

Varicose Veins

Varicose veins are abnormal enlarged twisted veins, typically affecting the superficial veins of the legs. Normally, superficial veins have one-way valves that help blood to flow back to the heart. If these valves become incompetent (open and non-functioning), blood pools in the veins causing them to become swollen and varicose. Sometimes varicose veins can also arise from structural weaknesses in the vein wall, or from higher than normal blood pressure in the veins.

Varicose veins are a common problem, affecting nearly 20-30% of the population, with women more susceptible. The most common type of varicose veins is telangiectasias. Due to their appearance, they may also be called spider veins, starbursts, thread veins, or matted veins. Varicose veins can be more common in people who are on their feet for long periods of time, women following childbirth and those that have a family history of varicose veins.

Symptoms

Some patients experience no symptoms, but choose to see their doctor because they find the cosmetic appearance of varicose veins unsightly. Symptomatic patients may experience:

- dull ache or pressure in the legs after prolonged standing or walking
- sensation of "heaviness" of the legs
- skin changes (such as itchiness, pigmentation, induration)
- recurrent or persistent ulceration
- inflammation of the vein (phlebitis)
- clots in the vein (thrombosis)

Benefits of Endovascular WA's treatment

- The treatment is minimally invasive, which means patients are able to walk in and walk out
- Very little, if no scarring
- No hospital visit or hospital fees
- No general anaesthetics
- Excellent success rates
- Future clinic visits and ultrasounds are bulk billed

Treatment is performed using ambulatory phlebectomy, endovenous laser ablation and sclerotherapy. Some patients will require only one of these treatments, others may require a combination of 2 - 3 to ensure the best possible outcome.

What do Varicose Veins look like?

Before (left) and After (right) treatment;



Treatment Options

Conservative treatment

Patients experiencing mild symptoms such as aching or swelling, are advised to avoid prolonged standing and to use medical compression stockings.

Ambulatory Phlebectomy

Ambulatory phlebectomy involves the removal of varicose veins through small incisions in the skin. It is a minor surgical procedure performed using local anaesthetic. The patient can return to normal activities within 24-48 hours.

The Procedure

The procedure involves marking out the varicose veins on the patient's legs. Local anaesthetic is given and a series of small incisions (2-5 mm) are made along the course of the varicosities using a small scalpel. Phlebectomy vein hooks are used to "pluck" the veins through the incisions. Steri-strips and a compression dressing are applied to cover the incision sites. The compression bandage stays on for 24 hours.

Success Rate

The long term success rate is high with over 90% of patients reporting no recurrence of their varicose veins.

Potential Complications

As with all medical services there is risk involved, however Endovascular WA works with you to minimise these. Complications may include:

- Infection (< 5%) - reduced by intravenous anti-biotics at the time of the procedure and for one week after the procedure
- Bruising – this usually settles within 2 to 3 weeks
- Scarring - settles over 6 to 12 weeks. Depending on your skin type there is a small chance of keloid scarring (Silicon Scar Gels are helpful to minimize this).
- Pain - during and after treatment can last up to 1 week

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- Superficial thrombophlebitis - settles over 4-6 weeks with the use of anti-inflammatories and stockings
- Numbness – may occur in the treated area and in the distribution of the nerve affected. This may take some weeks to months to improve, and in very rare instances may be permanent (rare - < 1%)
- Recurrence of veins - 5-20% at 5 years, varies with patients
- Deep Vein Thrombosis with potential Pulmonary Embolism - < 1%
- Swelling of treated legs - could be permanent in up to 5% of people. The cause of this is sometimes unknown.

Endovenous Laser Therapy Ablation (EVLT or EVLA)

EVLT is usually performed under local anaesthesia and uses a laser fibre to close the varicose vein from the inside. A laser fibre is passed through a small incision in the skin around the ankle or knee into the varicose vein. The laser fibre or radiofrequency electrode is inserted through the catheter and the tip of the fibre or electrode is exposed by pulling the catheter back slightly. Local anaesthetic is injected around the abnormal vein with ultrasound guidance to reduce discomfort. Laser or radiofrequency energy is applied as the catheter is slowly withdrawn.

Success Rate

EVLT has a high success rate, with >95% patients experiencing an improvement in their symptoms. The recurrence rate of varicose veins is 5-20% after 5 years (compared with 20-80% with vein stripping surgery). It is not unusual to have a top up (sclerotherapy) procedure in the months or years after treatment.

Potential Complications

As with all medical services there is risk involved, however Endovascular WA works with you to minimise these. Complications may include:

- Bruising - this can be quite colourful (black and blue) for up to 2 weeks along the inner thigh
- Numbness over the treated area - usually temporary, can sometimes last for a few weeks or months
- Infections (<5%)
- Skin burns (rare < 1%)
- Inflammation of the veins, which is intentional - may cause localised swelling, tender lumpy areas and tightness along the inner thigh. The associated pain is often described as a "pulled muscle".

All of the above are normal and part of the healing process. These symptoms can often last 3-6 weeks post procedure.

Infrequent complications include:

- Rarely Deep Vein Thrombosis (< 1%)
- Recurrence of varicose veins (5-20% at 5 years)
- Swelling of treated legs - could be permanent in up to 5% of people. The cause of this is sometimes unknown.

Foam Sclerotherapy

Sclerotherapy involves injecting a chemical agent (a sclerosant) to induce blood vessel scarring and closure. Sclerotherapy has a long history and has been used to treat varicose veins for over 150 years. In foam sclerotherapy, air is mixed with the liquid sclerosant to create a foam. When this is injected into the varicose vein under ultrasound guidance, it displaces the blood within the vein and fills the vein. This causes the vein to spasm and scar. The vein can be checked with the ultrasound to see if the injection has been successful.

Success Rate

Foam sclerotherapy has an excellent success rate, with 80-90% of veins remaining closed after 3 years. To improve the success rate, veins may need to be re-injected. Regular ultrasound surveillance is used to monitor early recurrence.

Potential Complications

As with all medical services there is risk involved, however Endovascular WA works with you to minimise these.

Complications may include:

- Bruising - after your procedure, however this will improve with time. Wearing medical compression stockings, anti-inflammatory gels and bruising creams will aid in your recovery.
- Skin Staining - (up to 40 - 50%) usually wears off within 6-12 months however this can sometimes be longer
- Skin Ulceration - (less than 1%) which in the worst instance may require skin grafting
- Mild pain - may persist for several days. This is an indicator that the injections are working.
- Superficial Thrombophlebitis - usually settles within 10-12 weeks and is treated with anti-inflammatories and stockings
- Numbness in the treated area and in the distribution of the affected nerve. This may take some weeks to months to improve, and in rare instances may be permanent (rare - < 1%).
- Infection - less than 1%
- Recurrence of veins - 5-20% at 5 years, it varies with patients. There is an increased chance of surface veins developing.
- Deep Vein Thrombosis with potential of Pulmonary Embolism - less than 1%
- Discolouration and tender lumps will improve over 4-6 weeks. Inflammation of the vein caused by trapped blood inside, may cause new lumps to develop at a later stage.
- Stroke - rare < 1%
- Swelling of treated legs - could be permanent in up to 5% of people. The cause of this is sometimes unknown.

Micro Sclerotherapy

Micro Sclerotherapy is used to treat the surface veins visible on the skin referred to as reticular veins and telangiectasias. Sclerotherapy involves injecting a chemical agent (a sclerosant) to induce blood vessel scarring and closure.

Sclerotherapy has a long history and has been used to treat varicose veins for over 150 years. This causes the vein to spasm and scar. The vein can be checked with the ultrasound to see if the injection has been successful.

Success Rate

Liquid micro sclerotherapy has a good success rate, with 60-70% of veins remaining closed after 1 year. To improve the success rate, veins may need to be re-injected.

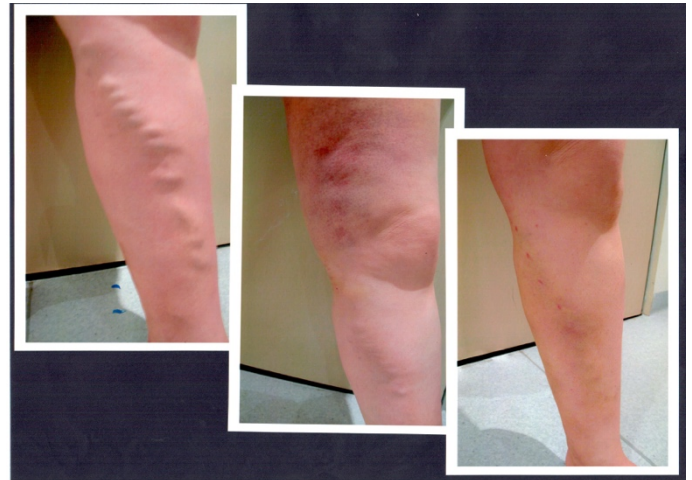
Potential Complications

As with all medical services there is risk involved, however Endovascular WA works with you to minimise these.

Complications may include:

- Bruising – after your procedure, however this will improve with time. Wearing medical compression stockings, anti-inflammatory gels and bruising creams will aid in your recovery.
- Skin Staining - up to 60-70%, usually wears off in 6 to 12 months, sometimes longer.
- Skin Ulceration - (less than 1%) which in the worst instance may require skin grafting
- Mild pain - may persist for several days. This is an indicator that the injections are working.
- Superficial Thrombophlebitis (always, usually settles within 10-12 weeks and is treated with anti-inflammatories and stockings)
- Numbness in the treated area and in the distribution of the affected nerve. This may take some weeks to months to improve, and in rare instances may be permanent (rare - < 1%).
- Infection - less than 1%
- Recurrence of veins (up to 80 % at 5 years, it varies with patients.)
- Deep Vein Thrombosis with potential of Pulmonary Embolism - less than 1%
- Discolouration and tender lumps will improve over 4-6 weeks. Inflammation of the vein caused by trapped blood inside, may cause new lumps to develop at a later stage.
- Stroke - rare < 1%
- Swelling of treated legs - could be permanent in up to 5% of people. The cause of this is sometimes unknown.

Before and After Treatment



Left to Right (1) Pre procedure, (2) Post Endovenous Laser Ablation, (3) 1 week post Phlebectomy

Patient Preparation

Prior to a procedure for the treatment of varicose veins, patients are required to complete the following;

- i. Ensure you have ordered and received your compression stockings
- ii. Ensure you have someone to take you to and from the clinic on the day of your procedure
- iii. Have a shower on the morning of your procedure
- iv. Wear comfortable loose clothing
- v. Remove all jewelry prior to procedure

Post Procedure Patient Care

You will be provided with post procedure instructions on the day of your procedure. Your doctor and nursing staff will explain all care instructions to you and answer any questions you may have.

Making an appointment

Phone our Claremont clinic on (08) 9284 2900 and you will speak directly to one of our friendly receptionists who will book your appointment and answer any of your questions.

More information is available on our website at www.endovascularwa.com.au