

Table XV

<p>Operative procedure</p>	<p>Reference <i>Abstracts corresponding to references can be found using the listing "RCTs by alphabetical order" or "RCTs by topic."</i></p>	<p>Summary</p>
<p>Partial or complete stripping</p>	<p>Holme JB, Skajaa K, Holme K. Incidence of lesions of the saphenous nerve after partial or complete stripping of the long saphenous vein. <i>Acta Chir Scand.</i> 1990;156:145-8.</p>	<p>163 consecutive patients with GSV incompetence 157 patients assessed Group I (N= 80, 75) complete stripping+ trib.phleb <i>versus</i> Group II (N=77, 75) partial stripping + trib.phleb Results at 12 weeks of follow-up: More frequent lesions of the saphenous nerve in group I (39%) Compared with group II (7%); P <0.001</p>
<p>HL <i>versus</i> HL</p>	<p>Corder AP, Schache DJ, Farquharson SM, Tristram S. Wound infection following high saphenous ligation: a trial comparing two skin closure techniques:subcuticular polyglycolic acid and interrupted monofilament nylon mattress sutures. <i>JR Coll Surg Ed.</i> 1991;36(2):100-2.</p>	<p>Skin closure with subcuticular polyglycolic acid (N= 76) <i>versus</i> interrupted monofilament nylon mattress sutures (N = 86) Results at 6 weeks of follow-up:</p> <ul style="list-style-type: none"> · Higher infection rate found with subcuticular polyglycolic acid (P= 0, 05) · Appeared to be operator dependent
<p>Conventional stripping <i>versus</i> pin stripping</p>	<p>Durkin MT, Turton EPL, Scott DJA, Berridge DC. A prospective randomised trial of PIN versus Conventional stripping in varicose vein surgery. <i>Ann R Coll Surg Engl.</i> 1999; 81: 171–174. PMID: 11397030</p>	<p>80 patients with incompetent SFJ and GSV Group I (N=43) conventional stripping <i>versus</i> Group II (N=37) PIN stripping Results at 1 to 6 weeks of follow-up:</p> <ul style="list-style-type: none"> · <i>Postoperative complications:</i> no difference between the 2 groups · <i>Size of exit site:</i> significantly smaller in group II (P<0.01)
	<p>Durkin MT, Turton EPL, Wijesinghe LD, Scott DJA, Berridge DC. Long Saphenous Vein Stripping and Quality of Life: a Randomised Trial. <i>Eur J Vasc Endovasc Surg.</i> 2001; 21: 545-549. PMID: 10364948</p>	<p>80 patients with incompetent SFJ and GSV Group I (N=43) PIN stripping <i>versus</i> Group II (37) Conventional stripping Results at 6 months of follow-up:</p> <ul style="list-style-type: none"> · <i>HRQoL (SF-36; EuroQoL)::</i> bodily pain, and physical summary significantly improved in both groups · <i>Role function:</i> improved in group I only

<p>HL+ tributary phlebectomy <i>versus</i> HL+ S+ tributary phlebectomy</p>	<p>Dwerryhouse S, Davies B, Harradine K, Earnshaw JJ. Stripping the long saphenous vein reduces the rate of reoperation for recurrent varicose veins. five-year results of a randomized trial. <i>J Vasc Surg.</i> 1999;29:589-92.</p>	<p>100 patients (133 lower limbs) with incompetent GSV Group I (N=69): HL+ Tributary ablation <i>versus</i> Group II (N= 64): HL+S+ Tributary ablation Results at 5 years of follow-up: Relative risk of reoperation in group I= 0.45, CI 0.26-0.78. P=0.002</p>
<p>Open Surgery with and without tourniquet</p>	<p>Sykes TC, Brookes P, Hickey NC. A prospective randomised trial of tourniquet in varicose vein surgery. <i>Ann R Coll Surg Engl.</i> 2000;82:280-2.</p>	<p>50 patients with primary GSV incompetence Group I :HL+S + Trib. phleb. with tourniquet <i>versus</i> Group II: HL+S + Trib. phleb. without tourniquet Results at 1 to 6 weeks of follow-up:</p> <ul style="list-style-type: none"> · <i>Operative time:</i> shorter in group I (P<0.01) · <i>Bruising:</i>reduced in group I (P< 0.01) · <i>Temporary saphenous neuralgia:</i> · N=2 in group I · <i>Pain, activity, cosmetic results:</i> similar in both groups
<p>SFJ flush ligation + tributary phlebectomy <i>versus</i> SFJ distal ligation + tributary phlebectomy</p>	<p>Belcaro G, Nicolaidis AN, Cesarone NM, De Sanctis MT, Incandela L, Errichi BM et al. Flush ligation of the sapheno-femoral junction. versus simple distal ligation A randomised, 10 year, follow-up. The safe study. <i>Angéiologie.</i> 2002;54:19-23.</p>	<p>800 patients with incompetent GSV 746 patients still available at 10-year Group I (N=369) SFJ Flush ligation + trib phleb <i>versus</i> Group II (nN=377) SFJ distal ligation +trib phleb Procedure Cost and operating time in favor of group II but P=NS Results at 10 years of follow-up:</p> <ul style="list-style-type: none"> · <i>Number of sclerotherapy sessions</i> (to control varices) in favor of group II · <i>Reflux assessment by DS and AVP:</i> no difference in terms of persistent reflux or AVP · <i>GSV occluded segment</i> in favor of group I, 6.5 cm versus 1.4 cm. (P<0.025) <p>No conclusion can be drawn from this study</p>

<p>SSV surgical treatment variants</p>	<p>Dumas BE, Spronk S, Boelhouwer RU, den Hoed PT. Subfascial ligation at three different levels versus partial exeresis of the incompetent short saphenous vein: A randomized clinical trial. <i>J Vasc Nur.</i> 2007 ;25 :12-18.</p>	<p>84 patients with incompetent SSV investigated by DS Ligation of SSV termination when refluxing (Flush ligation ?) in all patients +</p> <ul style="list-style-type: none"> Additional subfascial ligation of SSV trunk at 3 different levels in group I (N=44) <i>versus</i> Additional partial resection of the proximal SSV (10-15 cm) by S in group II (N=40) <p>Results at 3 months of follow-up:</p> <ul style="list-style-type: none"> <i>Reflux assessment:</i> no difference between groups in terms of persistent reflux <i>Symptoms improvement:</i> No correlation between presence or absence of reflux and symptom improvement, and no difference between groups in terms of improvement.
<p>Saphenous stripping (Babcock) <i>versus</i> pin stripping (Oesch stripper)</p>	<p>Buttler CM, Scurr JH, Coleridge Smith PD. Prospective randomized trial comparing conventional (Babcock) stripping with inverting (Pin) stripping of the long saphenous vein. <i>Phebiology.</i> 2002;17:59-63.</p>	<p>136 patients with incompetent GSV Group I (N=68): HL+S Under general anesthesia Conventional stripping, Babcock <i>versus</i> Group II (N=68): inverting stripping Oesch stripper Per operative time: Shorter operative time and less blood loss in group II compared with group I Results at 1 to 26 weeks of follow-up: No difference between groups in terms of hematoma, postoperative pain, mobility or analgesics consumption</p>
<p>High ligation <i>versus</i> high ligation + fascia cribriformis suture <i>versus</i> high ligation with inverting suture of the stump</p>	<p>Haas E, Burkhardt T, Maile N. Reziivhäufigkeit durch Neoangiogenese nach modifizierter Krossectomie. <i>Phlebologie</i> 2005;34 :101-104</p>	<p>1054 Patients (1389 limbs) with SFJ and GSV reflux Group I (N=607): HL +S+/- trib phleb <i>versus</i> Group II (N=292) with fascia cribriformis suture +S +/- trib phleb <i>versus</i> Group III (N=490):HLwith inverting suture of the stump+S +/- trib phleb Results at 5 years of follow-up:</p> <ul style="list-style-type: none"> <i>Presence of neovascularization at the SFJ with or without varices:</i> Group I=9.6% vs Group II=5.7% vs Group III=9% (P=NS)
<p>HL+ tributary phlebectomy <i>versus</i> HL+S+ tributary phlebectomy</p>	<p>Winterborn R.J, Foy C , Earnshaw J.J. Causes of varicose vein recurrence: late results of a randomized controlled trial of stripping the long saphenous vein. <i>J Vasc Surg.</i> 2004;40:634-9.</p>	<p>100 patients (133 lower limbs) with incompetent GSV Group I (N=69): HL+ Tributary ablation <i>versus</i> Group II (N= 64): HL+S+ Tributary ablation Results at 11 years of follow-up:</p>

		<ul style="list-style-type: none"> · No Difference in terms of PREVAIT between the 2 groups (P=0.012) · More frequent reoperation in group II (P=0.012) · Reduction of reoperation by 60% in group II.
Open Surgery under general anesthesia + local anesthésia : Lidocaïne + adrenaline <i>versus</i> saline solution	Nisar A, Shabbir J, Tubassam P et al. Local anaesthetic flush reduces post-operative pain and haematoma formation after great saphenous vein stripping : a randomised controlled trial. <i>Eur J Vasc Endovasc Surg.</i> 2006;31:325-31.	<p>GSV incompetence</p> <p>Group I (N=50): general anesthesia + local lidocaine and adrenaline <i>versus</i></p> <p>Group II (N=50): general anesthesia + saline solution</p> <p>Results at 1 day to 26 weeks of follow-up:</p> <ul style="list-style-type: none"> · Better reduction of hematoma in group I compared with group II (P = 0.007) · Better reduction of post-operative pain in group I compared with group II (P<0.001)
Saphenous stripping (Babcock) <i>versus</i> invaginated stripping	Scheltinga MR, Wijburg ER, Keulers BJ, De Kroon CE. Conventional versus invaginated stripping of the great saphenous vein : a randomized double-controlled clinical trial. <i>World J Surg.</i> 2007;31:2236-42.	<p>92 patients with GSV incompetence</p> <p>Various anesthesia modality</p> <p>Group I (N= 46) Conventional stripping, (Babcock) <i>versus</i></p> <p>Group II (N= 46): invaginated stripping.</p> <p>Results at 1 to 26 weeks of follow-up:</p> <ul style="list-style-type: none"> · Less blood loss in group II compared with group I (P<0.001) · No difference between groups in terms of postoperative pain and returned to work, but less saphenous nerve damage in group II
HL+S+ Trib phleb. <i>versus</i> HL+S +Trib phleb. + SEPS	Kianifard B, Holdstock J, Allen C, Smith C, Price B, Whiteley MS. Randomized clinical trial of the effect of adding subfascial endoscopic perforator surgery to standard great saphenous vein stripping. <i>Br J Surg.</i> 2007;94:1075-80.	<p>68 patients with GSV incompetence + Pe reflux</p> <p>Group I (N=34): HL +S+ Trib phleb <i>versus</i></p> <p>Group II (N=34): HL +S+ Trib phleb+ SEPS</p> <p>Patients with isolated SFJ junction reflux or /and deep reflux, C₆, PREVAIT were excluded</p> <p>Results at 1 week to 1 year of follow-up:</p> <p>The addition of SEPS was not associated with significant morbidity and had no effect on VV recurrence rate or HRQoL outcomes, but did reduce the number of incompetent Pe</p>

<p>Redo SFJ ligation <i>versus</i> Redo SFJ ligation +PTFE patch insertion in recurrent GSV</p>	<p>Winterborn R.J, Earnshaw J.J. Randomized trial of PTFE patch for recurrent great saphenous varicose veins. <i>Eur J Vasc Endovasc Surg.</i> 2006;34:367-73.</p>	<p>31 patients (40 lower limbs) with GSV reflux All presenting recurrent SFJ reflux Group I (N=20 lower limbs): redo SFJ ligation <i>versus</i> Group II (N=20 lower limbs): redo SFJ ligation+ PTFE patch interposition Results at 6 weeks, 1 year, and 2 years of follow-up: No difference between groups in terms of perioperative complications and recurrent neovascularisation.</p>
<p>Chemical ablation (UGFS)+HL <i>versus</i> Open Surgery (HL+S)</p>	<p>Abela R, Liamis A, Prionidis I, Mathai J, Gorton L, Browne T et al Reverse foam sclerotherapy of the great saphenous vein and saphenofemoral ligation compared to standard and invagination stripping: A prospective clinical series. <i>Eur J Vasc Endovasc Surg.</i> 2008;36:485-490.</p>	<p>Patients with GSV reflux Group I (N=30): HL+ reverse foam sclerotherapy Group II (N=30): HL + invagination S Group III (N=30): HL+ standard S General anesthesia for all procedures Results at 2 weeks of follow-up: Less post-operative complications and better patient satisfaction in group I compared with group II.</p>
<p>Flush SFJ ligation <i>versus</i> standard transfixion SFJ ligation</p>	<p>Winterborn R.J, Foy C, Heather H, Earnshaw J.J. Randomized trial of flush saphenofemoral ligation to standard and invagination stripping. <i>Eur J Vasc Endovasc Surg.</i> 2008;36:477-84.</p>	<p>182 patients (210 lower limbs) with GSV reflux Group I (N=87 lower limbs): flush SFJ ligation <i>versus</i> Group II (114 lower limbs) :standard transfixion SFJ ligation Results at 2 years of follow-up: No difference between groups in terms of PREVAIT and neovascularization</p>
<p>HL+S+ <i>versus</i> ± tributary phlebectomy <i>versus</i> S with ligation below SFJ of GSV ± tributary phlebectomy</p>	<p>Casoni P. Lefebvre-Villardebo M, Villa F, Corona P Great saphenous vein surgery without high ligation of the saphenofemoral junction. <i>J Vasc Surg</i> 2013;58:173-178.</p>	<p>120 Patients with SFJ and GSV reflux Group I (N=60): HL+S ± trib phleb <i>versus</i> Group II (N=60): S with ligation below SFJ of GSV ± trib phleb Results at 8 years of follow-up: · <i>PREVAIT and DS reflux</i> Group I = 32.2% vs group II=16.4 % (P= 0.045) · <i>Average time of PREVAIT</i> Group I=3.5 ±1.2 years vs group II= 4.1±1.6 years (P= 0.358=NS)</p>
<p>HL+S+ tributary phlebectomy + antibiotic prophylaxis <i>versus</i> HL+S+ tributary phlebectomy <u>without</u> antibiotic</p>	<p>Mekako AI, Chetter IC, Coughlin PA, Hatfield J, McCollumPT. Randomized clinical trial of co-amoxiclav <i>versus</i> no antibiotic prophylaxis in varicose vein surgery. <i>Br J Surg.</i> 2010;97(1):29-36.</p>	<p>Patients with GSV reflux Operative treatment: Group I (N=219): HL+ S+ trib phleb with antibiotics <i>versus</i> Group II (N=214): HL+ S+ trib phleb without antibiotics Results at 1 to 5 days of follow-up: Prophylactic antibiotics conferred satisfactory wound healing in group I (OR 2.2; 95% CI,1.3 to 3.6; P =0.003).</p>

Abbreviations :

AVP= ambulatory venous pressure; OS= duplex scan ;F-U= Follow-up; GS V= great saphenous vein; HL= high ligation; Pe = perforator; PTFE = polytetrafluoroéthylène; HRQoL = health-related quality of /life; PREVAIT= presence of varices after operative treatment; S =stripping; SEPS= subfascial endoscopie perfora tor surgery; SFJ= saphenofemoraljunction; Trib phleb.= tributary phlebectomy; UGFS = ultrasound guided foam sclerotherapy.