POST-OPERATIVE COMPRESSION after VARICOSE VEIN TREATMENT:

YES OR NO?

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Varicose Veins

• Varicose veins are common

• Prevalence:
  – Men: 10-40%
  – Women: 20-51%

• Causes physical symptoms and can lead to complications (e.g., ulcers)

• Affects quality of life of patients
Endovenous Ablation
Post-Treatment Compression
Effect of Compression Stockings

- Improved lymphatic flow
- Increased volume and rate of venous blood flow owing to improved efficiency of skeletal-muscle pump and reduced vein diameter
- Reduced venous reflux owing to improved valve function
- Reduced edema and inflammation
- Reduced risk of thromboembolism

Without stockings:
- Pain, edema, inflammation, skin changes and ulceration
- Venous reflux, blood stasis, and venous hypertension
- Increased risk of thromboembolism from blood stasis

With stockings:
- Improved microcirculation and cutaneous oxygenation
Management of varicose veins: a survey of current practice by members of the Vascular Society of Great Britain and Ireland

AG EDWARDS¹, S BAYNHAM¹, T LEES², DC MITCHELL¹

- Questionnaire survey of members of the Vascular Society of GB & Ireland
- 69% response rate
- 75% used either elastic or non-elastic bandages post-operatively
- 77% then change to stockings – worn for a variable length of time
Compression regimes after endovenous ablation for superficial venous insufficiency – A survey of members of the Vascular Society of Great Britain and Ireland

J El-Sheikha¹, S Nandhra¹, D Carradice¹, C Acey¹, GE Smith¹, B Campbell² and IC Chetter¹

- Questionnaire survey sent to members of the Vascular Society of GB & I
- Response rate – 41%
- Compression post-endothermal ablation:
  - 87% used compression stockings and 60% used bandages
  - Change from bandages to compression stockings – Median 2 days after treatment and stockings worn for median 5 days
- Compression post-UGFS:
  - 83% used compression stockings and 64% used bandages
  - Change from bandages to compression stockings after median 5 days and stockings worn for median 2 days
Compression Stockings after Endovenous Laser Ablation of the Great Saphenous Vein: A Prospective Randomized Controlled Trial

N.A. Bakker a, L.W. Schieven b, R.M.G. Bruins b, M. van den Berg b, R.J. Hissink b,*

Pain significantly worse in those wearing stockings

v/s

Role of compression stockings after endovenous laser therapy for primary varicosis

Jan H. Elderman, MD, a,b Attila G. Krasznai, MD, a Adri C. Voogd, PhD, c Karel W. E. Hulsewé, MD, PhD, a and Cornelis J. J. M. Sikkink, MD, PhD, a Sittard, Rotterdam, and Maastricht, The Netherlands

Statistically significant difference in pain scores noted in 1st week only in favour of compression group
Compression following Foam Sclerotherapy

Foam Sclerotherapy of the Saphenous Veins: Randomised Controlled Trial with or without Compression

C.M. Hamel-Desnos, B.J. Guias, P.R. Desnos, A. Mesgard

- No difference in pain scores, inflammation, ecchymosis, induration, matting or pigmentation at 14 and 28 days
- Only 40% of patients wore stockings everyday

Randomized clinical trial of different bandage regimens after foam sclerotherapy for varicose veins

J. L. O’Hare, J. Stephens, D. Parkin and J. J. Earnshaw
Department of Vascular Surgery, Gloucestershire Royal Hospital, Great Western Road, Gloucester GL1 3NN, UK
Correspondence to: Mr J. J. Earnshaw (e-mail: jjearnshaw@tiscali.co.uk)

At 6 weeks:
- No difference in rates of vein occlusion
- No significant difference in varicose vein severity score or pain score
## Compression Post-Treatment: Presumed Effects

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td>• Reduced post-op pain</td>
<td>• Low compliance</td>
</tr>
<tr>
<td>• Prevent/minimise superficial/deep vein thrombosis</td>
<td>• Uncomfortable</td>
</tr>
<tr>
<td>• Reduced inflammation</td>
<td>• Difficult to apply (elderly)</td>
</tr>
<tr>
<td>• Reduced bleeding and haematoma</td>
<td>• More pain</td>
</tr>
<tr>
<td>• Increased patient satisfaction</td>
<td>• No difference re: DVT/Phlebitis</td>
</tr>
</tbody>
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12. What is the clinical and cost effectiveness of compression bandaging or hosiery after interventional treatment for varicose veins compared with no compression? If there is benefit, how long should compression bandaging or hosiery be worn for?
Systematic review of compression following treatment for varicose veins

J. El-Sheikha, D. Carradice, S. Nandhra, C. Leung

This systematic review attempts to make any recommendations about compression therapy after interventions for varicose veins. Even currently insufficient information on compression for varicose veins. Even using this review to RCTs, there are concerns with the overall methodological quality of the included studies; the most significant flaw is inadequate sample size. Heterogeneity of the regimens compared, and of the outcomes and their timing, preclude any meaningful meta-analysis.
ClinicalTrials.gov
A service of the U.S. National Institutes of Health

ISRCTN17719156: A single-centre study looking at the effect of compression therapy in patients having foam sclerosant injection for varicose veins

Overall trial status: Ongoing    Recruitment status: Recruiting

A single-centre study looking at the effect of compression therapy in patients having foam sclerosant injection for varicose veins

Intervention: Other: Compression socks for 2 weeks

3 Recruiting  Compression Therapy Following Endothermal Ablation
Condition: Varicose Veins
Intervention: Device: Class II Compression Stockings (no specific device used)
Thank You!