Mid-term Results of Catheter Directed Foam Sclerotherapy Combined with Tumescent Local Anaesthesia for Treatment of Great Saphenous Vein Incompetence

Haitham Ali, MD
Lecturer of Vascular and Endovascular Surgery
Assiut University Hospitals, Assiut, Egypt
Disclosure

Speaker name:

Haitham Ali

I have the following potential conflicts of interest to report:

☐ Consulting
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

☐ I do not have any potential conflict of interest
- CDFS is a modification of UGFS that involves the use of an intravenous catheter to deliver the sclerosant along the lumen of the saphenous trunk under DUS control.

- The purpose of this prospective study was to evaluate the occlusion rate, clinical severity, disease specific HRQoL, and safety in patients with GSV reflux 3 years after a single treatment session of CDFS combined with peri-saphenous infiltration of TLA.
Demographic Data:
- 249 patients
- Female sex: 53.5%
- Mean age: 46.3 ± 8.3 years
- Mean GSV diameter: 8.3 ± 1.4 mm
Procedure:

- Patients were placed in a reverse Trendelenburg position to distend the vein and facilitate its puncture.
- The GSV was punctured just below the knee. Then, 0.035 guidewire was advanced and positioned at the SFJ under DUS guidance.
- 4Fr multiple hole straight catheter with open tip was introduced over the guidewire and positioned approximately 2 cm distal to the SFJ.
- TLA was infused strictly into the saphenous compartment along the GSV using a spinal anaesthesia needle (25G/0.53 × 88 mm) under DUS guidance.
- The foam sclerosant was then delivered along the GSV at a rate of 1-2 mL for every 5 cm while the catheter was steadily withdrawn.
Results:

- Freedom of GSV recanalization

![Graph showing Freedom of GSV recanalization over time](image_url)
- Freedom of GSV reflux
- Both VCSS and CIVIQ score were significantly lower, indicating better quality of life.

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>3-years</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VCSS</strong></td>
<td>9.5 ± 2.3</td>
<td>7.2 ± 2.9</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td><strong>CIVIQ-20</strong></td>
<td>24.4 ± 7.3</td>
<td>21.8 ± 8.3</td>
<td>&lt; .0001</td>
</tr>
</tbody>
</table>
Conclusions:

- CDFS combined with TLA for treatment of GSV incompetence yields good mid-term results in terms of occlusion rate, clinical severity, patient’s QoL, and safety.

- The current guidelines recommend the following treatment hierarchy for VVs: endothermal ablation including RFA and EVLA, surgery or UGFS, and compression hosiery.
- The heterogeneity of the chemical nature of foam, preparation techniques, volumes injected, methods of delivery, post-procedure compression regime, and strategy for re-treatment makes foam sclerotherapy difficult to compare with other endovenous ablation techniques.

- Standardisation of the UGFS technique is clearly needed to compare its efficacy with other endovenous treatment modalities.
Mid-term Results of Catheter Directed Foam Sclerotherapy Combined with Tumescent Local Anaesthesia for Treatment of Great Saphenous Vein Incompetence


Vascular and Endovascular Surgery Department, Assiut University Hospitals, Assiut, Egypt
THANK YOU
Mid-term Results of Catheter Directed Foam Sclerotherapy Combined with Tumescent Local Anaesthesia for Treatment of Great Saphenous Vein Incompetence

Haitham Ali, MD
Lecturer of Vascular and Endovascular Surgery
Assiut University Hospitals, Assiut, Egypt