Table VI. Open Surgery or EVLA with various phlebectomy procedures
6 articles, 6 RCTs

Operative procedure	Reference	Summary
Open surgery with various types of tributary phlebectomy	Aremu M, Mahendran B, Butcher W, Khan Z, Colgan MP, Moore J et al. Prospective randomized controlled trial: conventional *versus* powered phlebectomy. *J Vasc Surg*. 2004;39:88-94	Monocenter study 141 patients and 188 lower extremities presenting GSV or/and SSV incompetence. No deep vein anomaly. CEAP class 2-3 General anesthesia Group I (n=100): OS with tributary stab avulsion *versus* Group II (n=88): OS with tributary avulsion using Trivex® **Results at 2 to 52 weeks of follow-up:** - Fewer incisions in group II **compared** with group I. P<0.0001 - No difference between groups in terms of operative time. P =0.16 No difference between groups in terms of patient satisfaction and cosmetic result
	Scavée V, Lesceu O, Theys S et al. Hook phlebectomy *versus* transilluminated powered phlebectomy for varicose veins surgery. Early	Multi-center study 80 patients presenting VV with GSV reflux. Exclusion criteria; SSV reflux, previous surgery on the same venous territory and

	results. *Eur J Vasc Endovasc Surg*. 2003;25: 473-5.	previous DVT CEAP class 2-6 General or spinal anesthesia Group I (n=40): OS with tributary stab avulsion *versus* Group II (n=40): OS with tributary avulsion using Trivex® **Results at 6 weeks of follow-up:** . Fewer incisions in group II (Trivex®) compared with group I. P<0.0001 . More bruising in group II (Trivex®) compared with group I. P=0.06 . No difference between groups in terms of postoperative pain, number of complications, residual varices, cosmetic result
	Ray-Chaudury SB, Huq Z, Souter RG, McWhinnie D. A randomized controlled trial comparing transilluminated powered phlebectomy with hook avulsions: an adjunct to day surgery. *The Journal of One Day Surgery* 2003;13:24-7.	Monocenter study 30 patients (40 LL) presenting VV in GSV or/and SSV territory Exclusion criteria: previous surgery on the same venous territory and deep venous incompetence. CEAP clinical class C 2-C3 Group I (n= 19): OS with tributary stab avulsion *versus* Group II (n=:21): OS with tributary avulsion using Trivex® **Post-operative results:** No difference in terms of postoperative pain

	Chetter I C, Mylankal K J, Hughes H, Fitridge R. Randomized clinical trial comparing multiple stab incision phlebectomy and transilluminated powered phlebectomy for varicose veins. *Br J Surg*. 2006;93:169-74.	Multi-center study 62 patients with primary symptomatic VV in GSV territory Exclusion criteria: previous surgery on the same venous territory, SSV incompetence, deep venous anomaly No CEAP class information Group I (n=33): OS with multiple stab incision phlebectomy *versus* Group II (n=29): OS with transilluminated powered phlebectomy **Post-operative results:** . No difference in terms of surgery duration . Less incisions in group II compared with group I . More skin bruising and pain in group II compared with group I
	Krasznai AG, Sigterman TA, Willems CE, Dekkers P, Snoeijs MGJ, Wittens CHA et al. Prospective study of a single treatment strategy for local tumescent anesthesia in Muller phlebectomy. *Ann Vasc Surg*. 2014. DOI10.1016/j.avsg10 .028	Multi-center study 101 patients with GSV or/and SSV incompetence. CEAP classification; C3-4, Ep, As, P r 2-4 All patients scheduled for ambulatory Muller phlebectomy under LA Group I: anesthetic solution Lidocaine 1%+ epinephrine in sodium bicarbonate 1.4% *versus* Group II: anesthetic solution Lidocaine 1%+ epinephrine in saline 0.9% standard solution. **Post-operative results:**

		. Significantly less pain during injection in group I compared with group II. P <0.01 No significant difference between groups in terms of per operative and postoperative pain
Open surgery with different tributary phlebectomy procedures using UGFS Sodium tetra-decyl sulphate Versus Polidocanol	Kushwaha JK, Anand A, Sonkar A A, Gupta R. A study to compare outcomes of Sodium tetra-decyl sulphate and Polidocanol in the treatment of varicosities due to incompetent tributaries of superficial vein of leg: a randomized controlled trial. Int Surgery Journal 2018; 5:3315-19	Monocenter study. 56 symptomatic patients presenting with GSV or/and SSV incompetence were treated by open surgery or EVLA. Incompetent tributaries were treated later by UGFS using STD or POL. CEAP clinical classification C2-C6 Exclusion criteria DVT, congenital or secondary varices Group I: STD (n=26) Group II: POL (n=30) **Results** Lost to follow-up 6 in each group Post procedure complications. There was no significant difference between the 2 groups in terms of skin necrosis. Conversely Pain and hyperpigmentation were lesser in group II compared to group I. P=0.01 Outcome at 4 weeks Pain was lesser in group II. P=0.01

Abbreviations:
EVLA = endovenous laser ablation; GSV: Great Saphenous Vein; EVLA=endovenous laser ablation LA= local anesthesia; LL=lower limb; OS= Open surgery: High ligation + Saphenous stripping+/ - Perforator ligation +/ - tributary phlebectomy; ; POL=Polidocanol; STD= sodium tetra-decyl sulphate SSV= small saphenous vein; VV= varicose veins.