

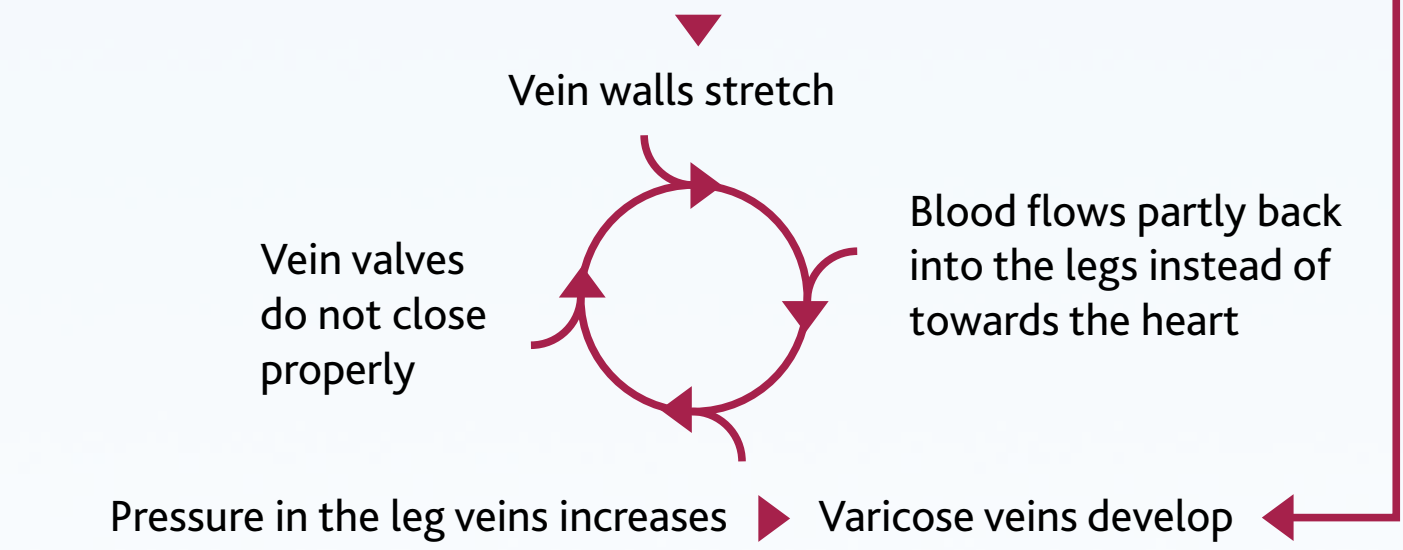
Varicose veins

Definition

Varicose veins are abnormally enlarged, superficial veins of the legs that often bulge out of the skin in a tortuous way. The condition of suffering from varicose veins is chronic and progressive and called varicosis. This means that there is no form of treatment that can cure the disease permanently.

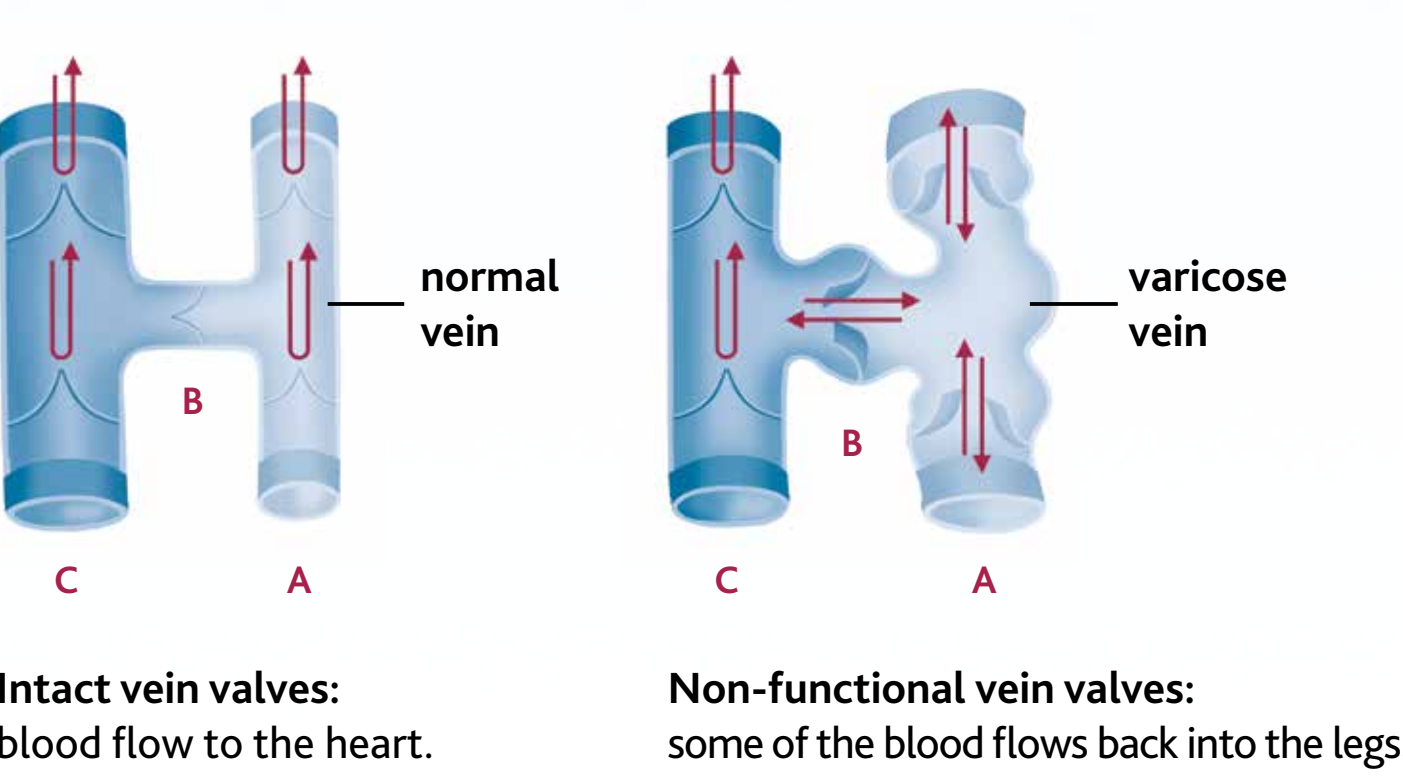
How do varicose veins develop?

Risk factors: hereditary weakness of connective tissue, age, pregnancies, taking hormone products, overweight, lack of exercise



Vein valves

Veins contain valve-like structures that open when the blood flows towards the heart and close when the blood begins to flow in the wrong direction due to gravity. In this way they enable blood to be transported from the leg veins towards the heart.



Muscle pump



In addition to the vein valves, the so-called muscle pump plays a major role in the transport of blood from the legs to the heart. The deep veins in the legs are surrounded by muscles that contract and thicken, for example, when walking. This is how they pump the blood in the veins upwards.

Types of varicose veins



Saphenous vein varicose veins (generally not visible from the outside)

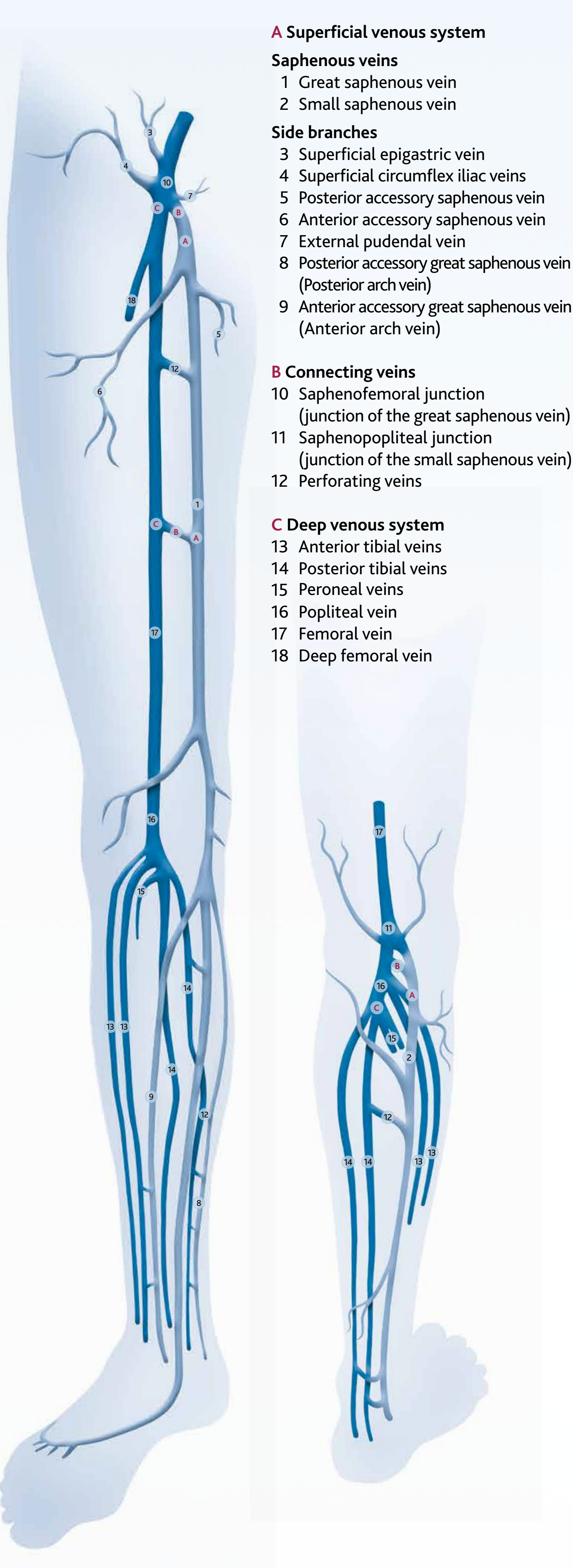
Recurrent varicose veins (varicose veins that reappear after treatment, e.g. after surgical operations)

Diagnosis with ultrasound



Using Doppler or duplex ultrasound, an image of the veins can be obtained painlessly from the outside of the leg through the skin. In this way, important information can be gained about the extent of the varicose veins.

Anatomy of the venous system



Conservative treatment

Conservative treatments cannot remove varicose veins, but may relieve the symptoms they cause.

Medicinal products for oral use

Agents to treat varicose veins in tablet form are mild-acting medicines to prevent and improve leg discomfort and oedema. For example, the active substance troxerutin can relieve the typical feeling of heaviness in the legs.



Compression

Wearing compression bandages or stockings supports the muscle pump and, on regular use, reduces the symptoms caused by varicose veins. Compression after varicose vein treatment can also improve the results of the therapy.



Sclerotherapy

Sclerotherapy is an outpatient, virtually painless and minimally invasive therapy to remove spider veins and larger varicose veins. Using a fine needle, the sclerosing agent is injected directly into the diseased vein as a liquid or foam. The body's own reactions lead to closure of the vein, which is then broken down and disappears completely over time.

Micro-sclerotherapy

In the case of spider veins and other small varicose veins, sclerotherapy using a liquid sclerosing agent is known as micro-sclerotherapy. According to the European Guideline¹, it is the method of choice in these cases.



Foam sclerotherapy



Foam sclerotherapy is especially suitable for larger varicose veins such as side branches and saphenous veins, because foam is even more effective.

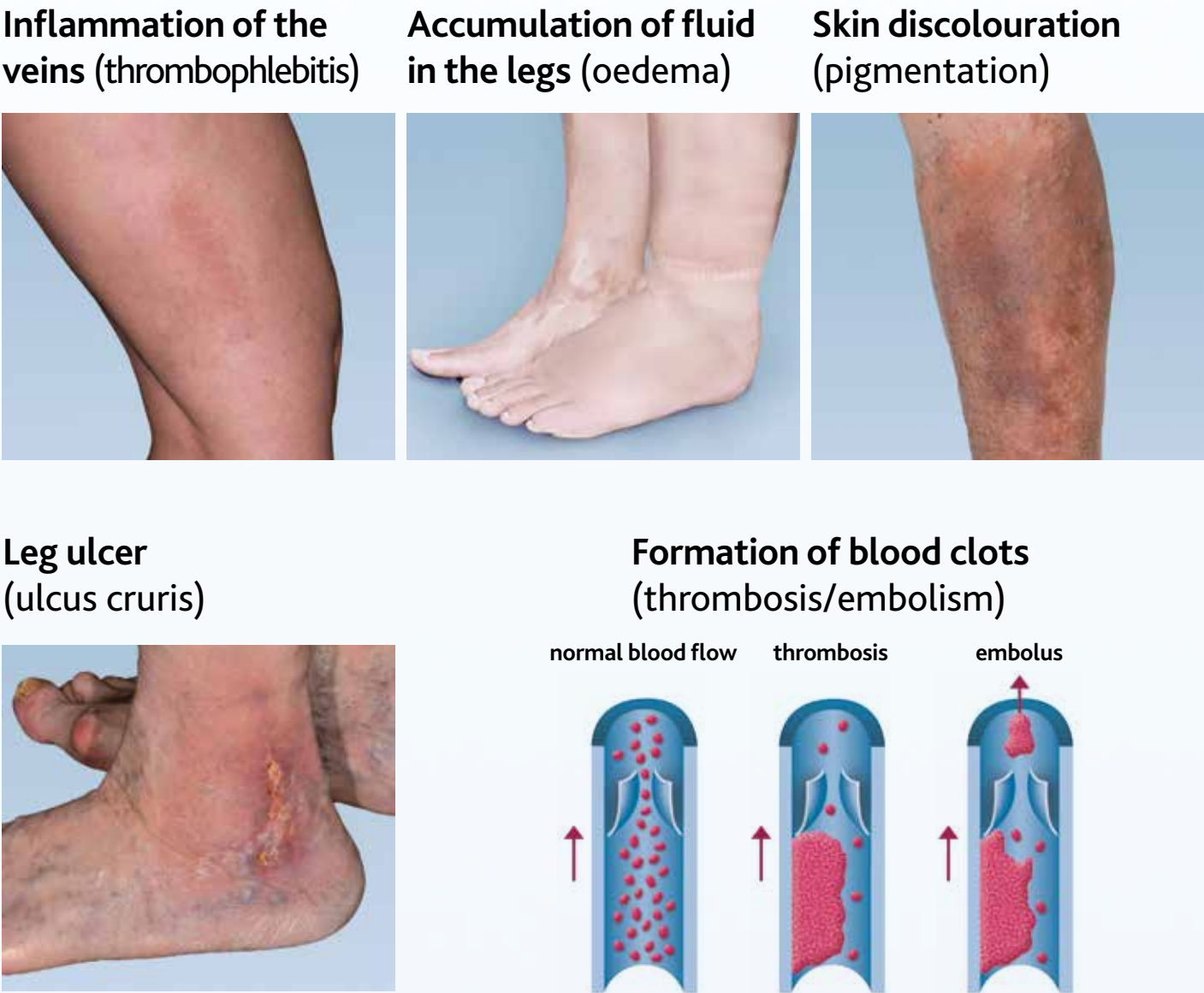
The functional result obtained with foam sclerotherapy corresponds to that of the surgical removal of a varicose vein¹.

Beautiful healthy legs



Complications related to untreated varicose veins

If varicose veins remain untreated for a long time, the following, sometimes serious complications can occur:



¹ Rabe et al. (2014) European guidelines for sclerotherapy in chronic venous disorders. Phlebology 29 (6): 338-354