

## Ultrasound-guided foam sclerotherapy

### The purpose of the procedure

Sclerotherapy is a treatment for chronic venous insufficiency. The basic treatment of superficial venous insufficiency is a medical, pressure-classified compression stocking that comes up to your calf below the knee and prevents swelling. Sclerotherapy is needed if the stocking treatment no longer provides sufficient benefit, or if the situation calls for other measures for some other reason.

Ultrasound-guided foam sclerotherapy is an efficient treatment for eliminating varicose veins locally and is the primary treatment today. The results of treating venous insufficiency in small and medium-sized superficial veins are also good and comparable to the results of traditional surgery. Usually, varicose veins that have appeared after a previous procedure also respond well to sclerotherapy.

### Getting ready

In good time before the procedure, buy Class 2 medical compression stockings that come up to your thigh and have been accurately measured to fit you. Wear loose-fitting trousers when you come to the hospital for the procedure.

### What happens during the procedure

During sclerotherapy for the treatment of varicose veins, special foam is injected into enlarged, swollen, twisted veins. The foam scars the veins, which seals them closed, and blood is forced to reroute through healthier veins, consequently repairing the venous insufficiency.

The procedure involves injecting a cannula into the desired vein. An ultrasound device is used to monitor the spreading of the foam. The number of injections performed depends on how strong the solution injected is and how extensive the venous insufficiency is. After the injection, a padded bandage will be applied to help compress the vein and then a thigh-length compression stocking.

Ultrasound-guided foam sclerotherapy is an almost painless procedure. You will only feel the pinprick of the injection, and no auxiliary medicinal products are generally needed.

## After-treatment

Straight after the procedure, you will be asked to walk for 20 minutes in the hospital. If you feel well, you can then go home or back to work. On the day of the procedure, you should walk for 15 to 20 minutes every hour you are awake.

After the procedure, a two-week long treatment involving compression stockings will be begun. It is an important part of successful sclerotherapy. The bandage and stocking applied during the procedure should be worn day and night for three days and then only in the daytime for the following 11 days. After the first two days, the stocking can be removed for the duration of a shower.

We recommend plenty of gentle exercise after sclerotherapy. You can go to sauna and start more vigorous cardiovascular exercise after the stocking treatment is finished and any tenderness and swelling resulting from the procedure has subsided. Avoid air travel for one month after the procedure.

### Please note

The most important circumstances that make sclerotherapy inadvisable for a patient are a large vein, immobility and severe obesity. Sclerotherapy is also not recommended if the patient has been diagnosed with atrial septal defect, or the patient has suffered deep vein thrombosis or pulmonary embolism. Other factors that may influence the success of the treatment are your own or your family's history of hypercoagulability (increased tendency towards blood clotting) or coagulation disorders, which have been confirmed by laboratory tests. Sclerotherapy is not recommended during pregnancy or breastfeeding.

### Success of the sclerotherapy and potential problems

Medical procedures always involve risks. However, ultrasound-guided foam sclerotherapy performed to treat superficial venous insufficiency very rarely involves serious complications, and the procedure is generally considered safer than traditional varicose vein surgery.

In extensive international studies, 80–90% of superficial veins treated form a scar as a result of sclerotherapy, remain permanently closed and the collapsed vein is absorbed into local tissue, as intended. This means that some patients' veins reopen, but in such cases the superficial venous insufficiency is milder and does not always require treatment. Of course, repeated sclerotherapy is possible, and in most cases produces good results. Because of your tendency towards varicose veins, new ones may later appear in veins that are currently healthy.

The treated vein will suffer a mild inflammatory response (thrombophlebitis), which is connected to the blocking of the vein and presents itself as redness and tenderness of the treated area. The situation will usually resolve itself without external assistance within 1 to 2 months. If needed, we recommend you use paracetamol (for example Panadol) and localised cold therapy to ease the pain and that you only use anti-inflammatory painkillers (for example Burana) when needed. The inflammatory response may cause brown marks (hyperpigmentation) to appear on the skin in the area of treatment. These marks usually disappear within about a year of the procedure. In the case of strong hyperpigmentation, some of the discolouration may be permanent. The risk of inflammation and hyperpigmentation increases if the vein to be treated is large and close to the surface of the skin.

Serious side effects are extremely rare. Side effects occasionally put forward in international literature include allergic reactions, an ulcer at the site of injection, deep vein thrombosis, pulmonary embolism, and disturbed vision and transient ischemic attack after the injection. In order to minimise side effects, the treatment is performed in stages and as little foam as possible is applied during each treatment.

## Contacting us

If you have symptoms of inflammation (increasing pain, heavy swelling, heat, redness, continuous purulent discharge from the wound) or some other problem, please contact your health Centre or the unit that treated you:

Day Surgery Unit on weekdays 7.00–15.00, telephone 06 213 1552

Surgical Outpatient Clinic Monday to Thursday 8.00–11.00, Friday 9.00–11.00, telephone 06 213 1522

Your own health Centre or occupational health clinic

Telephone nursing services from 15.00–08.00 on Monday–Thursday and from 14.00–08.00 on Friday and 24 hours a day during weekends and on midweek holidays, telephone 116 117