STEP BY STEP TREATMENT USING FOAM SCLEROTHERAPY FOR VARICOSE VEINS
Jean Luc GERARD
Paris France

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2:12 PM - 2:17 PM

Technical
Patient positions

Great saphenous vein

Small saphenous vein

Patient positions
**Small Saphenous Vein**

Foot of the leg on the Achilles tendon of the other leg allows to relax the muscles and thus have a better vision of SSV to inject.

**Identification of the Vein to Be Treated**

Pastel pencil delimits 2 zones, after ensuring the absence of small arteries in the area of puncture.

**Safe Puncture**

Examination area Puncture area

**Time between Foam Production and Injection should be as Short as Possible**

With the same concentration and the same volume:

The time elapsed after preparing the foam and the injection the foam (depending on the skill of each practitioner) can vary the results.

**Foam Production**

3-way stopcock

Female-female connection

The production of the foam which should not depend on the angle of rotation of the hub and therefore the double syringe female-female should be recommended.
Ratio of liquid sclerosant to gas for production sclerosing foam

- 1 + 3
- 1 + 4
- 1 + 5

1 part liquid + 4 parts air (GRADE 1A)

- European Guidelines for sclerotherapy in chronic venous disorders E Rabe et al Phlebology april 2013

Standardized procedure UGFS

4 stages all done under Duplex imaging control:
- 1. The vein to be treated is identified (detection of possible nearby arteries)
- 2. Vein puncture + check needle position
- 3. Injection
- 4. Post-injection assessment (control of filling of the vein by the foam)

Procedure must be entirely done under Duplex control

**Doses**

<table>
<thead>
<tr>
<th>Vein size</th>
<th>Polidocanol foam</th>
<th>STS foam (Sodium tetradecyl sulfate)</th>
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</thead>
<tbody>
<tr>
<td>Ø &lt; 4 mm</td>
<td>0.5%</td>
<td>0.2 to 0.5%</td>
</tr>
<tr>
<td>Ø 4 and &lt; 6 mm</td>
<td>1%</td>
<td>0.5 to 1%</td>
</tr>
<tr>
<td>Ø 6 and &lt; 8 mm</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Ø ≥ 8 mm</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Algorithm for treating saphenous vein with sclerotherapy. The maximum volume of foam per session is 10 mL.


**Vein measurement**

Don't miss the Dist Intima-Intima = 0.45cm vs Dist Adventitia-Adventitia = 0.62cm.

**Duplex scan machine**

- **LINEAR PROBE**
  - 10 - 13 Mhz
  - 14 – 18 Mhz

Longitudinal or cross section?

There is no better technique.
Segment not filled enough
2nd injection recommended

CONCLUSION
- Procedure must be entirely done under Duplex
- Check before injection the proximity of small arteries
- Respect doses and volumes