Understanding venous disease and treatment
UNDERSTANDING VENOUS DISEASE

VENOUS DISEASE

FEMORAL VEIN

GREAT SAPHENOUS VEIN

SMALL SAPHENOUS VEIN
Venous reflux disease is **two times more prevalent** than coronary heart disease (CHD) and **five times more prevalent** than peripheral arterial disease (PAD).¹

- Varicose veins **may be more than just a cosmetic issue.**¹
- Varicose veins **are not the same as spider veins.**¹
- Varicose veins **affect both men and women.**¹
- **More than 30 million people** suffer from venous reflux disease, or a more serious form of vein (venous) disease called chronic venous insufficiency (CVI).¹
- Given the common misunderstanding that varicose veins are only a cosmetic issue, **only 1.9 million people seek treatment.**²,³
VENOUS ANATOMY

FEMORAL VEIN

GREAT SAPHENOUS VEIN

SMALL SAPHENOUS VEIN

NORMAL VEIN
Valves ensure blood flows in one direction

DISEASED VEIN
Valves that cannot close allow blood to drain and pool
Varicose veins may be a sign of something more severe — VENOUS REFLUX DISEASE.

Venous reflux disease develops when the valves stop working properly and allow blood to flow backward (i.e. reflux) and pool in the lower leg veins. If venous reflux disease is left untreated, symptoms can worsen over time and could lead to chronic venous insufficiency (CVI).

Venous reflux disease may cause the following signs and symptoms in your legs:

- Varicose veins
- Heaviness / tiredness
- Aching
- Itching
- Swelling
- Open skin sores
- Cramping
- Restlessness

Signs and symptoms of CVI as it progresses:

- Varicose veins
- Swollen legs
- Skin changes
- Skin ulcers
WHO IS AT RISK?

Possible risk factors:

- Gender
- Age
- Family history
- Sedentary lifestyle
- Prolonged standing
- Obesity or excess weight
- Current or previous pregnancies
- Smoking

How is CVI diagnosed?

- Current general health
- Past medical history
- Symptoms
- Physical exam
- Ultrasound and/or other non-invasive scans to check for the presence of disease
REFERENCES

VenaSeal™
Closure System

- Improves blood flow by sealing—or closing—the diseased vein
- Delivers a small amount of a specially formulated medical adhesive to the diseased vein
- Seals the vein with adhesive and blood is rerouted through nearby veins
PROCEDURE

Leg preparation
Prior to the VenaSeal procedure:
- Leg will be evaluated using ultrasound
- Vein may be marked using a skin marker

Vein access and catheter positioning
- Local anesthesia will be given at the catheter entry site to numb the area
- The physician will access the vein through either a small incision or skin puncture
- Once the vein is accessed, the catheter is inserted and advanced to the treatment starting point
- The catheter’s position is verified using ultrasound

Treatment
- VenaSeal™ adhesive is delivered along the length of the targeted vein segment
- The proprietary catheter is highly visible under ultrasound, for precise delivery of the adhesive
In comparison, patients treated with the VenaSeal system experience less bruising.\(^2\)

*Some patients may benefit from the use of compression stockings post procedure.*

<table>
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<th>THERMAL ENERGY: THE TRADITIONAL TREATMENT OPTION</th>
<th>VENALEASEL™ CLOSURE SYSTEM: AN INNOVATIVE TREATMENT OPTION</th>
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<tr>
<td>Heat closes the vein</td>
<td>Adhesive seals the vein</td>
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<td>Multiple needle sticks of numbing medicine</td>
<td>Only one needle stick of numbing medicine</td>
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<td>Compression stockings required after the procedure</td>
<td>No compression stockings after the procedure*</td>
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REFERENCES


CAUTION: Federal (USA) law restricts this device to sale by or on the order of a physician.
IMPORTANT: Please reference the Instructions For Use (IFU) for a complete listing of indications, contraindications, warnings and precautions, adverse effects and suggested procedure.
ClosureFast™
Endovenous Radiofrequency Ablation Procedure
The ClosureFast procedure is a minimally invasive treatment that uses radiofrequency ablation (heat) to seal off the diseased vein so blood gets rerouted to nearby healthy veins.
**Leg preparation**

Prior to the ClosureFast procedure:
- Leg will be evaluated using ultrasound
- Vein may be marked using a skin marker

**Vein access and catheter positioning**
- Local anesthesia will be given at the catheter entry site to numb the area
- The physician will access the vein through either a small incision or skin puncture
- Once the veins is accessed, the ClosureFast™ catheter is inserted and advanced to the treatment starting point
- The catheter’s position is verified using ultrasound

**Anesthesia**
- Treatment path will be numbed with local, tumescent anesthesia
PROCEDURE

1. Small catheter inserted into vein
2. Controlled heat collapses vein
3. Catheter withdrawn, closing vein

ClosureFast™ Procedure
PROCEDURE HIGHLIGHTS*

- Minimally invasive, outpatient procedure
- Proven results with positive patient outcomes
- Lower rates of pain, bruising and complications and a faster improvement in patients’ quality of life when compared to 980 nm laser ablation

- Average patient typically resumes normal activities within a few days following treatment

- Most patients report a noticeable improvement in symptoms within 1 – 2 weeks following procedure

- Can be performed under local anesthesia
- Covered by most insurance providers**

* Individual results may vary.

** Patient should speak with their insurance provider prior to seeking treatment.

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

Pretreatment

3 Months Post-treatment*
REFERENCES


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RELIEF IS JUST THE BEGINNING