

## **[ Sclerotherapy Protocol ]**

### **Purpose**

The purpose of sclerotherapy is to treat varicose, reticular or spider veins and cause endothelial damage and subsequent fibrosis of the vein. This can be achieved through the introduction of a chemical irritant into the lumen of the vein.

### ***Prior to providing sclerotherapy, the facility must consider the following:***

- Indication
- Contraindications
- Pretreatment Evaluation

### **Indications**

The indications for cosmetic sclerotherapy are the presence of the spider veins, reticular veins or small varicose veins, either associated with symptoms of discomfort or with a cosmetic concern (or both).

### **Contraindications**

- Untreated reflux involving one of the main superficial veins
- Hypersensitivity to the sclerosing agent
- Fever
- Phlebitis (superficial or deep)
- Childhood
- Pregnancy
- Breastfeeding (patient can pump and dump for two days after the procedure, not an absolute contraindication)
- Bed rest
- Severe systemic disease
- Poor patient understanding
- Short life expectancy or advanced cancer

### **Pre-Treatment Evaluation**

Prior to sclerotherapy, the facility must obtain a complete history and physical examination that determine the following:

- Patient history of venous disorder
- Family history of venous disorder
- Previous venous insufficiency ultrasound studies
- Other previous diagnostic venous imaging studies
- Previous arterial perfusion studies if there is any concern regarding the lack of normal pedal pulses
- Prior use of compression
- Medication history
- Allergies

In addition, the facility must obtain the following:

- Clinical class score (CEAP)
- Venous clinical severity score (VCSS)
- Photographs prior to and post procedure
- Duplex ultrasound for C2 or higher, and as indicated with C0 or C1 disease

## Sclerotherapy Protocol

*If sclerotherapy is deemed appropriate, the facility must perform the procedure adhering to the following steps:*

1. Pre-Sclerotherapy Evaluation
2. Sclerotherapy Procedure
3. Post-Sclerotherapy Care
4. Reporting Outcomes

### **Pre-Sclerotherapy Evaluation**

The facility performs the procedure adhering to the outlined protocol. Pre-sclerotherapy treatment for the patient must include the following:

- An available procedure date is scheduled
- Patient is given a prescription for compression stockings of appropriate length and compression (usually 20-30 mmHg)
- Patient is provided with information regarding sclerotherapy procedure

### **Sclerotherapy Procedure**

The steps for the sclerotherapy procedure must be executed in the following order:

#### **1. Equipment and Supplies Check**

Prior to performing the procedure, staff must ensure that they have all of the necessary equipment to perform the procedure, which includes the following:

- Sclerosing agent (i.e. Sotradecol or Polidocanol)
- 3cc and 10cc disposable syringes
- 30 gauge and 32 gauge disposable transparent hub needles
- Cotton balls
- Magnifying glasses (or surgical loops)
- Transilluminator (Veinlite)
- Nitroglycerin paste, hyaluronidase (for prolonged blanching)

#### **2. Preparation**

- a. Staff members introduce themselves to the patient.
- b. The risks, benefits, indication, and alternatives of the procedure are reviewed with the patient. The patient must demonstrate an understanding of this discussion and sign a specific sclerotherapy consent form.
- c. Time out is performed. The surgeon ensures and documents the correct patient, the correct procedure and the correct procedure site immediately before initiation of the procedure
- d. The patient is placed in a decubitus position.

#### **3. Delivery of sclerosing agents**

- a. Wash hands and apply gloves
- b. The skin is cleansed with alcohol
- c. Reticular veins are usually treated with 0.3% Sotradecol (or 0.5% to 1.0% Polidocanol) solution using a 27-gauge butterfly
- d. Spiders veins are usually treated with 0.1-0.2% Sotradecol (or 0.25% to 0.5% Polidocanol) solution, using a 30 ga or a 32 ga needle
- e. During a session of sclerotherapy, patient may receive up to 15 cc of sclerosing agent.
- f. Premixed pharmacologic agents must be labeled with content, concentration and expiration date if not prepared immediately before use

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### **Post-Sclerotherapy Care**

Following the procedure, patient care must be executed in the following order:

1. Assistant fits grade one (20-30 mm Hg) compression stockings
2. Patient is instructed to walk for ten minutes to promote blood flow into the deep system
3. Post-sclerotherapy instructions are given to the patient
4. Patient remains at facility for at least 30 minutes following treatment
5. Patient is discharged after a final evaluation by nurse or medical assistant
6. Follow-up visits are usually scheduled at 3 weeks and then at 6-8 weeks post treatment
7. Selected patients who had prior sclerotherapy and have only very fine veins treated may be seen at a 6 week follow up visit only.

### **Reporting Outcomes**

#### *Sclerotherapy report*

At the completion of the visit for cosmetic sclerotherapy, the following information is entered on the patient's sclerotherapy technical sheet:

- Summary of procedure (notes and diagram of the extremity treated), indicating the veins treated (spider veins, reticular veins, varicose tributaries) and their location
- Type, concentration and volume of sclerosing agent
- Any immediate complications or adverse events
- Patient status at time of discharge
- Type and duration of compression (if used)
- Follow-up appointment date

#### *Complication Log*

- Following the post-sclerotherapy visit, a staff member will input the patient's information into the facility's procedure complication log, used to document the outcomes, including complications, of the procedures performed. This log will be reviewed biannually per the facility's quality improvement measures.

### **References:**

The Vein Book: Sclerotherapy and Ultrasound-Guided Sclerotherapy; Paul Thibault, p. 189

The Fundamentals of Phlebology: Venous Disease for Clinicians. Second Edition: Sclerotherapy of telangiectasia and reticular veins, p. 31

J Mal Vasc. 2005 Jul; (3): 144-9 Contraindications of sclerotherapy update 2005

R. L. Worthington-Kirsch Semin Intervent Radiol. 2005 September; 22(3): 209-217 Injection Sclerotherapy