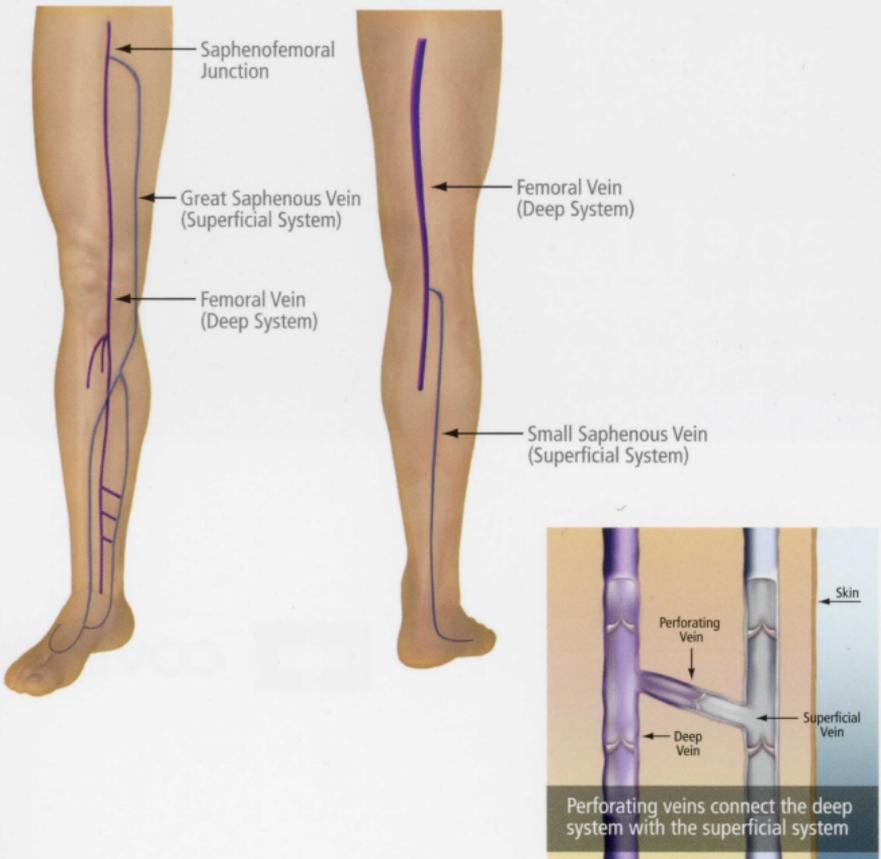


## THE VENOUS SYSTEM ANATOMY

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 Venefit™ procedure treats venous reflux disease in the superficial venous system, often the underlying cause of painful varicose veins.

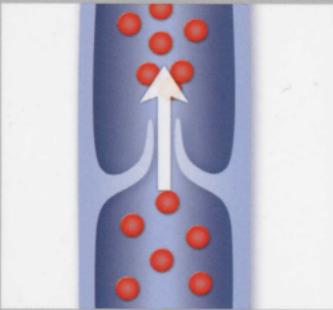


# UNDERSTANDING VENOUS REFLUX DISEASE

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 become damaged or diseased. As a result, vein valves will not close properly, leading to symptoms<sup>3</sup> of:

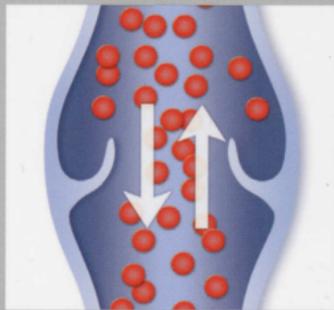
- Varicose veins
- Pain
- Swollen limbs
- Leg heaviness and fatigue
- Skin changes
- Ulcers

HEALTHY VEIN VALVE



Healthy valves keep blood moving in one direction

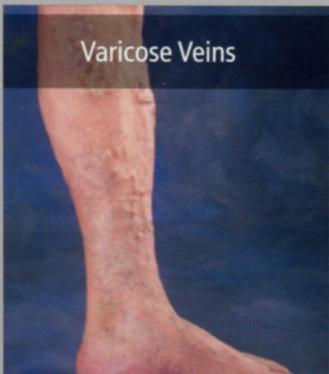
DISEASED VEIN VALVE



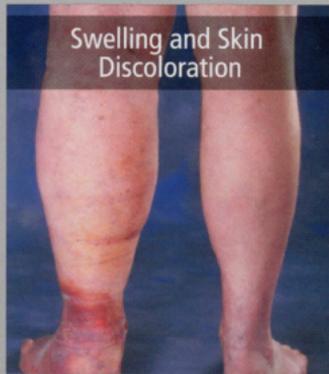
Diseased valves cause blood to move in both directions, elevating venous pressure

## VENOUS REFLUX DISEASE IS PROGRESSIVE — SYMPTOMS CAN WORSEN OVER TIME IF LEFT UNTREATED.

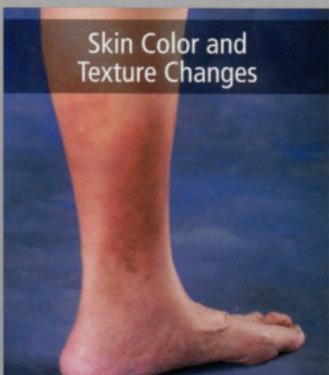
### A Serious Progressive Disorder



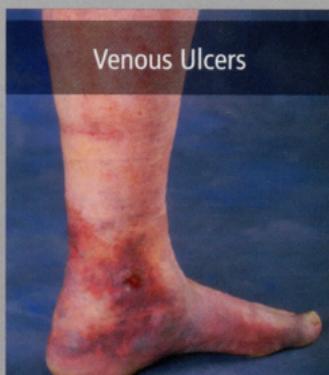
Varicose Veins



Swelling and Skin Discoloration



Skin Color and Texture Changes



Venous Ulcers

## EXPERIENCE THE VENEFIT™ PROCEDURE

The Venefit procedure is performed on an outpatient basis. Using ultrasound, your physician will position the ClosureFast™ catheter into the diseased vein through a small opening in the skin. The tiny catheter powered by radiofrequency (RF) energy delivers heat to the vein wall. As the thermal energy is delivered, the vein wall shrinks and the vein is sealed closed. Once the diseased vein is closed, blood will re-route 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.<sup>2</sup>

## ARE YOU SUFFERING FROM VENOUS REFLUX DISEASE?

Many factors contribute to the presence of venous reflux disease, including:<sup>6</sup>

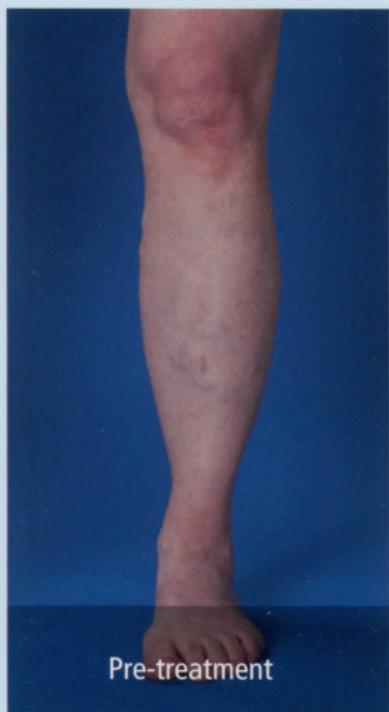
- Age
- Gender
- Family history
- Heavy lifting
- Multiple pregnancies
- Obesity
- Standing profession

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

## PROCEDURAL HIGHLIGHTS\*

- Relief of symptom within 2 days<sup>1</sup>
- Outpatient procedure
- Can be performed under local anesthesia
- The average patient typically resumes normal activities within a few days.<sup>2</sup>
- Proven results with positive patient outcomes and experience<sup>1,2</sup>

## VISUAL RESULTS\*



\* Individual results may vary.

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

This picture shows results of Venefit procedure treatment only. Cosmetic improvements may occur sooner with adjunctive procedures. Results of 'after' picture is shown 3 months post procedure.

**INDICATIONS:** The ClosureFast™ catheter is intended for endovascular coagulation of blood vessels in patients with superficial venous reflux.

**CONTRAINDICATIONS:** Patients with thrombus (blood clots) in the vein segment to be treated should not have the Venefit™ Procedures.

**POTENTIAL COMPLICATIONS:** As with all medical procedures, potential risk and complications exist including vessel perforation (when the catheter punctures the vein wall), thrombosis, pulmonary embolism (when a blood clot travels to the lungs), phlebitis (inflammation of the vein), infection, nerve damage, arteriovenous fistula (an abnormal connection between an artery and a vein), hematoma (bruising), and skin burn. As with all medical procedures, consult your physician for information on the risks and benefits of the procedure.



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## Do you experience the discomfort and swelling of varicose veins?

If so, you may be suffering from venous reflux disease.

More than 30 million people are undiagnosed with varicose veins or CVI\*<sup>3</sup>. Traditionally, patients diagnosed with venous reflux would undergo vein stripping surgery. Now, minimally invasive treatment options, such as the Venefit™ procedure, are available to patients.



### References

\* Statistics based on individuals over the age of 40

- <sup>1</sup> 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.
- <sup>2</sup> 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.
- <sup>3</sup> 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.
- <sup>4</sup> 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
- <sup>5</sup> 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
- <sup>6</sup> "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>>.

## FREQUENTLY ASKED QUESTIONS

### Q: Is the Venefit™ procedure painful?

A: Most patients report feeling little, if any, pain during the Venefit procedure.<sup>1</sup> 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 Venefit procedure may resume normal activities more quickly than patients who undergo surgical vein stripping or endovenous ablation. With the Venefit procedure, the average patient typically resumes normal activities within a few days.<sup>2</sup> 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 1-2 weeks following the procedure.<sup>1</sup>

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

A: Most patients report limited to no scarring, bruising, or swelling following the Venefit procedure using the ClosureFast™ catheter.<sup>1</sup>

### Q: How is the Venefit procedure different from endovenous laser?

A: Although the Venefit procedure and 980nm endovenous laser ablation are both minimally invasive procedures, a comparative, multi-center study showed that the Venefit procedure was associated with statistically significant lower rates of pain, bruising and complications. Patients undergoing the Venefit procedure also reported improvements in quality of life measures up to four times faster than patients treated with 980nm endovenous laser ablation.<sup>1</sup>

### Q: How is the Venefit 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 Venefit 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.<sup>4,5</sup>

### Q: Is the Venefit procedure covered by insurance?

A: Many insurance companies pay for the Venefit procedure in part or in full. The Venefit procedure has coverage policies with major health insurers. Please discuss your coverage with your insurance provider prior to seeking treatment.



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*Visit [www.venefitprocedure.com](http://www.venefitprocedure.com) to locate  
a physician and receive more information*

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VTH0151 08/12