

Surgery vs EVLA: recurrence by AAGSV is more frequent after EVLA

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No disclosures

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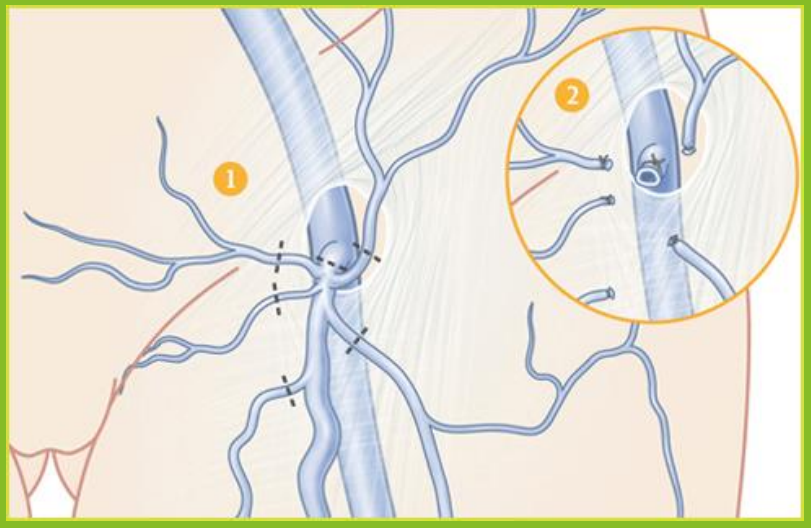
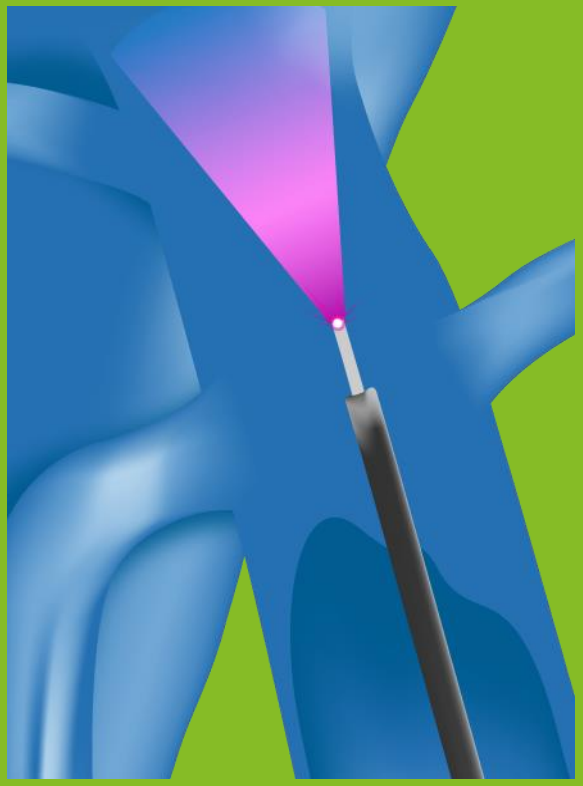
The Problem

Is there more AAGSV reflux after EVTA compared to HL/S?





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AAGSV reflux after EVTA

Journal of
Vascular Surgery
Venous and Lymphatic Disorders™

A longitudinal single-center cohort study on the prevalence and risk of accessory saphenous vein reflux after radiofrequency segmental thermal ablation of great saphenous veins

Thomas M. Proebstle, MD, MSc,[a,b] and Thomas Möhler, MD,[a,b] *Mainz and Mannheim, Germany*

During 4 years of follow-up (n=93), according to life-table analysis: **32%** of all legs and **55%** of legs with a detectable anterior AAGSV exhibited refluxing anterior ASVs.

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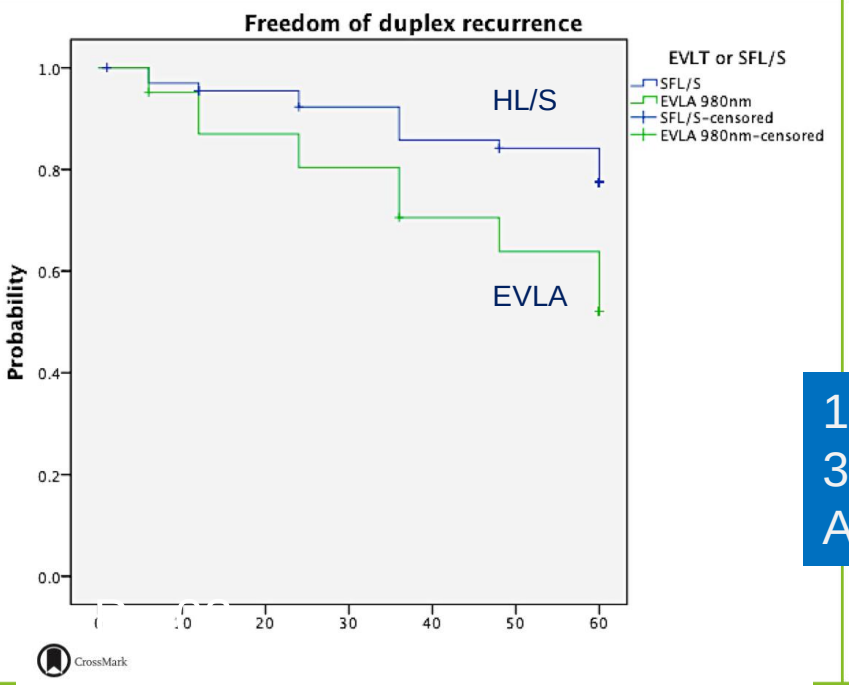
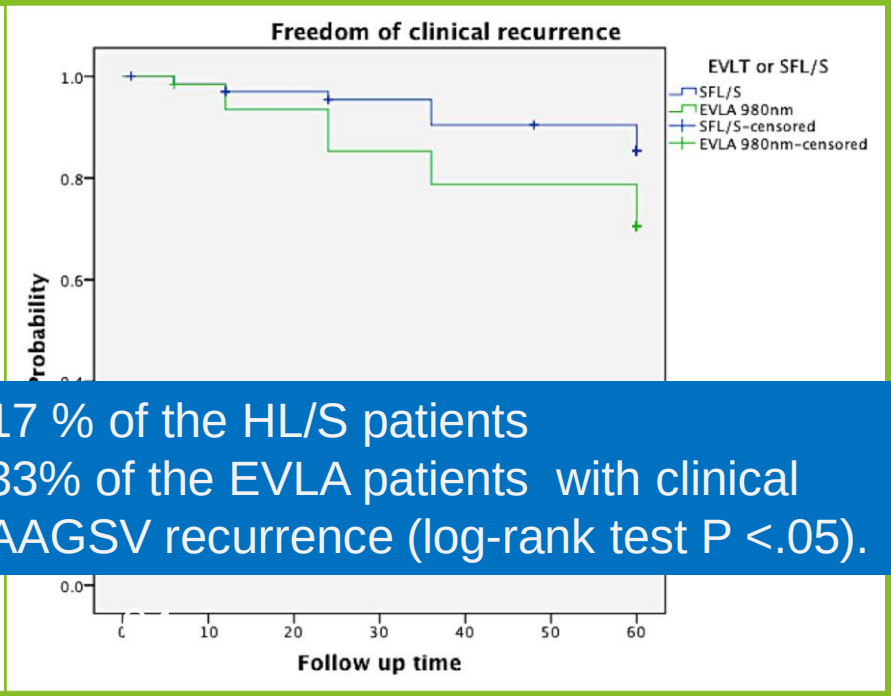
Varico 1 : 5 years RCT : HL/S vs EVLA (bare fiber)





17 % of the HL/S patients
33% of the EVLA patients with clinical AAGSV recurrence (log-rank test P <.05).

Five-year follow-up of a randomized, controlled trial comparing saphenofemoral ligation and stripping of the great saphenous vein with endovenous laser ablation (980 nm) using local tumescent anesthesia

Stefanie A. Gauw, CRC, James A. Lawson, MD, PhD, Clarissa J. van Vlijmen-van Keulen, MD, PhD, Pascal Pronk, MD, Menno T. W. Gaastra, MD, and Michael C. Mooij, MD, *Alkmaar, The Netherlands*

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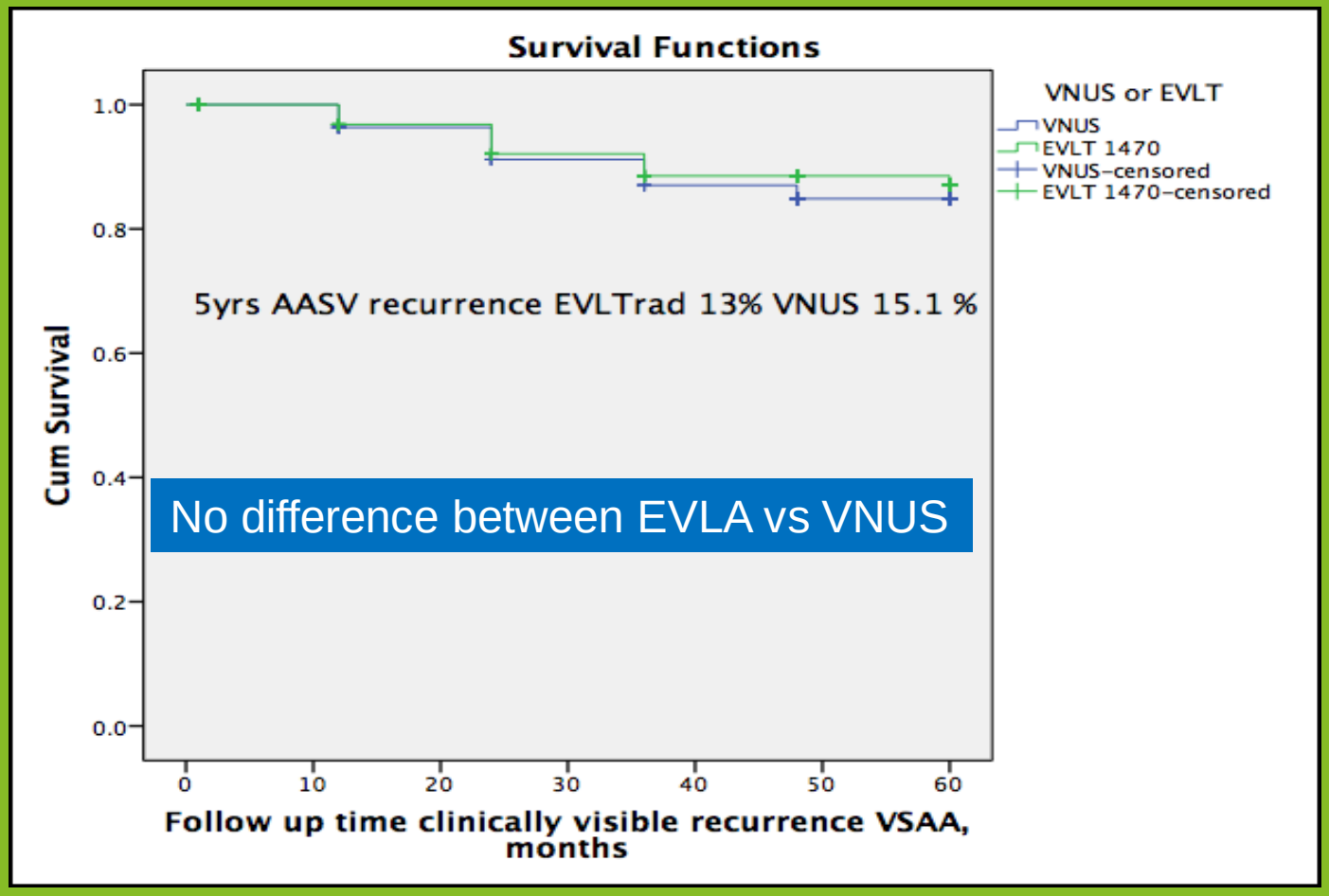
Varico 2 study : VNUS vs Radial fiber EVLA



Neovascularisation mostly not clinical relevant

	Conventional surgery ($n = 63$)	EVLA ($n = 63$)
GSV reflux		
Above-knee	8 (13)	11 (17)
Below-knee	17 (27)	17 (27)
Missing	9 (14)	14 (22)
AASV reflux	3 (5)	8 (13)
Missing	10 (16)	17 (27)
SFJ reflux	8 (13)	14 (22)
Missing	0 (0)	6 (10)
Neovascularization		
Grade I	17 (27)	2 (3)
Grade II	11 (17)	8 (13)
Refluxing tributaries		
Above-knee	16 (25)	22 (35)
Below-knee	18 (29)	15 (24)

the proportion of patients with grade II neovascularization was similar following conventional surgery and EVLA (P = 0·606)

Van den Velden BJS 2016

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Longterm RCT's comparing EVLA vs HL/S

AASV Reflux						
	EVLA		HL/S			
	totaal	AAGSV reflux	totaal	AAGSV reflux	follow up months	
Gauw (2016)	61	25	60	5	60	p<.05
Disselhof (2011)	41	6	35	0	60	
Rasmussen (2013)	69	6	69	6	60	
Rass (2015)	152	27	129	2	60	p<.05
Flessenkamper (2016)	45	14	63	2	60	p<.05
Velden (2016)	63	8	63	3	60	
Totaal	431	86	419	18		
%	EVLA	19,9 %	HL/S	4.2 %		*P* < .05

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Conclusion: In long term more AAGSV Reflux after EVLA vs HL/S !

Do we have to do something about it ?

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How can we avoid the higher incidence of AAGSV reflux after EVLA?

Option 1.

If possible, simultaneous closure of the sufficient AAGSV during the treatment of the greater saphenous vein?

Or

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Option 2.

Complete occlusion of the insufficient saphenous vein flush at the sapheno-femoral junction?

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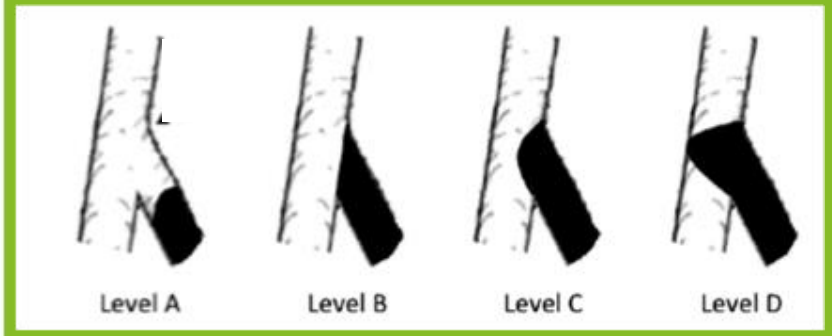
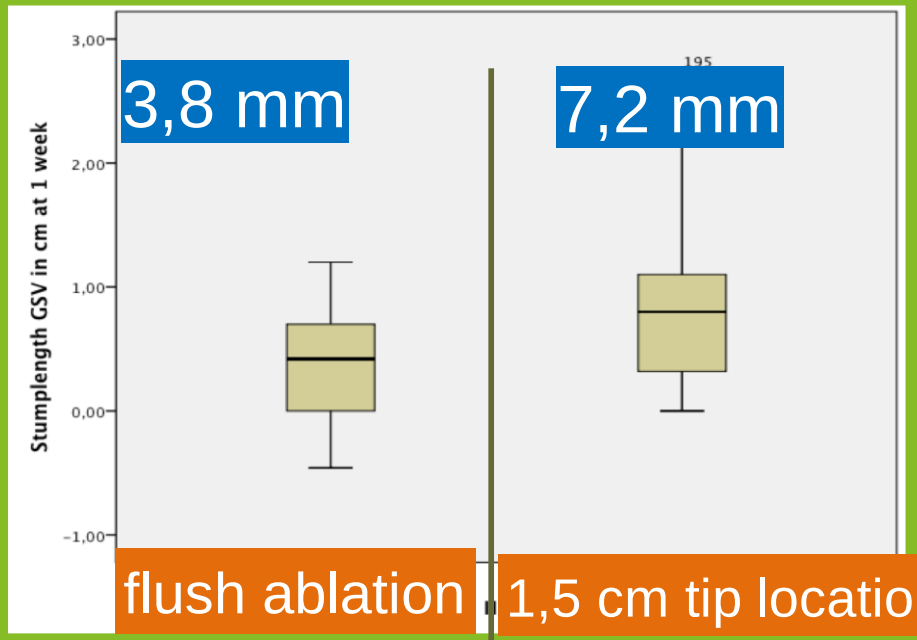
feasibility study laser crossectomy

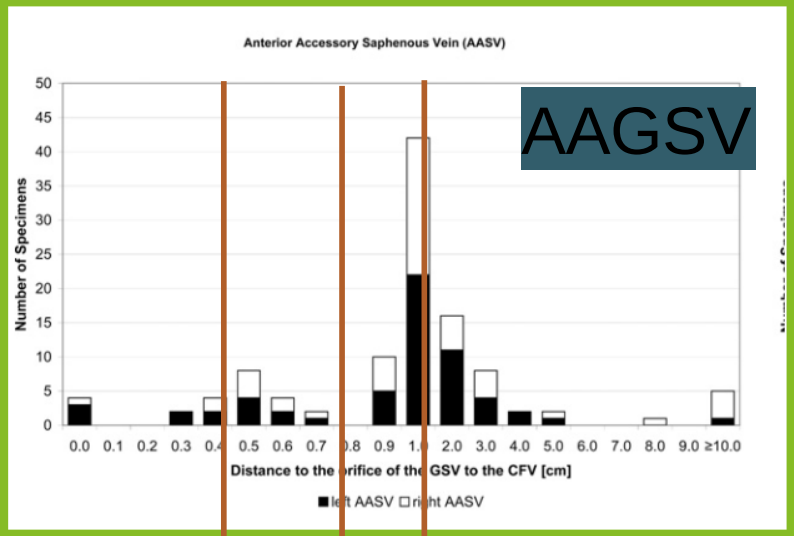


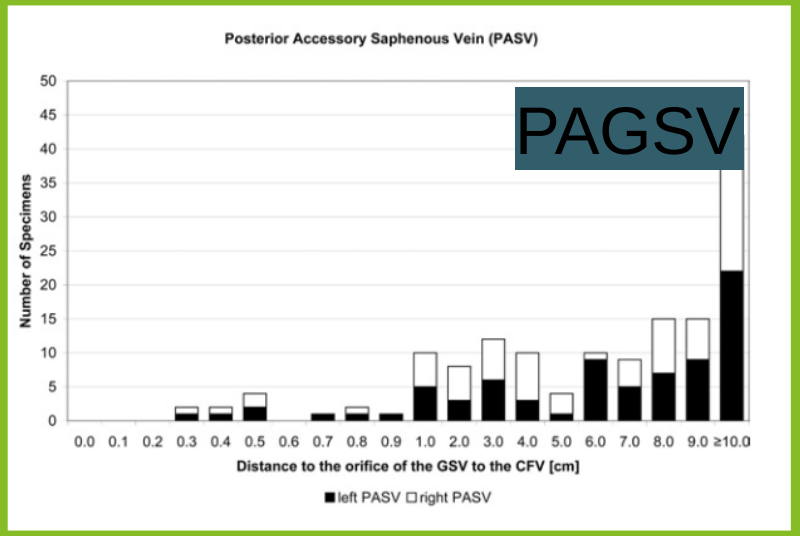
17 | 15 | 2



50% total stump closure with flush ablation

distance from accessory veins till SFJ border





1. Mühlberger D, Morandini L, Brenner E.. J Vasc Surg.; 2009 Jun 1;49(6):1562–9.

Stump length

3,8 mm

10 mm (Proebstle 2015)

7,2 mm

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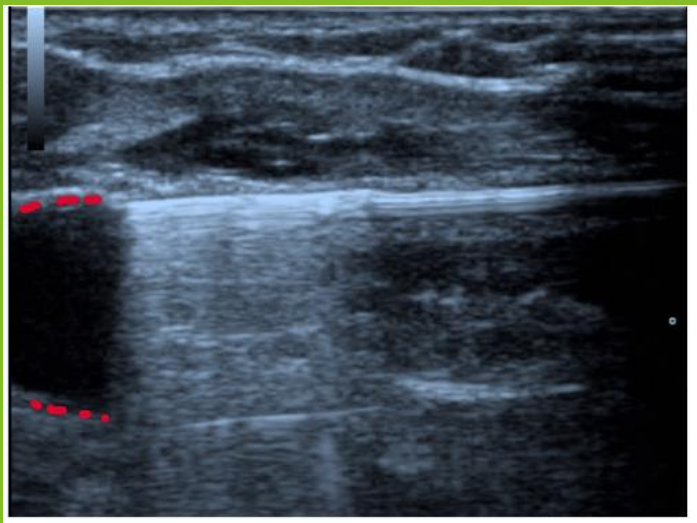
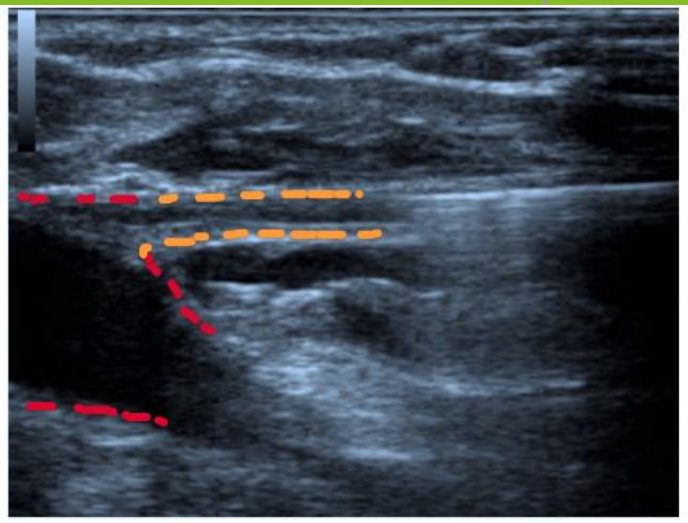
TOMY-study: “Lasercrossectomy” Randomized single center study

The aim of the randomized controlled study is to compare **AAGSV** reflux and neovascularisation rates 1 and 2 years following either conventional GSV laser ablation (tip 1,5 cm from SFJ) or complete GSV flush ablation including the SFJ using a 1470 nm radial two rings fiber
(Biolitec)





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