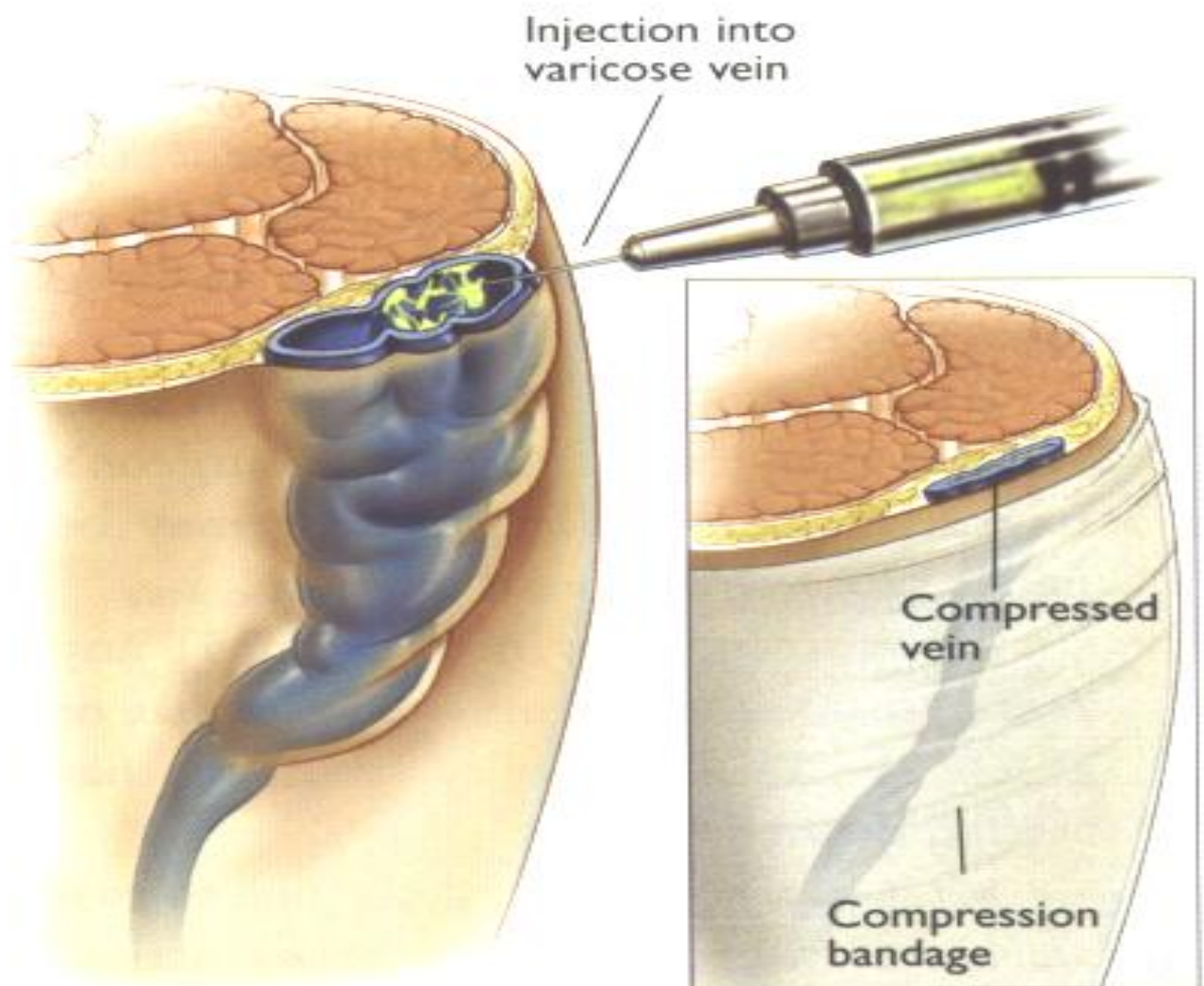


Surface Sclerotherapy for Reticular, Spider and Thread Veins.



Mr. Matthew Claydon
Vascular and Endovascular Surgeon

M.B., B.S.(Hons), B.Med.Sci.(Hons)
F.R.A.S.C.S.(General), F.R.A.C.S.(Vascular)

Website: arteryandvein.com.au
Email: info@arteryandvein.com.au
Phone: 9576 1491
Pager: 8508 9000

The Disease

There are two systems of **veins** which drain the blood out of your leg – the *deep system* and the *superficial system*. The **superficial system** has two main veins (called the long saphenous and the short saphenous vein), and these have multiple branches. See *figure 1*. The two main systems are connected to each other at the groin and behind the knee at the sapheno-femoral and sapheno-popliteal junctions respectively. There are a number of **valves** in the veins and at the junctions to prevent blood running back into the leg. These valves are very thin and quite fragile.

Varicose veins usually occur when the valves in the superficial system fail (becoming *incompetent*), allowing blood to flow backwards (*reflux*) into the leg. This creates higher pressures, causing the veins become wider and longer - varicose veins.

There are occasionally rarer causes of varicose veins.

Reticular and Spider veins are veins very close to the skin (reticular veins) or in the structure of the skin (Spider veins). They may be associated with varicose veins or occur without any abnormality of the deeper venous systems. See *Figure 2 and 3*. Abnormalities such as deeper varicose veins can drive the development of surface veins.

Symptoms and Complications

Small varicose veins, reticular veins and spider veins are usually associated with a **cosmetic effect**, but can occasionally cause **bleeding**, especially in patients on blood thinning medications.



Figure 2. Spider Veins

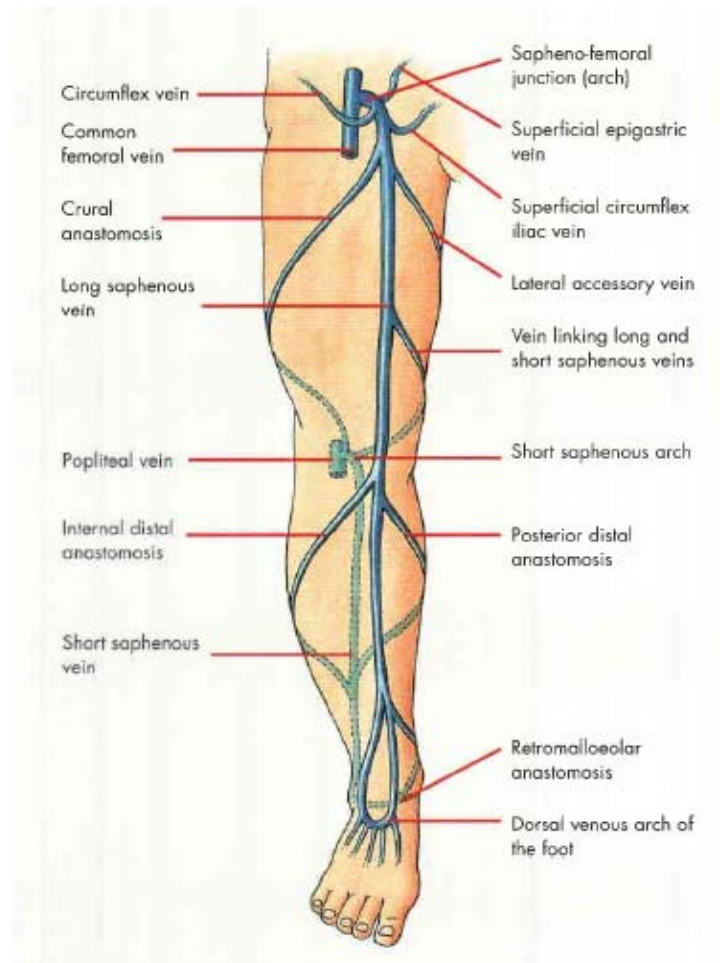


Figure 1. The Venous System

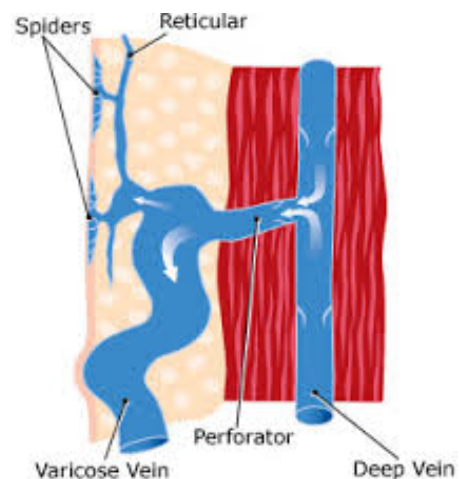


Figure 3. Varicose, Reticular and Spider veins.



Treatment Options

The required treatment depends on the system/s affected, the exact nature and anatomy of the problem, previous treatments and your preference. Your treatment will depend on whether there is a driving deeper system abnormality requiring treatment, or whether the surface veins have occurred in the absence of a deeper abnormality. As a rough rule of thumb, the larger and deeper abnormalities are treated first.

Treatment options for the deeper abnormalities include:-

- **Compression Stockings**
- **Surgery.**
- **Ultrasound guided Injection Sclerotherapy**
- **Endovenous laser or Radiofrequency Ablation**
- **Combinations** of the above.

Injection Sclerotherapy.

Surface Sclerotherapy is a treatment for the surface spider and reticular veins and small varicose veins. It may be combined with other treatments.

The treatment has 2 main components:-

- Sclerosant injection.
- Compression dressings.

The sclerosant is a medicine which irritates the lining of the vein, causing it to close. It is **injected** through a very fine needle, with the aid of magnification (*see front page*). When the vein closes, it becomes effectively invisible. A small amount of discomfort may be felt at the site of injection.

After the injection, **compression** will be applied with either a bandage, a stocking or both. The compression is worn for at least a week.

Multiple treatments are usually required for the best results.

Expectations

Not all cases of varicose veins are suitable for injection sclerotherapy treatment. Relative contra-indications to the procedure are:-

- Large or extensive varicosities (need other treatment)
- Pregnancy or lactation.
- Previous allergic reaction to sclerosant.

After injection sclerotherapy, the injected veins may become red and slightly tender.

Small varicosities, reticular veins and spider veins usually respond very well to injection sclerotherapy, though the aim is to **reduce** the

visible surface veins rather than completely eradicate them. Some surface veins do not respond to the treatment.

The majority of patients are very satisfied with the results obtained.



Possible Side Effects

While it is not possible to list all potential risks, below are the more common or important side effects of the treatment. A copy of the product information is available on request.

- **Allergic Reaction** - A uncommon complication.
- **Pigmentation** - Brown pigmentation is possible along the line of the vein. It usually fades over time (up to two years) but occasionally is permanent. Some skin types are more prone to this than others.
- **Ulceration/Skin necrosis** - This is uncommon can occur if some of the sclerosant escapes from the vein. If this occurs, it can take 4-8 weeks to heal.
- **Telangiectatic Matting/Flare** - This is the formation of multiple fine veins at the site of injection and is an adverse response of the patient's tissues to the injection.
- **Deep Vein Thrombosis (DVT)** - A rare complication. The risk is reduced by the application of compression stockings and regular walking.
- **Pulmonary Embolus** - An uncommon complication of a DVT which involves part of the deep clot breaking off and traveling to the lungs.
- **Recurrence** - The recurrence of varicose veins is an old problem. The recurrence rates after good open surgery is approximately 10 - 15% over 5-10 years. The recurrence rates after injection sclerotherapy alone is approximately 30% over 5-10 years.

