Simultaneous or staged varicose vein treatment after saphenous ablation

VEIN PROCEDURES: to stage or not to stage

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University of Ferrara – ITALY
USUHS Bethesda - USA
COI

Italian Ministry of Health grant winner

Scientific Thermal Research foundation grant winner

Speaker fee: alfasigma, medi, servier

Scientific consultant: aivarix, alfasigma, i-vasc, servier
Vasquez MA.
The utility of the Venous Clinical Severity Score in 682 limbs treated by radiofrequency saphenous vein ablation.
J Vasc Surg. 2007 May;45(5):1008-1014

EXTENSIVE VARICOSITIES
from 80.8% to 6.6%, \( P < .0001 \)

\textbf{GSV} 83%

\textbf{AASV} 14%

\textbf{SSV} 3%

Fig 4. Mean venous clinical severity score (VCSS) throughout the study.
Vasquez MA.
The utility of the Venous Clinical Severity Score in 682 limbs treated by radiofrequency saphenous vein ablation.
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J Vasc Surg. 2007 May;45(5):1008-1014
Phlebology. 2019 Sep;34(1 Suppl):4-66.
Global guidelines trends & controversies in lower limb venous and lymphatic disease Gianesini S et al.

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staging is not making a difference, unless general anesthesia is used (1B)

Other guidelines are not specifying

ESVS 2022: The optimal timing of tributary treatment remains UNCLEAR
staging is not making a difference, unless general anesthesia is used (1B)

perform the tributary treatment at the same time

Other guidelines are not specifying

Thomas M. Aherne
Concomitant vs. Staged Treatment of Varicose Tributaries as an Adjunct to Endovenous Ablation: A Systematic Review and Meta-Analysis.
Eur J Vasc Endovasc Surg (2020) 60, 430e442
Aherne TM, Ryan ÉJ, Boland MR, et al.
Concomitant vs. Staged Treatment of Varicose Tributaries as an Adjunct to Endovenous Ablation: A Systematic Review and Meta-Analysis.
Eur J Vasc Endovasc Surg. 2020 Sep;60(3):430-442

Re-intervention significantly lower in the concomitant group
(6.3% vs. 36.1%)

15 studies
Complications & DVT: NS
VCSS & AVVQ better in concomitant
Aherne TM, Ryan ÉJ, Boland MR, et al.  
Concomitant vs. Staged Treatment of Varicose Tributaries as an Adjunct to Endovenous Ablation: A Systematic Review and Meta-Analysis.  
Eur J Vasc Endovasc Surg. 2020 Sep;60(3):430-442

### Concomitant vs. Staged Treatment of Varicose Tributaries as an Adjunct to Endovenous Ablation

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Concomitant</th>
<th>Staged</th>
<th>Risk Ratio (superficial venous re-intervention)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Events</td>
<td>Total</td>
<td>M-H, Random, 95% CI</td>
</tr>
<tr>
<td>RCT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thievacumar 2008</td>
<td>8</td>
<td>22</td>
<td>0.93 [0.48, 1.80] 15.0%</td>
</tr>
<tr>
<td>Lane 2015</td>
<td>1</td>
<td>51</td>
<td>0.05 [0.01, 0.39] 10.2%</td>
</tr>
<tr>
<td>El-Sheikha 2014</td>
<td>1</td>
<td>25</td>
<td>0.06 [0.01, 0.42] 10.3%</td>
</tr>
<tr>
<td>Total (95% CI)</td>
<td>10</td>
<td>98</td>
<td>0.16 [0.01, 2.17] 35.5%</td>
</tr>
</tbody>
</table>

Heterogeneity: $\tau^2 = 4.61; \chi^2 = 17.90, df = 2 (p < .001); I^2 = 89%$
Test for overall effect: $Z = 1.37 (p = .17)$

### Observational

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Events</th>
<th>Total</th>
<th>M-H, Random, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welch 2006</td>
<td>0</td>
<td>7</td>
<td>0.16 [0.01, 2.43] 7.8%</td>
</tr>
<tr>
<td>Wang 2018</td>
<td>8</td>
<td>163</td>
<td>0.24 [0.12, 0.49] 14.8%</td>
</tr>
<tr>
<td>Mohamed 2019</td>
<td>2</td>
<td>50</td>
<td>0.22 [0.05, 1.02] 11.9%</td>
</tr>
<tr>
<td>Kim 2008</td>
<td>12</td>
<td>132</td>
<td>1.10 [0.50, 2.40] 14.6%</td>
</tr>
<tr>
<td>Harlander-Locke 2013</td>
<td>19</td>
<td>355</td>
<td>0.06 [0.04, 0.10] 15.5%</td>
</tr>
<tr>
<td>Total (95% CI)</td>
<td>41</td>
<td>707</td>
<td>0.23 [0.07, 0.83] 64.5%</td>
</tr>
</tbody>
</table>

Heterogeneity: $\tau^2 = 1.68; \chi^2 = 40.73, df = 4 (p < .001); I^2 = 90%$
Test for overall effect: $Z = 2.25 (p = .02)$

Total (95% CI): 51 805 314 870

Heterogeneity: $\tau^2 = 1.82; \chi^2 = 69.15, df = 7 (p < .001); I^2 = 90%$
Test for overall effect: $Z = 2.86 (p = .004)$
Test for subgroup differences: $\chi^2 = 0.06, df = 1 (p = .80), I^2 = 0%$

Favours Concomitant ← Favours Staged

**ALL NS apart**

**VCSS < 3 months**
ALL NS apart

AVVQ scores 3-12 months significantly favoured concomitant treatment.
Kim Y.
Defining the human and health care costs of chronic venous insufficiency.

2% healthcare budget
THINK different
Ultrasound-based topographic analysis of tributary vein connection with the saphenous vein during ambulatory conservative hemodynamic correction of chronic venous insufficiency.

82.3% ESCAPE POINTS below the knee
Ultrasound-based topographic analysis of tributary vein connection with the saphenous vein during ambulatory conservative hemodynamic correction of chronic venous insufficiency.

Potential recurrence
Deep veins

Ten-Year Outcomes of Treatment of Varicose Veins by Ambulatory Selective Ablation of Varices Under Local Anesthesia (ASVAL) J Vasc Surg VL 2018

Freedom from REFLUX 64.4%

Freedom from VARICOSE VEINS 81%

Varicose vein stripping vs haemodynamic correction (CHIVA): a long term randomised trial. EJVES 2008
**Reflux Elimination Test**

Type 1 + N3 shunt

Type 3 shunt

GSV

RET test

Gianesini S

*CHIVA strategy in chronic venous disease treatment*

Phlebology 2014
Who’s the culprit?

Gianesini S. 
CHIVA strategy in chronic venous disease treatment: instructions for users. 
BACKGROUND

Authors’ conclusions:

*Saphenous sparing* method reduces recurrence of varicose veins and produces fewer side effects than stripping. New RCTs are needed.”

Bellmunt-Montoya et al.  
*Chiva method for the treatment of varicose veins*
*Cochrane Database of Systematic Reviews 2015*

Gianesini S  
*Chiva strategy in CVD treatment: instructions for users*  
*Phlebology 2014*
Long term efficacy of different procedures for treatment of varicose veins: a network meta-analysis

2019 Feb; 98(7):e14495.
Cochrane Database Syst Rev. 2021 Sep 30;9(9):CD009648.
We suggest preservation of the saphenous vein using the ambulatory conservative hemodynamic treatment of varicose veins (CHIVA) technique only selectively in patients with varicose veins, when performed by trained venous interventionists.
THROMBO-PROPHYLAXIS...in COVID Time
Irish THROMBO-PROPHYLAXIS SURVEY

- Always 73.3%
- Enoxaparin and tinzaparin most used (20-40 mg / 3500-4500 IU)
- Single dose 71.4%
- already ongoing anticoagulation is kept in 46.7%

Figure 2. Importance of various thromboembolic risk factors as rated by survey respondents where 1 = not important and 5 = very important.
more investigations are needed before giving recommendations

ACP, AVF, UIP: against routine prophylaxis (only UIP with grade 1 C)

EVLA in:
- <40 yo female using hormonal therapy
- Heart/renal disease
- Coagulation disorders
Risk of DVT risk within 6 weeks of day-surgery is approximately 10 times higher.


- in 6707 patients
  - EHIT 3%
  - Non-fatal PE 0.03%
  - EHIT resolution in 2-4 w in most patients,
  - Worsening in 4.5% (all resolved <4 w)

- 68% EHIT had concomitant phlebectomy vs
- 39.4% no concomitant phlebectomy (p<.0001)
SMALL SAPHENOUS VEIN
Global guidelines trends & controversies in lower limb venous and lymphatic disease
Gianesini S et al.
Endovenous laser treatment involves the use of lasers to treat varicose veins. It is a minimally invasive procedure that can be performed in an outpatient setting. The laser is directed through a small incision to heat and coagulate the vein walls, causing them to collapse and leading to the occlusion of the vein. This procedure is particularly useful for treating small tributaries of the saphenous vein, which is a network of veins that runs along the thigh and leg. The table below provides a risk factor analysis for retreatment:

**Table III. Risk factor analysis for retreatment**

<table>
<thead>
<tr>
<th></th>
<th>Univariate</th>
<th>Multivariate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p</td>
<td>Odds ratio</td>
</tr>
<tr>
<td>Gender</td>
<td>0.537</td>
<td>1.299</td>
</tr>
<tr>
<td>Age</td>
<td>0.643</td>
<td>1.009</td>
</tr>
<tr>
<td>Group</td>
<td>0.813</td>
<td>1.801</td>
</tr>
<tr>
<td>SPR</td>
<td>0.341</td>
<td>1.586</td>
</tr>
<tr>
<td>Perforating reflux</td>
<td>0.066</td>
<td>3.938</td>
</tr>
</tbody>
</table>

CI, confidence interval; SPR, saphenopopliteal reflux.
ONE size DOES NOT fit all

NOT-modifiable

1. advanced age
2. family history of VV (1.85 OR)
3. DVT history (4.10 OR)
4. Venous reflux (SSV+deep in particular)
5. Symptoms of swelling with varicose veins

Modifiable

1. high BMI (1.85 OR)
2. Venous reflux (SSV+deep in particular)
3. Symptoms of swelling with varicose veins

Sanders JO.

Clinical practice guidelines: their use, misuse, and future directions

CONNECTING the EXPERTS,
INFORMING the PATIENTS
international consensus document
& communication campaign for

FAKE NEWS FREE
patient information

in conjunction with
10th International interuniversity meeting
in Phlebology, Lymphology & Aesthetics

TECHNICAL NOTES

Connecting the Experts,
Informing the Patients

40% of the top shared healthcare web links contains “FAKE NEWS”

& they are shared more than

450,000 times

The spread of medical fake news in social media
YOU CAN REPORT eventually encountered venous-lymphatic Fake News

www.vwinfoundation.com/fake-news-free-project/
The v-WINter DUBAI mission includes:

1. Consensus Document to be published on INTERNATIONAL ANGIOLOGY JOURNAL (IF 2,789)
2. Multi-lingual BOOKLET for the PUBLIC
3. Open access WEBSITE including evidence based information

1. Experts Consensus document
2. Multi-lingual awareness booklet
3. Interactive Educational website
CONGRATS &
see you at

MAY 25-27
Let's have a Turkish Coffee together!