

Table XXXXXVIII. Open surgery and post-operative compression.
9 articles. 9 RCTs

Operative procedure	Reference	Summary
Open surgery and post-operative compression	Rodrigus I, Bley J. For how long do we have to advise elastic support after varicose vein surgery? A prospective randomized study. <i>Phlebology</i> . 1991;6:95-98. doi: 10.1177/026835559100600207	<p>Monocenter study 287 legs presenting primary varicose vein were treated by surgery including GSV short stripping and tributary stab avulsion. No data on SSV, deep vein, CEAP clinical classification Exclusion criteria: severe venous insufficiency including ulcer, recent superficial thrombophlebitis and previous VV surgery. An elastic bandage was applied to all patients until removal of sutures, then Group I (n=84): no bandage Group II (n=84): bandage for 2 weeks Group III: (n=89): bandage for 5 weeks Results at 1, 3 and 6 weeks, 1 month No difference between the 3 groups in terms of objective score (hematoma, induration) and subjective scores symptom, cosmetic, quality of life.</p>
	Travers JP, Makin GS. Reduction of varicose vein recurrence by use of post-operative compression stockings.	<p>Monocenter study. Sixty-nine patients with GSV insufficiency were treated either by SFJ ligation and stripping or avulsion</p>

	<p>Phlebology. 1994;9:104-107.Doi:10.1177/026835559400900304</p>	<p>No data on SSV, deep vein, CEAP clinical classification All patients wear crevic crepe applied the 1st postoperative day and later tubular stockinet for 2 weeks, then Group I (n=33): no compression <i>versus</i> Group II (n=36) compression by stocking Results at 3, 6, 9 and 12 months of follow-up (F-U): 39 % of patients allocated stockings were either lost to FU or abandoned their use after 3 months. At 1-year F-U only 6 % had PREVAIT in group II compared to group I 71%, assessed by clinical examination and hand-held doppler</p>
	<p>Raraty M G T, Greaney M G, Blair S D. There is no benefit from 6 weeks' postoperative compression after varicose vein surgery: a prospective randomised trial. <i>Phlebology</i>. 1999; 14:21-25. doi:10.1177/026835559901400106.</p>	<p>Monocenter study. One hundred-five patients presenting GSV varices were treated by SFJ ligation, stripping and stab avulsion. No data on SSV, deep vein, CEAP clinical classification They were randomized Group I: (n=64 LL): Pane last Acryl adhesive short-stretch bandages for 1 week Group II: (n=67 LL): crepe bandages for 16 h after surgery, which were then changed for TED anti-embolic stockings to be worn for 6 weeks Results Postoperatively there was significantly more bleeding in the second group and a larger area of bruising at the end of the first week. P<0.02</p>

		<p>No difference in discomfort or activity between the two groups.</p> <p>There was no statistical difference in the symptoms reported after the first week.</p>
	<p>Bond R, Whyman M R, Wilkins D C, Walker A J, Ashley S. A randomised trial of different compression dressings following varicose vein surgery. <i>Phlebology</i>. 1999;14:9-11. DOI : 10.1177/026835559901400103</p>	<p>Monocenter study.</p> <p>Forty-two patients with bilateral GSV insufficiency were treated by SFJ ligation, stripping and stab avulsion.</p> <p>No precise data on CEAP classification</p> <p>Contraindication: previous VV surgery, venous ulcer</p> <p>Patients were randomized in on one lower limb adhesive bandage (Pane last) and on the other TED or Medi Plus</p> <p>All the dressing worn 1 week.</p> <p>Results There was a significant reduction of mobility experienced by patients wearing Pane last bandages compared with the other two dressings. P < 0.05.</p> <p>However, there were no significant differences between the dressings with regard to the degree of postoperative pain experienced, and in all other respects the dressings were equally tolerated.</p>
	<p>Biswas S, Clark A, Shield DA. Randomized Clinical trial of the duration of compression therapy after varicose vein surgery. <i>Eur J Vasc Endovasc Surg</i>. 2007;33:631-637. PMID: 17276100</p>	<p>Three hundred patients presenting GSV varices were treated by SFJ ligation, pin stripping and stab avulsion.</p> <p>CEAP clinical classification C2-C4</p> <p>Compression bandaging was applied post-operatively for three days.</p>

		<p>Patients then wore graduated elastic compression stockings. 220 patients returned their questionnaire</p> <p>Group I (n=110) 1 week Group II (n=110) 3 weeks.</p> <p>Patients were assessed by questionnaire on pain scores at rest and during mobilization for up to six weeks, total analgesic consumption, duration of time off work, any complications, and patient perception of cosmetic results at various periods up to 12 weeks following surgery.</p> <p>Results.</p> <p>The mean pain score reported by patients over 6 weeks was similar in the two groups.</p>
	<p>Houtermans-Auckel JP, van Rossum E, Teijink JAW, Dahlmans AAHR, Eussen EFB Nicolaï SPA, Welten R J.Th.J. To Wear or not to Wear Compression Stockings after Varicose Vein Stripping: A Randomised Controlled Trial. <i>Eur J Vasc Endovasc Surg.</i> 2009;38:387-391. PMID: 19608438</p>	<p>Multi-center study</p> <p>One hundred and four presenting primary incompetence of the GSV were treated by SFJ ligation and interruption of all proximal tributaries and short inversion stripping.</p> <p>CEAP clinical classification C2-C3</p> <p>Both patient groups underwent standard elastic bandaging selective compression of the proximal part of the GSV by a rolled gauze immediately postoperatively for 3 days</p> <p>Group I (n=23): stockings compression (22-32mmHg) 4 weeks</p> <p><i>versus</i></p> <p>Group II (n=24): no compression</p> <p>Results at 4-week follow-up:</p> <ul style="list-style-type: none"> - The difference in leg volume between both the groups was not statistically

		<p>significant.</p> <ul style="list-style-type: none"> - Group I: Patients resumed work earlier. P=0.02. <p>No difference was observed in the number and type of complication and in pain scores during the 4-week follow-up period.</p>
	<p>Mariani F, Marone EM, Gasbarro V, Buccalosi M, Spelta S, Amsler F et al. Multicenter randomized trial comparing compression with elastic stocking versus bandage after surgery for varicose vein. <i>J Vasc Surg.</i> 2011;53:115-122. PMID: 21050700</p>	<p>Multi-center study</p> <p>Sixty patients presenting primary incompetence of the GSV were treated by SFJ flush ligation, with ligation and division of all proximal tributaries, short inversion stripping, stab avulsion of the tributaries +/- perforator ligation. CEAP clinical classification C2-C5. Contra-indication: previous sclerotherapy, previous acute DVT</p> <p>Group I (n=30): stockings (22-32 mm Hg)</p> <p>Group II (n=30) short stretch bandages two or more layers with spiral turns or figure-of-8 turns</p> <p>Outcome measurements at 3, 7 and 14 days</p> <p>No episodes of venous thromboembolism were observed.</p> <p>The mean area of thigh hematoma was not significant between the 2 groups. On postoperative day 7, edema was found in 50% in group II, and in 20% in group I, which was a significant reduction.</p> <p>No statistical difference was recorded for postoperative pain; however, better patient acceptance and quality of life after the operation were recorded in the group I.</p>
	<p>Reich-Schupke S, Feldhaus F, Altmeyer P, Mumme A, Stücker M.</p>	<p>Monocenter study</p>

	<p>Efficacy and comfort of medical compression stockings with low and moderate pressure six weeks after vein surgery. <i>Phlebology</i> 2014;29:358-66.</p>	<p>Hundred-eight patients presenting GSV or/and SSV varices including PREVAIT were treated by open surgery and thigh- high medical compression stocking (MCS) was applied post-operatively for 6 weeks Group I (n= 41); 18-21 mmHg Group II (n= 47) 22-32 mmHg Outcome at 1 and 6-week. At 1-week Edema analyzed clinically and by b-scan was lower in group II. Respectively P=0.016 and 0.013. Significant less patients of group II had a feeling of “tightness” P=. 0.01 and significant more a reduction of discomfort (P.=0.01) after week 1 but with no significance at week 6. There was no significant difference according to other clinical and ultrasound findings such as hematoma, infection, hyperpigmentation, cording, or thrombosis after one or six weeks. In week 1 and week 6, more patients suffered from pain in group I. Application of the MCS was easier in group I in week 1, but similar in groups I and II in week 6.</p>
	<p>Kraznai AG, Sigterman TA, Houtermans-Auckel JP, Eussen ED, Snorejs M, Sikkink KJJM et al. vA randomized controlled trial comparing compression therapy after stripping for primary great saphenous vein incompetence. <i>Phlebology</i> 2019;34:669-674</p>	<p>Monocenter study Seventy-eight patients presenting primary incompetence of the GSV were treated by SFJ flush ligation, antegrade stripping from the knee level Spinal anesthesia. CEAP clinical classification C2-C4. No SSV treatment, no data on symptomatology, deep vein and perforator</p>

		Group I (n= 36) elastic bandage 4 hours Group II (n= 42) elastic bandage 72 hours Outcome at 2 weeks No difference between the 2 groups in terms of postoperative pain, discomfort duration and edema
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Abbreviations:

DVT=deep vein thrombosis; GSV = great saphenous vein; LL=lower limb; PREVAIT=presence of varices after interventional treatment SFJ=saphenofemoral junction; SSV= small saphenous vein: VV varicose vein