

# Informed consent

Patient data sticker

## Localization

- ☐ Right leg
- ☐ Left leg
- ☐ Both legs

## Treatment

- ☐ Endovenous laser therapy
- ☐ Müller phlebectomy
- ☐ Sclerotherapy
- ☐ Crossectomy
- ☐ Surgery

## Thrombosis prophylaxis (low-molecular weight heparin)

- ☐ Yes (1D,10D): 0.3/ 0.6
- ☐ No

I hereby declare that I have been adequately informed (patient information leaflet) about the planned treatment (see above). I know that side effects and/or complications may occur.

## Side effects/complications that may occur after endovenous laser therapy, Müller phlebectomy, crossectomy, and/or surgery are:

- Transient pulling sensation may be felt in the upper leg and/or calf when bending and stretching the leg after laser therapy
- Temporary damage to an overlying nerve may occur after laser therapy.
- A raised lump may be felt temporarily over the treated vein
- There may be transient bruising, swelling, redness, soreness, and/or movement limitations after phlebectomy, crossectomy, and/or surgery.
- On rare occasions, wound infection and/or bleeding may occur after phlebectomy, crossectomy, and/or surgery.
- On rare occasions, thrombosis and/or pulmonary embolism may occur after laser therapy, phlebectomy, crossectomy, and/or surgery.
- On rare occasions, a patient may have an allergic reaction to the anaesthetic used.

**Side effects/complications that may occur after sclerotherapy are:**

- Transient bruising, swelling, redness, and/or soreness
- Transient brown discolouration of the skin.
- An allergic reaction to aethoxysklerol (rare).

I am aware that it may be necessary to change or modify the procedure while it is being carried out. I am also aware that the final result of the procedure cannot be guaranteed. I have had ample opportunity to ask questions about the procedure itself, possible complications, and care before and after the procedure. I hereby give my permission for the procedure to be carried out.

**The cost of the first consultation**

Your health insurance will directly reimburse the clinic the costs of the first consultation, after deduction of your own risk contribution.

**The cost of treatment**

**If you meet the criteria** set by your health insurance (see page 7), then your health insurance will directly reimburse the clinic the costs of the treatment, after deduction of your own risk contribution.

**If you do not meet the criteria** set by your health insurance, you will have to pay the costs of treatment yourself. These costs, in addition to the costs of the (possible) first consultation, are as follows:

- € 175 per leg per time regardless of the number of injections needed for sclerotherapy
- € 300 / 500 per leg for Müller phlebectomy
- € 25 per compression stocking
- Other: namely \_\_\_\_\_

A follow-up consultation including duplex examination will be scheduled 2–3 months after the procedure. This consultation is covered by your basic health insurance, after deduction of your own risk contribution.

Signature patient \_\_\_\_\_ Date \_\_\_\_ - \_\_\_\_ - \_\_\_\_

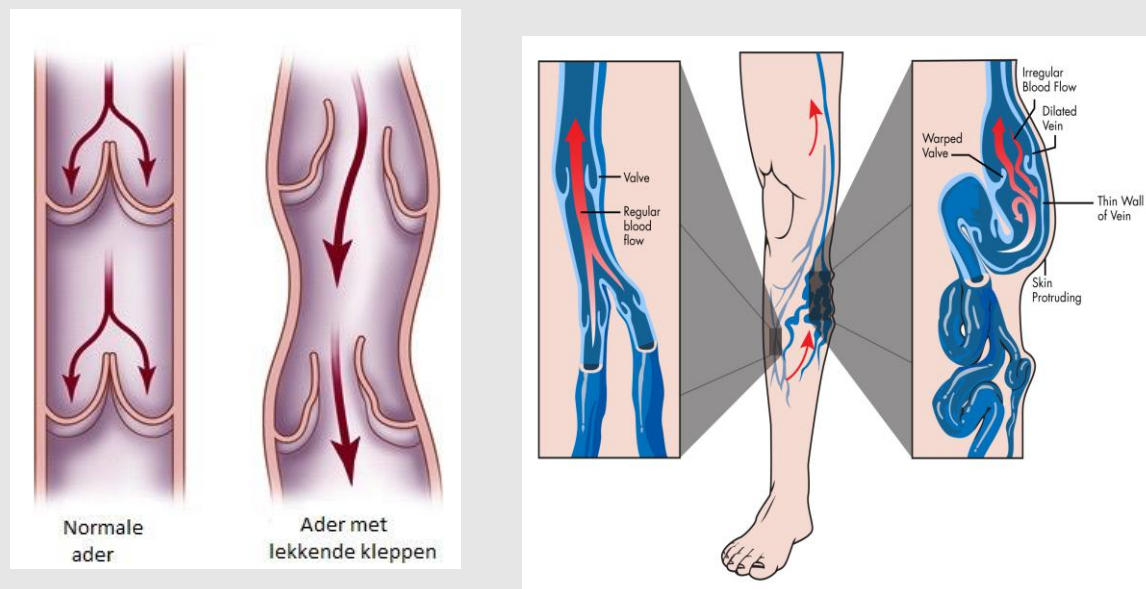
Signature specialist \_\_\_\_\_ Date \_\_\_\_ - \_\_\_\_ - \_\_\_\_



B. Disselhoff

Dr. B.C.V.M Disselhoff, surgeon

# Information leaflet varicose vein treatment



## General information

In this leaflet, you will find information about varicose veins and the various treatment options. You will also find a form to sign, giving your informed consent to the procedure. This form should be signed only after you have read and understood the information provided. Please feel free to ask for additional information if something is not clear. Our telephone number is 045-2080887.

## What are varicose veins?

Varicose veins, also called varices, are dilated veins in the legs.

## What do they look like?

- Small-sized veins. Small veins often get tangled and are also called teleangiectases, reticular veins, or malleolar flare. Most varicose veins are of this type and usually do not cause any symptoms other than concerns about their appearance.
- Medium-sized veins. These varicose veins are up to a few millimetres thick and can be many centimetres long but usually do not cause any symptoms other than their concerns about their cosmetic appearance.
- Large-sized veins. These varicose veins are often thick cables and can be present all over the leg. They do not always give rise to symptoms, but reported symptoms include tired legs, heaviness, restless legs, pain, night cramps, varicose eczema, white atrophy, ulcers, (superficial) venous thrombosis, and bleeding.

### What is the cause of varicose veins?

Veins carry blood to the heart. They have valves that prevent the blood from flowing back. If these valves no longer close properly, blood flows back into the leg. This increases pressure on the vein, stretching it, creating a varicose vein. Varicose veins can also occur as a result of changes in the vein wall. Women are slightly more likely than men to develop varicose veins. Possible causes of varicose veins are: family history, hormones, pregnancy, overweight, standing for long periods, and thrombosis.

### Which large veins (trunk veins) are important?

- The great saphenous vein (GSV) is also called the long superficial trunk vein. The vein runs from the inside of the ankle to the groin. A large side branch arises in the groin and runs over the middle of the upper leg and down the outside of the lower leg. It is often short and very winding.
- The small saphenous vein (SSV) is also called the short superficial trunk vein. This vein runs from the outside of the ankle to the knee cavity.
- In addition to these trunk veins, connecting veins connect the superficial and deep veins.

### What are the symptoms of varicose veins?

Many people are concerned about the appearance of the veins. Physical symptoms include a tired, heavy, or restless feeling in the legs, sometimes with cramps, itching, and / or pain in the lower leg. Long-lasting and untreated trunk varicose veins give rise to skin abnormalities such as a discolouration (brown spots), eczema, or ulcers that do not heal. There is not always a clear relationship between the extent of varicose veins, symptoms, and clinical appearance. In many cases, varicose veins do not give rise to symptoms.

### The main reasons to treat varicose veins are:

- To relieve symptoms such as a heavy feeling, pain, fatigue, (nocturnal) cramps, 'restless legs'.
- To improve quality of life. The impact of varicose veins on a person's life depends on how severe the problem is, but severe varicose veins affect a person's quality of life to a similar extent as other chronic conditions such as diabetes, rheumatoid arthritis, and heart failure.
- To prevent complications such as skin abnormalities (including eczema), leg ulcers, (superficial) venous thrombosis, and / or bleeding.
- To improve the cosmetic appearance of the veins.

### What are the treatment options?

The doctor will examine your legs when you are standing and thereafter perform a duplex ultrasound examination, which provides information about the severity of the varicose veins. On the basis of these results, the doctor decides on an appropriate treatment. Treatment options range from **conservative treatment** (lifestyle changes, calf muscle exercises, and wearing a compression stocking), **sclerotherapy** (injection of sclerosant for small to medium varicose veins), **endovenous laser therapy** (closing trunk veins with laser energy), **Müller phlebectomy** (step-wise surgical removal of veins), **crossectomy** (ligation of vessels connecting the superficial and deep

trunk veins), and surgery (if the vein is severely twisted and dilated). The various procedures are described in this leaflet.

### **Good to know**

It may take up to 3 months for the effect of treatment to be visible, but improvement is usually seen after 2–6 weeks. Follow-up treatment may be necessary.

### **Where does the treatment take place and which anaesthetic is used?**

The procedures are performed on an outpatient basis. With the exception of sclerotherapy, all procedures are performed under local anaesthesia.

### **Before treatment**

- If you are hypersensitive to injection fluid, iodine, or patches, please inform your doctor in advance. Please also tell your doctor if you are taking blood thinning agents, such as Sintrommitis®, Marcoumar, aspirin (Ascal) or Sinaspril.
- Please do not shave the leg or groin.
- On the day of treatment, do not use cream, lotion or bath oil for your legs, otherwise the patches will not stay in place.
- If you have a compression stocking, please bring it with you.
- As you will not be allowed to drive after the intervention, please arrange that someone accompanies you on the day of the treatment (not applicable for sclerotherapy).
- Please bring an extra pair of underpants (not applicable for sclerotherapy).
- You may experience slight pain and a burning sensation when the local anaesthetic is injected.

### **After treatment**

- After each treatment, you will be given a compression stocking that you must wear for a week, and in the first 2 days (or longer, depending on the doctor's advice) you must also wear it at night. If you find wearing a stocking comfortable, then you can continue to wear it during the day. We will provide you with an appropriate stocking.
- You can resume all normal activities immediately (unless the specialist informs you otherwise), but take it easy in the first few days. We do not recommend taking a warm bath for up to 2 weeks after treatment or visiting a sauna for up to 4 weeks.
- To reduce the chance of pigmentation after sclerotherapy, it is wise to wait with sunbathing until you have been to the specialist for a check-up after 6 weeks. We do not recommend you exercise strenuously when wearing a support stocking, but it is important to keep active.
- You can take paracetamol if you experience pain. If this is ineffective, you can add ibuprofen (Brufen) in combination with a stomach protectant or Naproxen.

### **If you have the following problems, contact the clinic by telephone 045-2080887**

- An allergic reaction, infection, or bleeding.
- Swelling and pain in the treated area.
- A painful, thick, red, and shiny leg.

- A temperature higher than 38.5 °C.
- Severe pain not relieved by paracetamol.
- Worries or concerns.

### What are the prospects?

In 95% of cases, varicose vein treatment is successful. It is important to remember that you may not immediately see the effect of treatment. Your leg needs time to get used to the restored blood circulation. Although in most cases symptoms resolve rapidly, sometimes additional treatment or sclerotherapy is needed. You should realize that the predisposition to develop varicose veins is not eliminated by treatment. This means that you may develop varicose veins again, but treatment does slow down the development of new varicose veins.

### What can you do yourself?

Walking is good for the legs. Standing or sitting for long periods is not advisable because it can lead to blood pooling in the veins, giving rise to varicose veins and/or complications. A simple but good exercise to strengthen the calf muscles is to raise your leg (either when sitting or standing) and pull the toes and ankle towards you for 5 seconds, then push the toes and ankle away from you for 5 seconds. Repeat this exercise three times. If your work involves standing or sitting for long periods, it is advisable to wear a short therapeutic elastic stocking class 2. When travelling, if possible leave your seat several times for a short walk. Lose weight if you are overweight. Combating obesity has a beneficial effect on the development and expansion of varicose veins.



Walking barefoot in sand is also a good calf muscle exercise. Walking in (high) heels is often not recommended, because it can cause pain in the knees, back, and feet. On the other hand, wearing high heels may tone the body and strengthen the pelvic floor muscles and calf muscles, resulting in muscular legs and stronger abdominal muscles, preventing oedema in the lower leg.

### Reimbursement by your health insurance

Your physician needs to refer you to the doctor for treatment, who will be able to tell you whether your treatment is covered by your health insurance.

The costs of treatment are covered by your health insurance if you meet all of the following conditions:

- The varicose veins cause symptoms, such as, tired legs, heaviness, restless legs, pain, oedema, cramping, varicose eczema, skin discolouration, ulcers, (superficial) venous thrombosis, and bleeding.
- Duplex ultrasound reveals serious abnormalities in the diameter of the vein (at least 3 mm) and direction of blood flow in the leg veins.
- The procedure chosen is evidence based; i.e., it has proven to be effective.

Endovenous laser therapy and surgery are covered by your health insurance and in some cases this is also true for Müller phlebectomy. Sclerotherapy (injection) is not covered by your health insurance and you must therefore pay the costs yourself, in addition to the costs of the first consultation. The doctor will discuss this with you.

### **Personal contribution**

You do not have to pay a statutory personal contribution.

### **Contribution (own risk)**

The mandatory own-risk contribution to basic health insurance is determined annually and is now €385.

### **Additional insurance**

The costs of sclerotherapy and in selected cases Müller phlebectomy are not covered by your basic health insurance. However, if you have taken out additional health insurance, your health insurance may cover the costs of these procedures. Please contact your health insurance company to find out whether and what costs are covered by your insurance.

### **Quality and complaints**

We will do our utmost to ensure that you have a comfortable, problem-free stay in our clinic, but we welcome any criticisms, comments, or suggestions to improve the quality of care provided. If you have any queries or complaints, please do not hesitate to discuss them with the specialist or one of the assistants.

### **Accessibility**

You can reach us from Monday to Friday, from 08.00 to 16.30, via telephone number 045-2080887. For urgent cases only, you can contact the emergency line after 16.30 and on weekends, 06-86895787.



## Endovenous laser therapy

With this treatment, varicose veins are closed using laser energy. Endothelial laser therapy is mainly used for the large varicose veins or the trunk veins and is carried out under local anaesthesia.

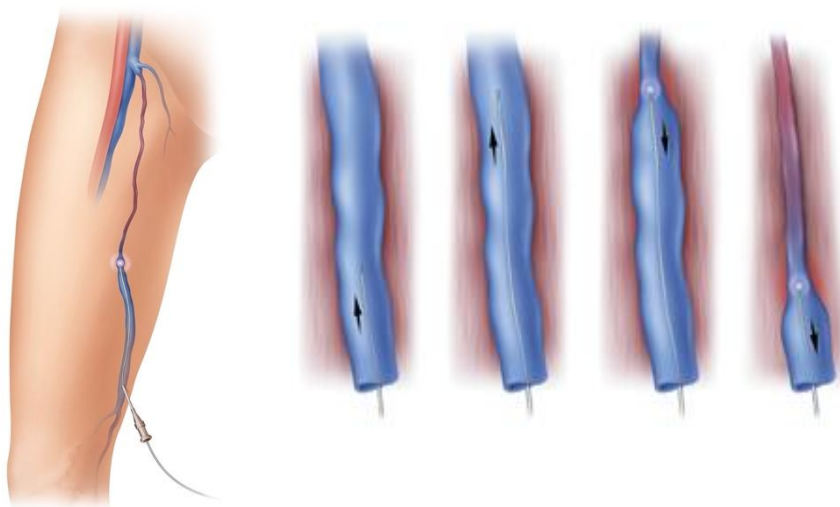
### Procedure

The procedure is carried out on an outpatient basis. You are placed in the supine position and after the leg has been disinfected and covered with sterile sheets, the GSV\* is punctured just below or above the knee with an infusion needle. After this, a guide wire is introduced into the vein. If the SSV is to be treated, you are placed in the prone position and the vein on the calf is punctured. An introduction sheath is inserted over this guide wire. After the guide wire has been removed, a laser fibre is inserted and positioned at the groin or the knee cavity (if a calf vein is to be treated). The area around the vein is anaesthetized and the vein is heated with short bursts of laser energy, sealing the vein. While you may feel pain and a burning sensation during the administration of local anaesthetic, you should not feel the introduction and positioning of the guide wire. After treatment, you must wear a compression stocking for a week. Depending on the doctor's instructions, you should wear the stocking day and night for the first 2 days and thereafter only during the day.

GSV\*: trunk vein on the inside of the leg, SSV \*\*: trunk vein at the back of the leg.

### After treatment

Some bruising may be visible but this often disappears within 10 days. You may sometimes, temporarily, experience a slight pulling pain on the inside of the thigh, especially when bending and stretching the leg. The body absorbs the varicose vein in a few months. There may be a brown discolouration at the site of the treated varicose veins, but this should disappear after a few months. Symptoms, such as fatigue and heaviness in the leg, should decrease. It may be necessary to treat remaining side branches of the varicose veins with sclerotherapy and / or Müller phlebectomy





## Müller phlebectomy

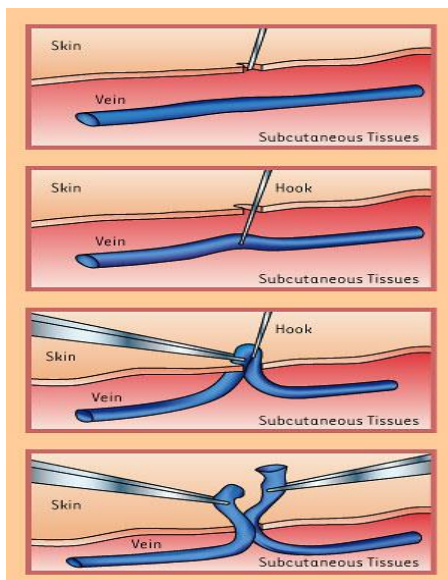
In this outpatient procedure, the varicose veins are removed through small incisions made in the leg. The Müller procedure is mainly used for medium-sized varicose veins and is carried out under local anaesthesia.

### Procedure

The varicose vein to be removed is marked on the leg and the area to be treated is disinfected and locally anaesthetized. Several small incisions are made, the varicose veins are tied off and partly removed through these incisions, and the wound is closed with soluble sutures or suture plasters. After the procedure, you must wear a compression stocking for 1 week. Depending on the doctor's instructions, you should wear the stocking during the day and at night for the first 2 days and thereafter during the day.

### After treatment

The risks associated with this procedure are low. Bleeding, wound infection, and inflammation of the veins are rare complications. Bruising is common but should disappear within 1–2 weeks. A brown discolouration can develop at the site of the treated varicose vein and subcutaneous bumps (these are remnants of the injected vein) may develop after 1–2 weeks. Both should disappear after a few months, but it may take longer. The number of visible varicose veins and symptoms should diminish after treatment, but it may be necessary to treat remaining side branches of the varicose veins with sclerotherapy.



## Sclerotherapy

Sclerotherapy is suitable for small and medium varicose veins or as an additional treatment after a previous endovenous laser therapy or Müller phlebectomy.

### Procedure

The injection needle is very fine so you should not feel pain during the procedure. The agent (aethoxysclerol) is injected into the vein, either as a liquid or as foam. The liquid causes a 'chemical reaction' so that the vessel walls stick together and eventually close, so that blood can no longer flow through the vein. The varicose vein turns into a thin scar. In ultrasound-guided sclerotherapy, larger varicose veins are visualized with duplex ultrasound and then injected with the agent (aethoxysclerol). After the procedure, you must wear a compression stocking for 1 week. Depending on the doctor's instructions, you should wear the stocking during the day and at night for the first 2 days and thereafter during the day.

### After treatment

Bruising may be visible after you remove the stocking, but this will disappear in a few weeks. The varicose vein is resorbed by the body, which may give rise to a brown colour of the skin at the site of the treated veins. Subcutaneous bumps (these are remnants of the injected vein) may develop after 1–2 months. Both usually disappear after a few months, but it may take longer.



### **Crossectomy**

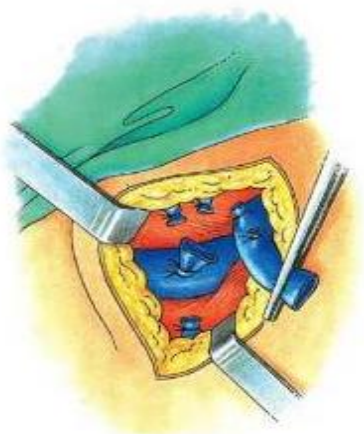
So-called connecting vessels connect the superficial and deep veins at different levels in the leg. These connecting vessels are sometimes leaky. The main connecting vessels are in the groin and the popliteal cavity. In crossectomy, the vein is tied off through a small incision made in the groin or in the popliteal cavity. Treatment is carried out on an outpatient basis under local anaesthesia. You may experience a burning sensation when the anaesthetic is injected.

### **Procedure**

The groin area and/or the popliteal cavity are anaesthetized and the vein is tied off through a small incision. The wound is closed with (soluble) sutures and/or suture plasters. After the procedure, you must wear a compression stocking for 1 week. Depending on the doctor's instructions, you should wear the stocking the day and at night for the first 2 days and thereafter during the day.

### **After treatment**

After procedure, the leg may be temporarily painful and sensitive because of bruising. The wound plaster can be removed after 2 days, but it may be necessary to cover the wound with a fresh plaster. Symptoms, such as fatigue and heaviness in the leg, will decrease. It may be necessary to treat remaining side branches of the varicose veins with sclerotherapy and / or Müller phlebectomy



## **Surgery**

In some cases, the vein is so severely twisted and dilated that surgery is necessary. Treatment is carried out on an outpatient basis under local anaesthesia. You may experience a burning sensation when the anaesthetic is injected.

## **Procedure**

The groin area and/or the popliteal cavity is anaesthetized, and the vein is tied off through an incision. The wound is closed with (soluble) sutures and / or suture patches. In addition, all the other, previously marked, veins in the leg are removed and the wounds are closed. After the procedure, you must wear a compression stocking for 1 week. Depending on the doctor's instructions, you should wear the stocking during the day and at night for the first 2 days and thereafter during the day.

## **After treatment**

The leg may be temporarily painful and sensitive because of bruising. The wound plaster may be removed after 2 days, but it may be necessary to apply a clean plaster. Symptoms, such as fatigue and heaviness in the leg, should decrease. It may sometimes be necessary to treat remaining side branches of the varicose veins with sclerotherapy and / or Müller phlebectomy.