



The Vein Institute

# **Your Guide to Varicose Veins**

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# TABLE OF CONTENTS



## 01

### WHAT ARE VARICOSE VEINS?

|                          |   |
|--------------------------|---|
| What are varicose veins? | 1 |
| Varicose veins symptoms  | 2 |
| Causes of varicose veins | 3 |

## 02

### ASSESS YOUR VEINS

|  |   |
|--|---|
| Try our vein assessment tool to assess your vein condition | 4 |
|--|---|

## 03

### PREVENTION

|  |   |
|--|---|
| See what steps you can take to avoid developing varicose veins | 5 |
|--|---|

## 04

### TREATMENT

|                             |    |
|-----------------------------|----|
| Treatment options           | 7  |
| • Endovenous Laser Ablation | 8  |
| • Radiofrequency Ablation   | 9  |
| • Medical Superglue         | 10 |
| • Sclerotherapy             | 11 |
| • ClariVein                 | 12 |
| • Results                   | 13 |
| Surgery                     | 14 |
| Treatment comparison        | 16 |
| FAQs                        | 17 |



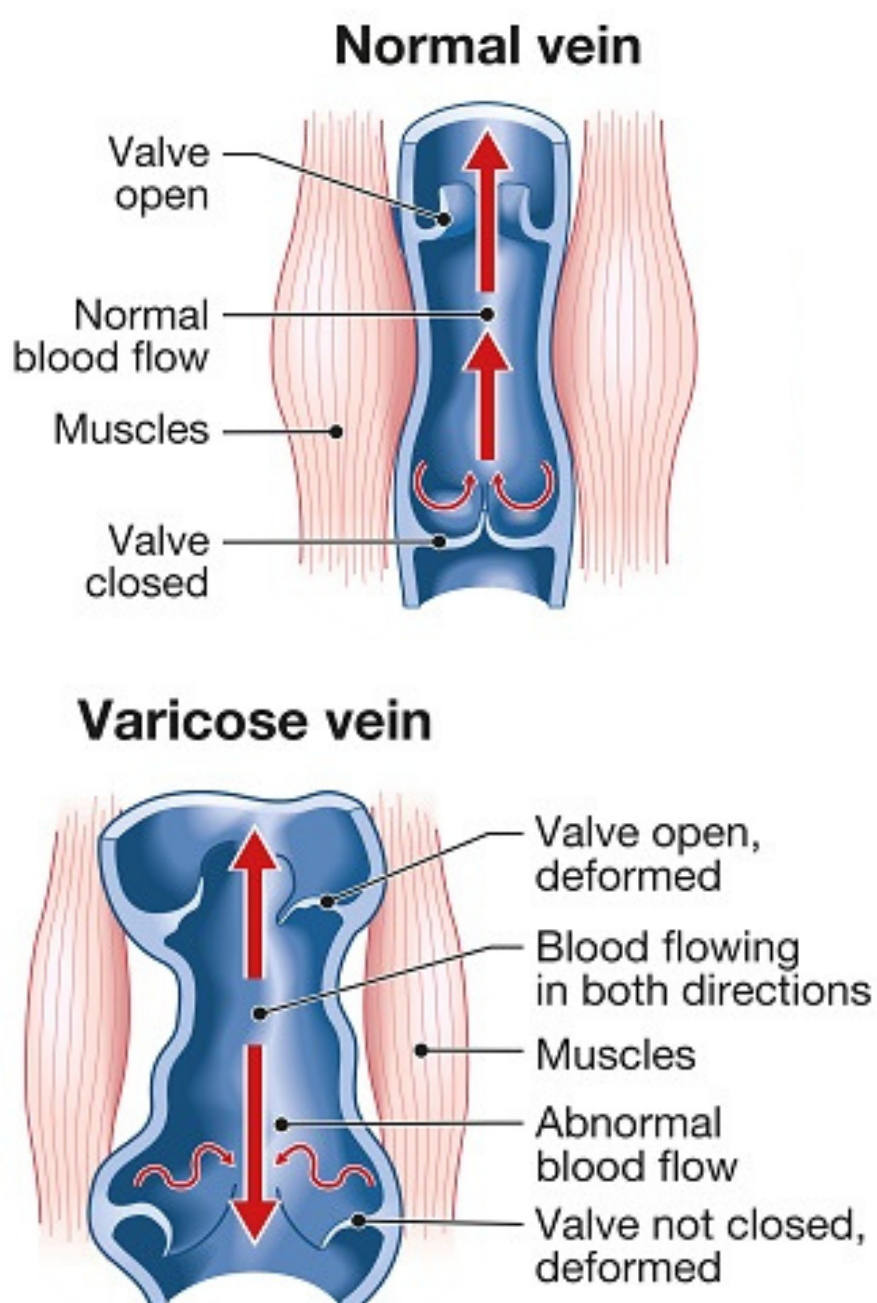
# WHAT ARE VARICOSE VEINS?

The veins in your body have small one-way valves that stop blood from flowing backwards. When these valves become damaged, weakened, or otherwise affected, they lose their ability to properly close. As a result, blood pools and causes the vein walls to twist, elongate, and bulge.

While they're usually found in the legs, varicose veins may also appear

in the arms, pelvis, and even the groin.

Typically, it will be the superficial veins that are affected. These are the smaller vein branches connecting tissues to the large deep veins, which transport deoxygenated blood back to your heart.







# VARICOSE VEIN SYMPTOMS

## 01 SWELLING

Varicose veins cause a build-up of excess fluid in surrounding tissues, resulting in swelling.

## 02 ACHING

You might also feel a dull, throbbing ache that worsens toward the end of the day.

## 03 ITCHING

Poorer circulation means slower oxygen and nutrient delivery to the skin, resulting in varicose eczema.

## 04 FATIGUE

Without sufficient nutrients, the muscles may feel fatigued, resulting in a heavy feeling.

## ARE VARICOSE VEINS DANGEROUS?

Varicose veins don't normally pose a significant health risk, and sometimes, patients don't experience any uncomfortable symptoms.

However, varicose veins may worsen over time, growing bulkier, more uncomfortable, and potentially leading to dangerous complications such as deep vein thrombosis and venous ulcers.

If left untreated for a long time, they can also cause skin damage that's often very difficult to reverse.



# WHAT CAUSES VARICOSE VEINS?

Varicose veins are primarily genetic. If your parents or grandparents (particularly your mother or grandmother) had them, you'll be more at risk. However, several other factors can increase your risk of developing them.



## **GENDER**

Women are twice as likely to develop varicose veins. This is partly due to higher levels of progesterone, a hormone that relaxes vein walls. Progesterone levels are especially high during pregnancy and menstruation.



## **PREGNANCY**

Along with a progesterone increase during pregnancy, your blood volume doubles to support the growing child. The increased volume means the veins expand, sometimes past the point your valves can handle.



## **LIFESTYLE**

Remaining static for long hours means your muscles are not moving enough to pump blood. Additionally, a diet low in vitamins and high in trans fats, salt, and sugar strains and weakens the veins.



## **WEIGHT**

If you are obese or excessively overweight, the pressure on your veins is much higher, meaning the valves have to work harder to push blood up the legs.



## **AGE**

As we get older, the risk of varicose veins increases, especially past the age of 40. Gradual wear and tear on the body mean that veins do not function as effectively as they used to.



A woman with long blonde hair is sitting on a light-colored couch. She is wearing a white t-shirt and a white wristwatch. Her hands are resting on her right knee, which shows prominent, dark, bulging veins (varicose veins). The background is slightly blurred, showing more of the couch and some green foliage in the foreground.

THINK YOU MIGHT  
HAVE VARICOSE VEINS?

## **TRY OUR VEIN ASSESSMENT TOOL**

[CLICK HERE](#)



# HOW TO AVOID VARICOSE VEINS

Unfortunately, factors like genetics and ageing aren't possible to control, and there's no fool-proof solution to preventing varicose veins entirely. However, there are few steps you can take to reduce your risk, which are especially important if you're genetically predisposed to the condition. Try the lifestyle changes below.



## STAY ACTIVE

- Go on regular walks to get the blood pumping in your legs. We recommend taking a 30-minute walk every day.
- When sitting or standing for long periods, take a break every 30 minutes to do some stretches, calf raises, or squats.
- Do a vein-friendly physical activity like yoga or swimming a couple of times a week.

## EAT HEALTHY

- Incorporate more fruits, vegetables, fish, nuts, seeds, and whole grains into your diet. These foods have all the vitamins and nutrients your veins need to stay strong.
- Cut down on fatty, salty, and sugary foods, as these aren't great for your cholesterol or blood pressure.



## KEEP COMFORTABLE

- Wear flat, comfortable shoes or sneakers as much as possible when out and about. High heels put your foot in an unnatural position, increasing the strain on your calf veins.
- Wear looser clothing that doesn't restrict blood flow so your veins can more easily push it to the heart.



## WEAR COMPRESSION SOCKS

- Compression socks activate the muscles and gently squeeze the veins, helping blood flow from venules into deep veins and into the heart.
- Wear them when you'll be sitting or standing for long hours (like on a flight), and during strenuous activities like weightlifting.

**ORDER YOUR  
PAIR TODAY**

**SHOP NOW**



# VARICOSE VEIN TREATMENTS

While there are conservative measures to help prevent varicose veins and relieve symptoms when they form, the only effective way to treat the condition is through medical intervention.

The best treatment option for you will depend on the size of your varicose veins, their location, and any pre-existing health concerns. In the

majority of cases, a short procedure that seals the vein is the recommended course of action.

However, in more severe cases, you may need to go to the hospital and undergo surgical removal. When considering which option to go for, it's best to speak to a vein doctor who'll help you find the best treatment plan for you.

..... YOUR OPTIONS AT A GLANCE .....



EVLA



RFA




VENASEAL



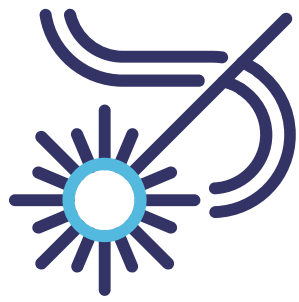
SCLERO



CLARIVEIN



SURGERY



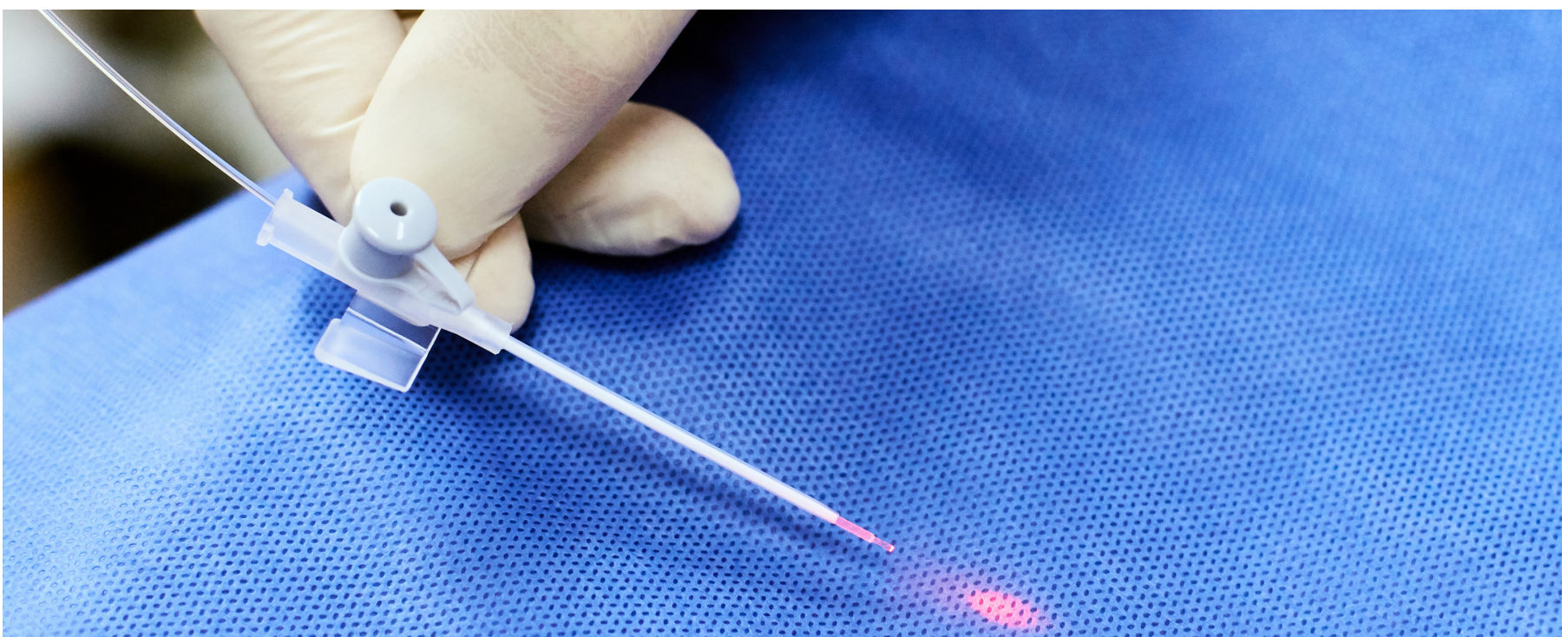
# ENDOVENOUS LASER ABLATION (EVLA)

EVLA is one of the more recent methods of vein treatment. First pioneered in 1999, it has since emerged as the gold standard option for varicose veins. It's minimally invasive, has a short recovery period, and boasts a success rate of 95-98%.

## ADVANTAGES

- Quick procedure (30-60 minutes)
- Minimally invasive
- Walk-in, walk-out
- 95-98% success rate
- Very safe with minimal side effects and risks
- Very little pain or discomfort
- 60-80% visible reduction in vein size right after treatment

First, your doctor injects a local anaesthetic. Once this takes effect, they will insert a catheter into the vein and use ultrasound guidance to maneuver it through the vein. At this point, your doctor will inject a tumescent anaesthetic into the vein to numb it and prevent the laser tip of the fibre from damaging surrounding tissue. Once that's done, they'll turn the laser on and slowly pull the fibre out of the vein, clotting the blood and sealing the vein off.







# RADIOFREQUENCY ABLATION (RFA)

RFA is very similar to EVLA, with only a few key differences. While EVLA clots the blood to seal the vein with a heated laser fibre, RFA uses intermittent bursts of radiofrequency energy to shrink the veins and stop blood from flowing through them. The ultrasound imagery specialists use to guide the fibre through the vein allows for pinpoint accuracy when delivering the bursts.

## ADVANTAGES

- Quick procedure (30-60 minutes)
- Minimally invasive
- Walk-in, walk-out
- 95-98% success rate
- Very safe with minimal side effects and risks
- Very little pain or discomfort
- 60-80% visible reduction in vein size right after treatment

We at The Vein Institute typically use EVLA for large veins and RFA for smaller and simpler ones. One of our vein doctors will advise which is the best choice and help guide you through this process. After the procedure is complete, you can go home and return to normal activities with the addition of some after care steps like compression socks and going on walks.







# MEDICAL SUPERGLUE (VENASEAL)

Medical superglue has a long history of being used to seal cuts and wounds. And while it's a relatively new addition to the varicose vein treatment space, it has proven to be very effective.

## ADVANTAGES

- Quick and simple procedure
- Minimally invasive
- Walk-in, walk-out
- Up to 95% success rate
- Very safe with minimal side effects and risks
- Very little pain or discomfort
- No general anesthesia

As with RFA and EVLA, your doctor will use a local anaesthetic. Once it sets in, they will inject VenaSeal either through a syringe or a catheter, depending on the size of the vein. Your doctor will then apply gentle pressure to your leg to 'glue' the varicose vein shut. Once sealed, your body will absorb the vein.





# SCLEROTHERAPY

This option is one of the oldest and most tested ways of treating varicose veins, having been practised for over 150 years. It has been well refined and improved since its introduction, using the most up-to-date technology available.

## ADVANTAGES

- Quick and simple procedure (30-45 mins)
- Minimally invasive
- Walk-in, walk-out
- No general anesthesia
- Very safe with minimal side effects and risks
- Very little pain or discomfort
- ~80-90% success rate in smaller veins

Sclerotherapy closes the vein through a special sclerosing solution, causing the vein to scar and collapse. Your doctor will inject the solution through a needle at 2-3 centimetre intervals along the leg, using ultrasound to guide the injections. Sclerotherapy works best on smaller veins. For larger veins, specialists may use it in conjunction with EVLA or RFA to clear up any attached spider veins.







# CLARIVEIN

ClariVein procedures also involve sclerosant, but it's dispersed into the vein via the ClariVein catheter. The catheter has a 360-degree rotating tip that allows specialists to cover more ground in the vein, making this procedure suitable for larger veins than what traditional sclerotherapy allows.

## ADVANTAGES

- Quick and simple procedure (30-45 mins)
- Minimally invasive, with a pin-sized entry point
- Walk-in, walk-out
- Performed under local anaesthetic
- Very safe with minimal side effects and risks
- Very little pain or discomfort
- ~80-90% success rate

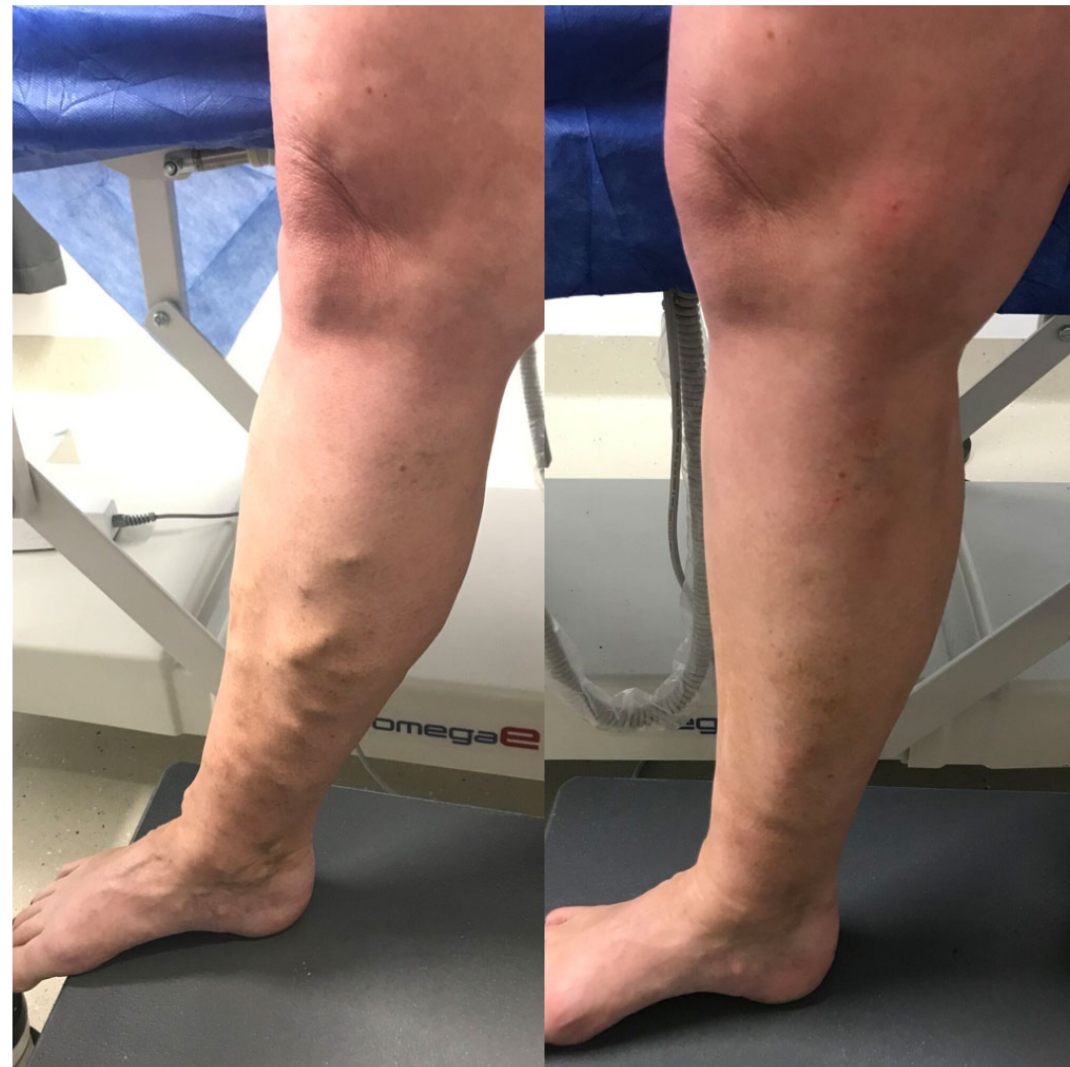
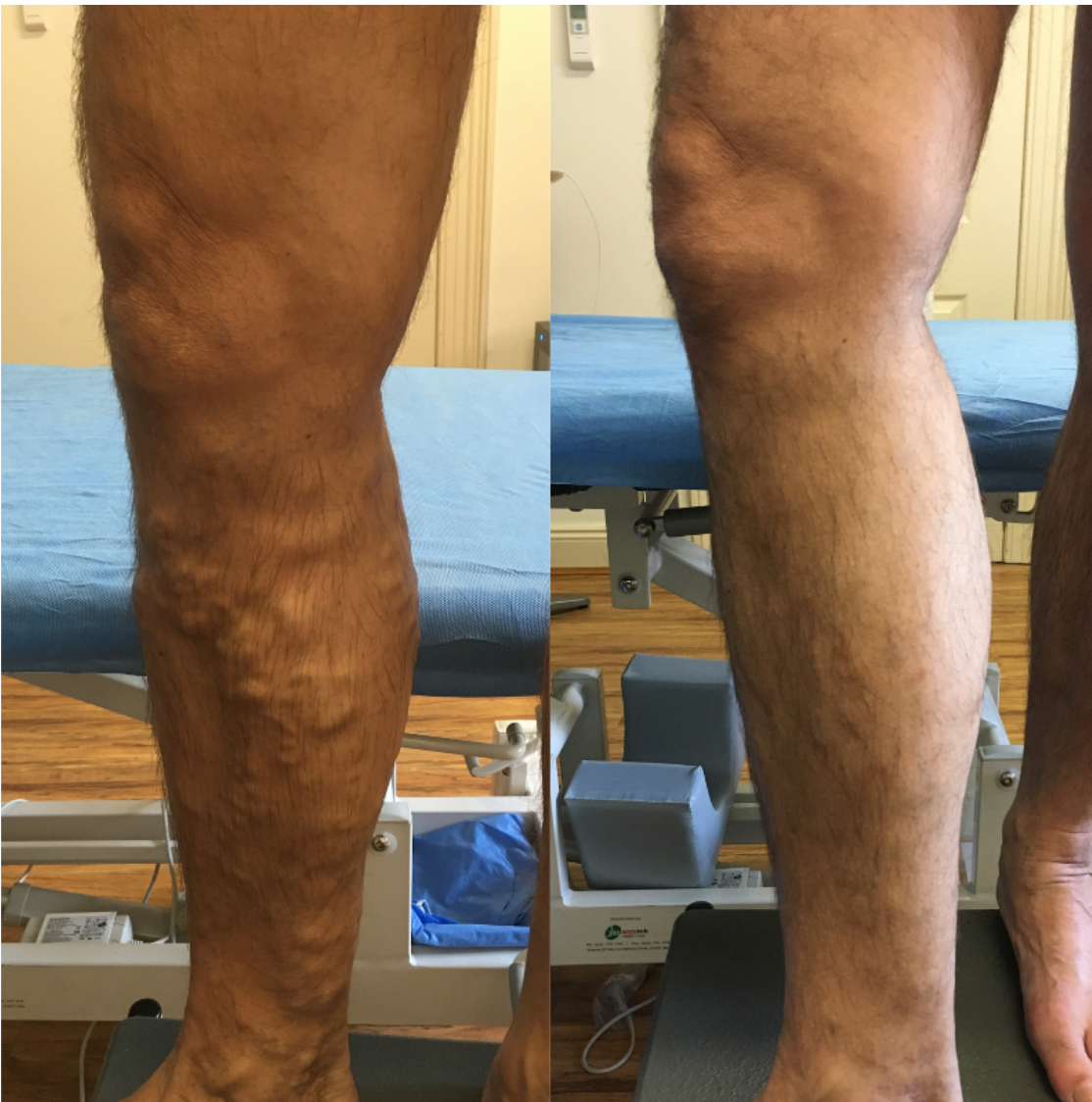
Once the local anaesthetic sets in, your doctor will create a pin-sized entry point and feed the catheter through under ultrasound guidance. Once they reach key areas in the vein, they'll turn the catheter on. Its spinning tip, capable of rotating at 3500 rpm, penetrates the diseased vein wall while dispersing sclerosant. This combination of mechanical action and dispersal seals the vein.





BEFORE & AFTER

# NON-SURGICAL TREATMENT



[SEE MORE RESULTS](#)





# VASCULAR SURGERY

For decades, vascular surgery was the primary method to treat varicose veins. Even today, many with the condition think surgery is their only option. While surgical procedures have proven to be effective, they have unique sets of risks as well as an extended and painful recovery period. There are several different types of surgery to remove varicose veins, and these can be used in conjunction with each other. They include stripping, ligation, and phlebectomy, all of which are more invasive and often require general anaesthesia.

## LIGATION

This procedure involves making incisions at the top and bottom of the vein on the leg and then cutting and tying off the vein on both ends to redirect the blood through healthier veins. As it's a more extensive procedure than Endovenous Laser Ablation, it requires general anaesthesia and sutures.

## VEIN STRIPPING

In a vein stripping procedure, a vascular surgeon will make an incision at both ends of the vein. They then feed a wire through to the other end of the vein and pull it and the vein out. Like ligation, stripping is performed under general anaesthetic. You'll also need sutures to help close the incision points.

## PHLEBECTOMY

There are two types of phlebectomy: ambulatory and transilluminated. In the former, your surgeon will make incisions along the vein, break it up into segments, and pull them out with a surgical hook. In the latter, they'll use suction instead of a hook. Sutures are required, but phlebectomy may sometimes be performed under local anaesthetic.

## ADVANTAGES

While it does have more risk and a longer recovery period, surgery does have its advantages.

- Effective in removing large and extensive varicose veins
- Helpful in treating thrombosis and certain other complications
- Part of venous ulcer treatment

The Vein Institute doctors do not perform surgery on varicose veins due to the extended recovery time and inherent risks involved. Minimally invasive thermal and non-thermal treatment of the veins is largely considered safer and just as effective in the majority of cases.

[LEARN MORE](#)



# TREATMENT COMPARISON

| EVLA/RFA   | SCLERO   | GLUE                                 | CLARIVEIN  | SURGERY   |
|--|--|--------------------------------------|--|---|
| USED TO TREAT  |  |                                      |  |   |
| Large straight veins   | Small veins  | Medium-sized straight veins          | Medium-sized veins   | Large veins   |
| PAIN LEVEL   |  |                                      |  |   |
| Similar to an injection  | Similar to an injection or blood test                            | Similar to an injection              | Similar to an injection or blood test                            | None if general anaesthetic, blood test if local                                    |
| SUCCESS RATE   |  |                                      |  |   |
| 95 - 98%   | 80-90% for small veins   | 92-95%                               | 80-90%   | ~90%  |
| DOWNTIME   |  |                                      |  |   |
| Minimal - 3-5 days   | Minimal - 3-5 days   | Minimal - 3-5 days                   | Minimal - 3-5 days   | 2-4 weeks   |
| ANAESTHETIC  |  |                                      |  |   |
| Local at incision point  | None   | Local at incision point              | Local at incision point  | General   |
| APPEARANCE   |  |                                      |  |   |
| 60-80% shrinkage post treatment. Bruising <1 weeks. No visible scars | Immediate bruising before improving in 6 weeks. No visible scars | Improvement usually within fortnight | Immediate bruising before improving in 6 weeks. No visible scars | Bruising < 6 weeks. Pain intense for 2 weeks. Minor scaring at each incision point. |
| NUMBER OF TREATMENTS REQUIRED  |  |                                      |  |   |
| 1 per leg  | 2-3 per leg  | 1 per leg                            | 1 per leg  | 1 per leg   |



# FREQUENTLY ASKED QUESTIONS



## CAN VARICOSE VEINS COME BACK AFTER TREATMENT?

In general, the veins that we treat are treated for good; we have a 98% success rate. On the off chance that the varicose branch reopens during your time with us, we will re-seal it at no additional cost. Please note, we can't guarantee separate varicose veins won't form.



## ARE TREATMENTS COVERED BY MEDICARE?

If varicose vein treatment is deemed medically necessary for you, Medicare may cover up to 85% of the cost. Your coverage may vary depending on your Safety Net status, which you can check through MyGov or the Medicare app.



## WHAT ARE THE RISKS OF NON-SURGICAL TREATMENT?

- Soreness and inflammation
- Allergic reaction to sclerosant or glue (we perform an allergen test prior to these procedures, so the risk is very minimal)
- 1/1000 chance of a DVT.

[SEE MORE FAQs](#)



# READY TO START YOUR TREATMENT JOURNEY?

CONTACT US TODAY

## Vein Institute

Specialist Laser Vein Treatment



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