

Table XXI. Liquid versus foam sclerotherapy in VV treatment.

6 articles, 5 RCT

Reference underlined in color means same RCT

Operative procedure	Reference	Summary
<p>Liquid sclerotherapy versus Foam sclerotherapy</p>	<p>Hamel-Desnos C, Desnos P, Wollmann J, Ouvry P, Mako S, Allaert FA. Evaluation of the efficacy of polidocanol in the form of foam compared with liquid form in sclerotherapy of the greater saphenous vein: initial results. <i>Dermatol Surg.</i> 2003;29:1170–75.</p>	<p>Multicenter study including 83 patients with incompetent GSV. No data on SSV, deep system, CEAP clinical class For both groups polidocanol 3%; V= 2 or 2.5 mL, according to vein diameter Group I (n=45): UGFS Turbofoam® versus Group II (n=43) : UGLS Direct puncture technique Injection at upper or middle-third of the thigh Complementary UGFS or UGLS if presence of persistent reflux identified Results at 3 weeks of follow-up: Reflux suppression: 84% in group I (UGFS) vs 40% in group II (UGLS). P<0.01 Results at 6-12 months of follow-up: Recanalization: 2 in group I (UGFS) versus 6 in group II (UGLS) After 1 year, no additional recanalization was observed with either foam or liquid.</p>
	<p>Yamaki T, Nozaki M, Iwasaki. Comparative Study of Duplex-Guided Foam Sclerotherapy and</p>	<p>Monocenter study 77 patients with isolated SFJ and GSV incompetence</p>

<p>Duplex-Guided Liquid Sclerotherapy for the Treatment of Superficial Venous Insufficiency. <i>Dermatol Surg.</i> 2004;30:718-722.</p>	<p>CEAP clinical classification C2-C5 Polidocanol 1 % and 3% injected under duplex guidance Group I (n=51): UGFS, Tessari method <i>versus</i> Group II (n=52): UGLS Results at 6-12 months of follow-up: . <i>Occlusion of treated vein:</i> 67.6% in group I vs 17.5% in group II (VFS). P <0.0001 . <i>Recurrent varicose veins:</i> 8.1% in group I (UGFS) vs 25% in group II (UGLS). P=0.048 . <i>Venous filling index (APG):</i> significant difference in favor of group I (UGFS) . <i>Residual venous fraction (APG):</i> significant difference in favor of group I (UGFS). P<0.0005</p>
<p>Alos J, Carreno P, Lopez JA, Estadella B, -Prat M, Marinel-lo J. Efficacy and safety of sclerotherapy polidocanol foam: a controlled clinical trial. <i>Eur J Vasc Endovasc Surg.</i> 2006;31:101-7.</p>	<p>Monocenter study including 75 symptomatic patients with reticular varices and REVAS Exclusion criteria: patients with truncal varices with SFJ incompetence and extra SFJ incompetence, post thrombotic varices. No data on CEAP clinical classification Polidocanol 0,5.- 2, 5%. V= 0,5-2 mL according to vein size Injection only in one varicose vein Group I (n=75): UGFS according to Tessari method <i>versus</i> Group II (n=75): UGLS in the same patient for identical lesions Results at 2-4 weeks of follow-up: <i>Pain:</i> UGFS is a less painful procedure compared with UGLS. P<0.001</p>

		<p>Results at 3 months of follow-up: .Occlusion of treated vein: 94.4% in group I (UGFS) vs 53% in group II (UGLS). P<0.001.</p>
	<p>Ouvry P, Allaert FA, Desnos P, Hamel-Desnos C. Efficacy of polidocanol foam versus liquid in sclerotherapy of the great saphenous vein: a multicentre randomised controlled trial with a 2 year follow-up. <i>Eur J Vasc Endovasc Surg.</i> 2008;36:366-70.</p>	<p>Multicenter study including 95 patients, with incompetent GSV. No data on SSV, no previous DVT. CEAP clinical classification C2-C6 Group I (n=47): polidocanol 3%; V= 2-2.5 mL; UGFS Turbofoam® <i>versus</i> Group II (n=48): UGLS Complementary UGFS or UGLS if presence of- persistent reflux identified Results at 3 weeks of follow-up: Reflux suppression: 85% in group I (UGFS) vs 35% in group II (UGLS). P<0.01 Results at 24 months of follow-up: Occlusion of treated vein: 53% in group I (UGFS) vs 12% in group II (UGLS)</p>
	<p>Rabe E, Otto J, Schliephake D, Pannier F. Efficacy and safety of great saphenous vein sclerotherapy using standardised polidocanol foam (ESAF): a randomised controlled multicentre clinical trial. <i>Eur J Vasc Endovasc Surg.</i> 2008;35:238-45.</p>	<p>Multicenter study including 106 patients with primary incompetent GSV. No data on SSV and deep vein. CEAP clinical classification C2-C5 Treated by polidocanol 3%; V= 3.3-3.8 mL; Group I (n=55): UGFS Turbofoam® <i>versus</i> Group II (n=53): UGLS Catheter technique Injection at middle-third of the thigh Results at 3 months of follow-up: . Reflux suppression: 69% in group I (UGFS) vs 27% in group II (UGLS). P<0.001 . Occlusion of treated vein: 54% in group I (UGFS) vs 17% in group II (UGLS). P=0.0001 . Total number of sessions: 1.3 in group I (UGFS) vs 1.6 in group II (UGLS)</p>

		<p>. Refilling time: 19.5 s in group I (UGFS) vs 13.6 s in group II (UGLS). P=0.0017</p> <p>. Patients' satisfaction (CIVIQ): Better in group I (UGFS) vs group II. P<0.0001</p>
	<p>Ukrimanoat T. Comparison of efficacy and safety between foam sclerotherapy and conventional sclerotherapy: a controlled clinical trial. <i>J med Assoc Thai</i> 2011;94. Suppl 2:535-540.</p>	<p>Monocenter study. 50 patients with primary symptomatic varicose veins (more than 2 mm in diameter) or postoperative varices not involving the SFJ.</p> <p>Group I (50 sites) treated with foam by injection of 0.5mL of polidocanol + air ratio 1:4)</p> <p>versus</p> <p>Group II (50 sites) treated with liquid injection of 0.5mL of polidocanol</p> <p>Results at 15 to 90 days of follow-up:</p> <p>. Vein occlusion: in favor of group II compared to group I. P<0.001.</p> <p>. Pain, inflammation and hyperpigmentation: less frequent in group I. P<0.001.</p>

Abbreviations:

APG= air plethysmography; CIVIQ= a quality of life tool;;DVT=deep venous thrombosis; GSV= great saphenous vein; REVAS= recurrent varices after surgery; SFJ=saphenofemoral junction; SFP=saphenofemoral junction; SSV=short saphenous vein; UGFS= ultrasound guided foam sclerotherapy; UGLS= ultrasound guided liquid sclerotherapy V = injected volume;