Sclerotherapy for Treatment of Varicose Veins





The Department of Surgery sees patients for a wide range of surgical services. These include Colorectal, Endocrine, Breast, Upper Gl, Bariatrics, Hepatobiliary, Plastics, Neurosurgery, Urology and Vascular Surgery. Our highly qualified consultants use minimally-invasive surgery and surgical endoscopy for diagnostic and therapeutic interventions in the treatment of these conditions. We provide inpatient and outpatient care with a 24-hour acute surgical service. Day surgery (endoscopy) and minor surgery (lumps and bumps) are also offered at Jurong Medical Centre.

# What is sclerotherapy?

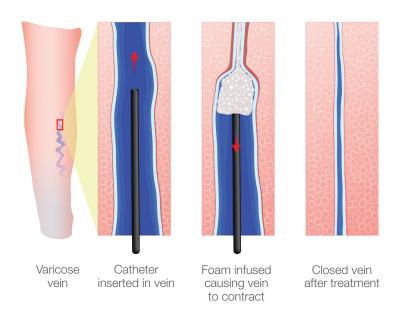
Sclerotherapy or injection of varicose veins is a procedure designed to remove some of your varicose veins. The veins are injected with a sclerosant solution which damages the internal lining of the vein and causes blood clotting within the vein.

In time your body will destroy the vein and it will disappear. The solution used is available in different concentrations depending on the size of the vein being treated.



# What is foam sclerotherapy?

Foam sclerotherapy involves making small volumes of the solution into foam by rapidly mixing them to agitate a small volume of air. This can then be used to treat some of the larger underlying abnormal veins which would not normally be treated with conventional sclerotherapy. This is performed under ultrasound guidance. The foam solution causes intense spasm of the vein and a greater volume can be injected without using too much of the solution.



# Are my veins suitable for foam injection sclerotherapy?

Varicose veins involving isolated veins in the leg or the long/short saphenous veins (most varicose veins) are suitable for this form of treatment. If you have very extensive and large varicose veins, surgey may be a better option than foam sclerotherapy. If you are prone to underlying blood clotting, sclerotherapy is not recommended.

# What does the procedure involve?

Depending on the number of varicose veins you have you may need two or three sessions of treatment, or sometimes more. Two or three smaller needles (called butterfly needles) will be inserted into the varicose veins in the leg and these will be similarly flushed.

Your leg will then be elevated above the couch and the foam solution injected in small volumes at a time into each needle. While this is being done you will be asked to bend your ankle up and down to increase the blood flow in your deep veins. You may experience slight stinging as the foam is injected but this is usually painless. The process will be monitored by ultrasound scanning. Once enough foam has been injected the needles will be removed and a simple dressing applied to your leg followed by elastic stockings to compress the treated veins. The stockings should feel tight but not too tight that your foot gets discoloured or painful.

# What happens after treatment?

Wear the stocking continuously for five days. After this you may remove the bandage and replace the stocking which should be worn for a further five days. During this period you may remove the stocking to bathe and at night if you wish. If you find it comfortable and wish to wear it longer, this may be helpful. Please bring this stocking with you to your next clinic appointment.

Try to walk more after your treatment. You may resume most activities but please do not drive on the day of your procedure. If in doubt, please check with your doctor.

## Will I need further treatment?

It is unlikely that all your varicose veins will improve after one set of injections. You may need several treatments. After the first treatment you will be seen again in a few weeks' time and further injections may be required. Some of the untreated veins may have shrunk at this stage.

# What are some possible complications?

## Superficial thrombophlebitis:

Most people experience hard lumps in their treated veins. These are areas of blood clotting but are nothing to worry about. It may be associated with inflammation and discomfort. Anti-inflammatory pain killers can help the lumps to subside and disappear after a few weeks or months. Your doctor may sometimes aspirate the clots to hasten the process.

## Brown pigmentation of the skin:

This can occur after a superficial thrombophlebitis and can be permanent. It usually may fade after a few months.

• Deep venous thrombosis: If the solution passes into the deep veins there is a risk of thrombosis of the deep veins. This may be very minor with no symptoms or a major blood clot with a risk of a pulmonary embolus (passage of a blood clot to the lungs). It is for this reason that only small volumes of the foam are injected at a time and the ankle is exercised in order to maintain good flow in the deep veins. Surgery carries a risk of deep vein thrombosis.



#### Recurrent and residual varicose

**veins:** If you have any remaining varicose veins it is usually possible to inject these at your next visit. However if you have a lot of very small varicose veins it may not be possible to remove all of them. It is possible that the treated vein could reopen and only long term follow up data will provide this information. If this does happen it would be possible to treat the vein again either by further injection or surgery.

- **Skin ulceration:** If the solution does not go into the vein but surrounding tissues it can cause a small ulcer of the skin. This will heal but could take several weeks. It may leave a scar.
- **Allergic reaction:** Allergy to the solution is rare but can occur. If you have any allergies please inform your doctor.
- **Visual disturbance:** Some patients report temporary visual disturbance with foam injections. It is more common in people with migraine.
- **Migraine:** Patients with existing migraine may experience it after the injection. We advise you to bring your medication with you.



#### For more information

#### Ng Teng Fong General Hospital and Jurong Community Hospital

1 Jurong East St 21, Singapore 609606 www.ntfgh.com.sg | www.jch.com.sg

#### Clinic opening hours

Monday - Friday: 8.30am - 5.30pm

Saturday: 8.30am - 12.30pm (Selected clinics only\*)

Dental Clinic: Monday - Thursday: 8.00am - 5.30pm, Friday: 8.00am - 5.00pm

\*Please refer to our websites for more details.

#### General enquiries & appointments

General enquiries line: 6908 2222 (24-hr)

Fax: 6716 5500 | Email: contactus@nuhs.edu.sg

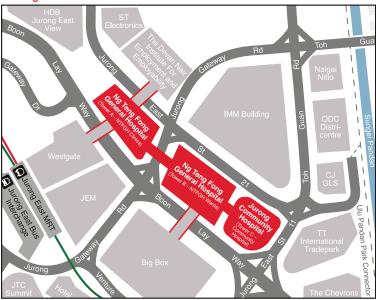
Appointment line: 6908 2222 (Monday - Friday: 8.00am - 5.30pm, Saturday: 8.00am - 12.30pm)

Fax: 6716 2200 | Email: appointment@nuhs.edu.sq

Dental appointment line: 6716 2233 (Monday – Friday: 8.00am – 5.30pm)

Fax: 6716 2200 | Email: JHCampus Dental@nuhs.edu.sq

### **Getting there**



#### By train

Alight at Jurong East MRT Station

#### By bus

#### Jurong East Bus Interchange

41, 49, 51, 52, 66, 66B, 78, 78A, 79, 79A, 97, 97E, 98, 98M, 105, 143, 143M, 160, 160A, 160M, 183, 183B, 197, 333, 334, 335, 506

#### Along Boon Lay Way

49, 99, 333, Private bus service 625, 990

#### Disclaimer:

The information in this brochure is meant for educational purposes and should not be used as a substitute for medical diagnosis or treatment. Please seek your doctor's advice before starting any treatment or if you have any questions related to your health, physical fitness or medical condition. Information is accurate at the time of printing.

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