

CJ van Vlijmen, SA Gauw, P Pronk,
MC Mooij, MTW Gaastra, JA Lawson,
Centrum Oosterwal, Alkmaar

Randomized study Endovenous Laser Ablation versus RF
VNUS ClosureFAST of Incompetent Great Saphenous Vein
Using Tumescant Anesthesia Saphenous Vein:
One year results.

Pilot RF VNUS CF vs. EVLA Radial 1470 nm

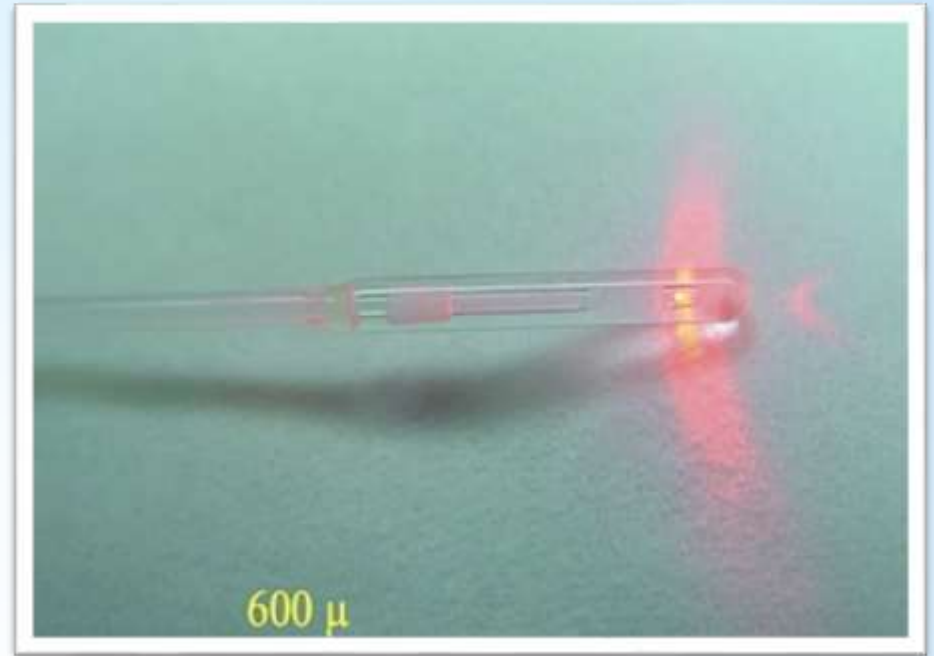
Procedure	no	Occlusion rate after 1 year	Time to normal function (days)	Back to work (days)
VNUS	83	100 %	1,4	2,6
EVLT 980	62	98,0 %	3,2	4,4
Radial 1470	51	93,0 %	1,4	2,9
Stripping	66	95,6 %	3,2	4,2

Treatment of incompetent GSV: VARICO II

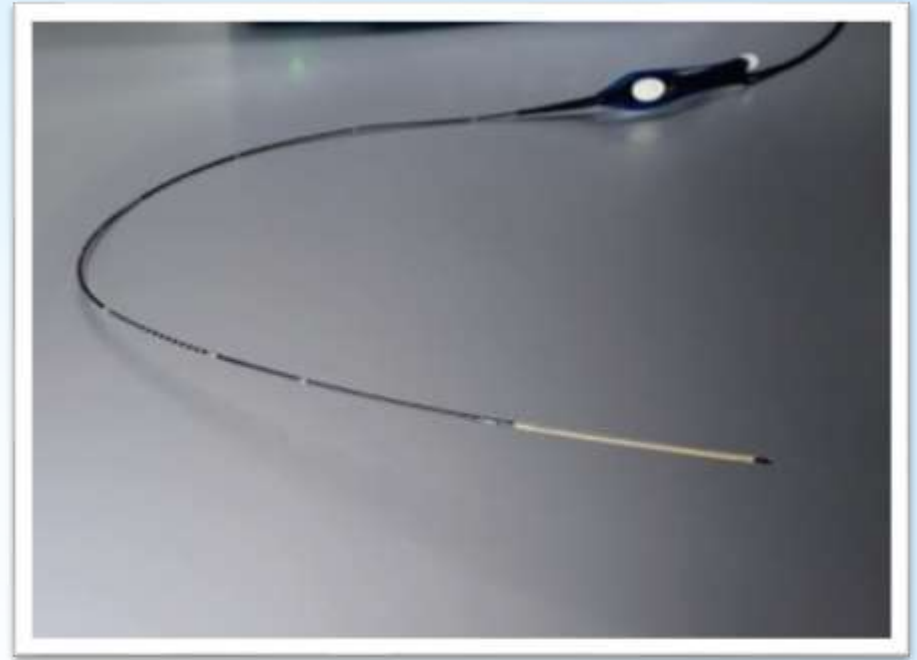
- Endovenous techniques, **using tumescent:**
 - Endovenous laser ablation (radial tip, 1470nm)
 - RF VNUS ClosureFAST

- Literature: Almeida JI et al, J Vasc Interv Radiol 2009 Jun;20(6):752-9. Perrin M et al, Int Angiol 2010 Aug;29(4):303-7. Nordon IM et al, Ann Surg 2011 Dec;254(6):876-81.

EVLT 1470nm radial tip



- Radial emitting laser fiber with blunt tip
- Homogenous circumferential (360°) energy emission.
- Energy delivery during Pull Back (1470nm, 10 watt 70-80J/cm)



RF VNUS Closure fast

- Radiofrequency current induced heating coil
- RF segmental ablation / Short energy cycle
- No energy delivery during pull back
- Conducting heating (temperature controlled)

Study design: VARICO II trial



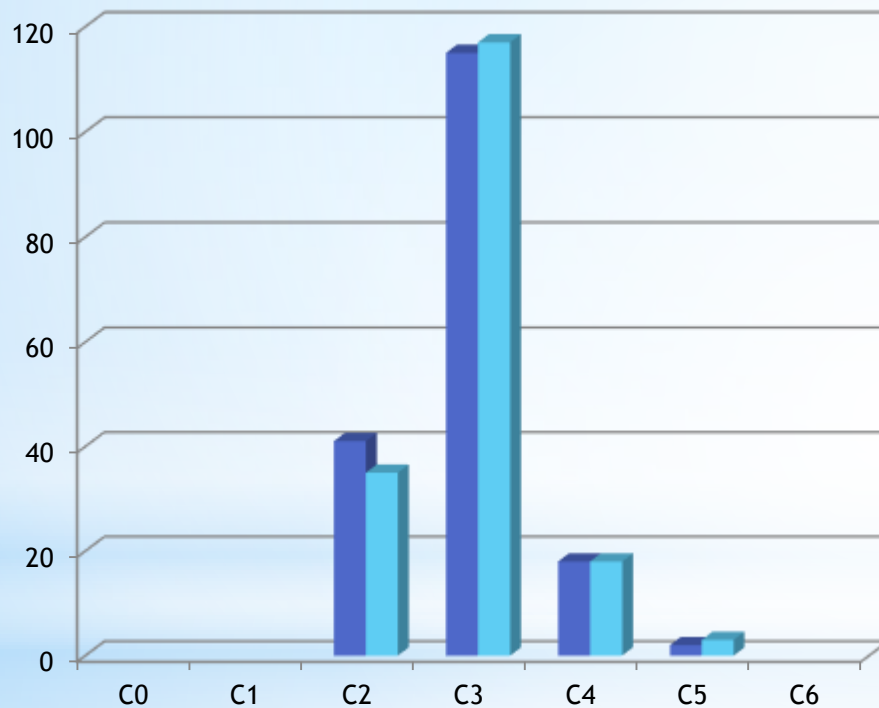
- Long term endpoints (5 year follow-up):
 - Duplex and clinically detected recurrences at the saphenofemoral junction
 - Clinical results, CEAP, VCSS, Aberdeen, QoL (EuroQuol5, VAS)

VARICO II trial : one year results

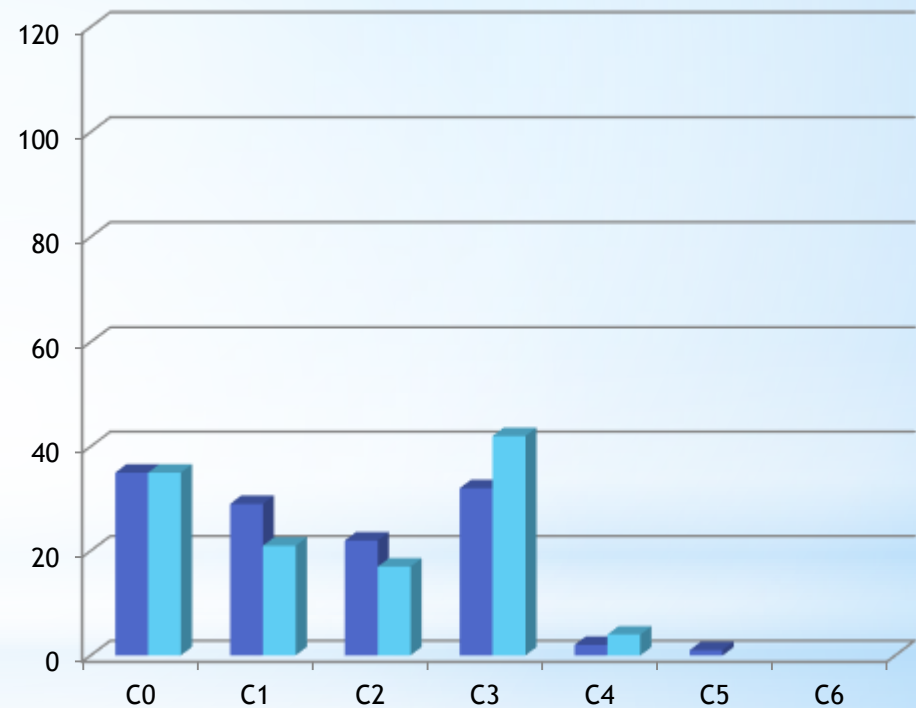
- Patients lost to follow up
 - 11 VNUS and 9 EVLA
- One year FU
 - 122 VNUS and 120 EVLA
 - 44 VNUS and 43 EVLA not evaluated yet



CEAP classification pre-op and after one year

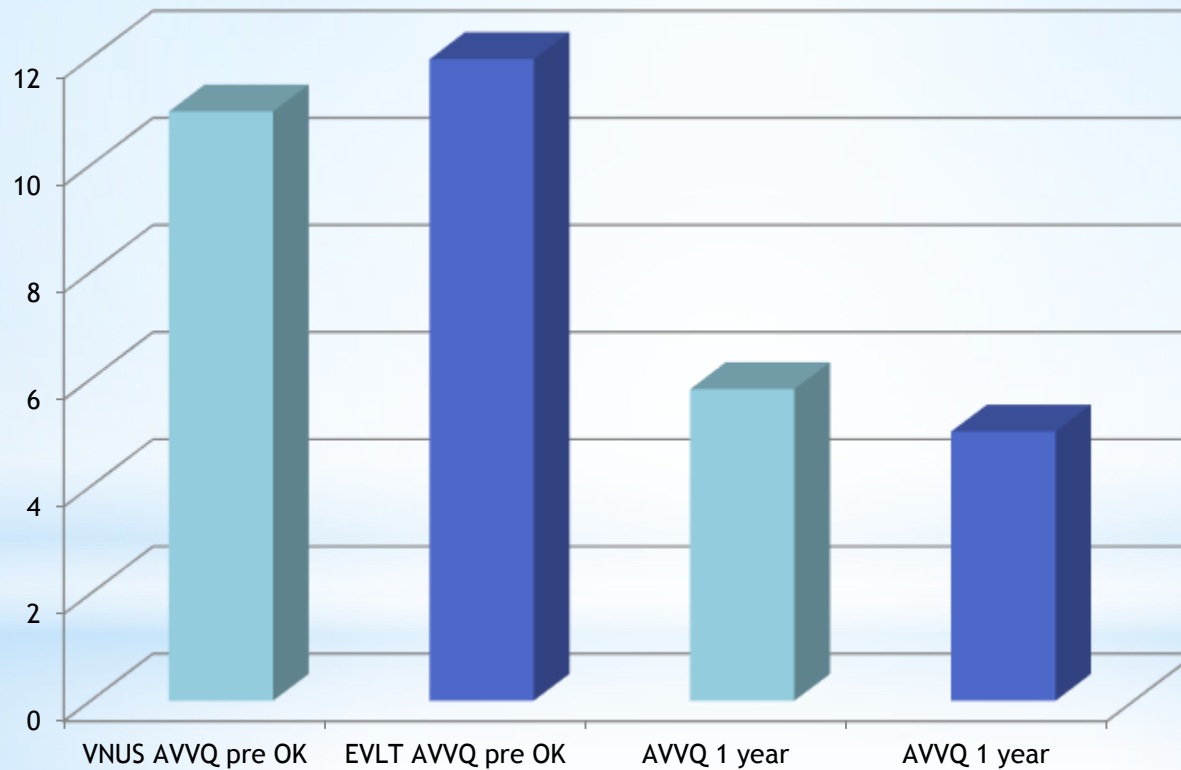


Pre-operative ■ VNUS ■ EVLT

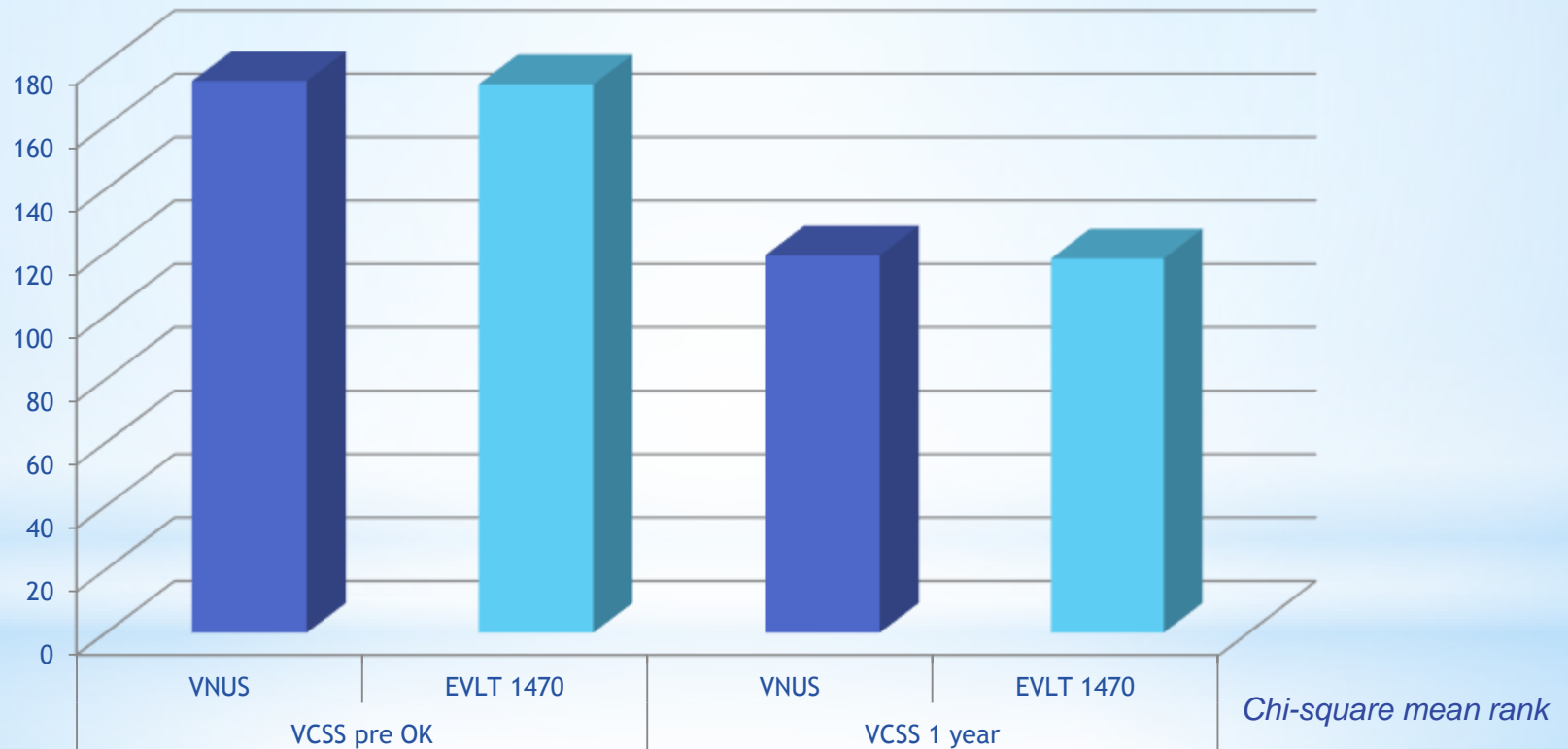


One year ■ VNUS ■ EVLT

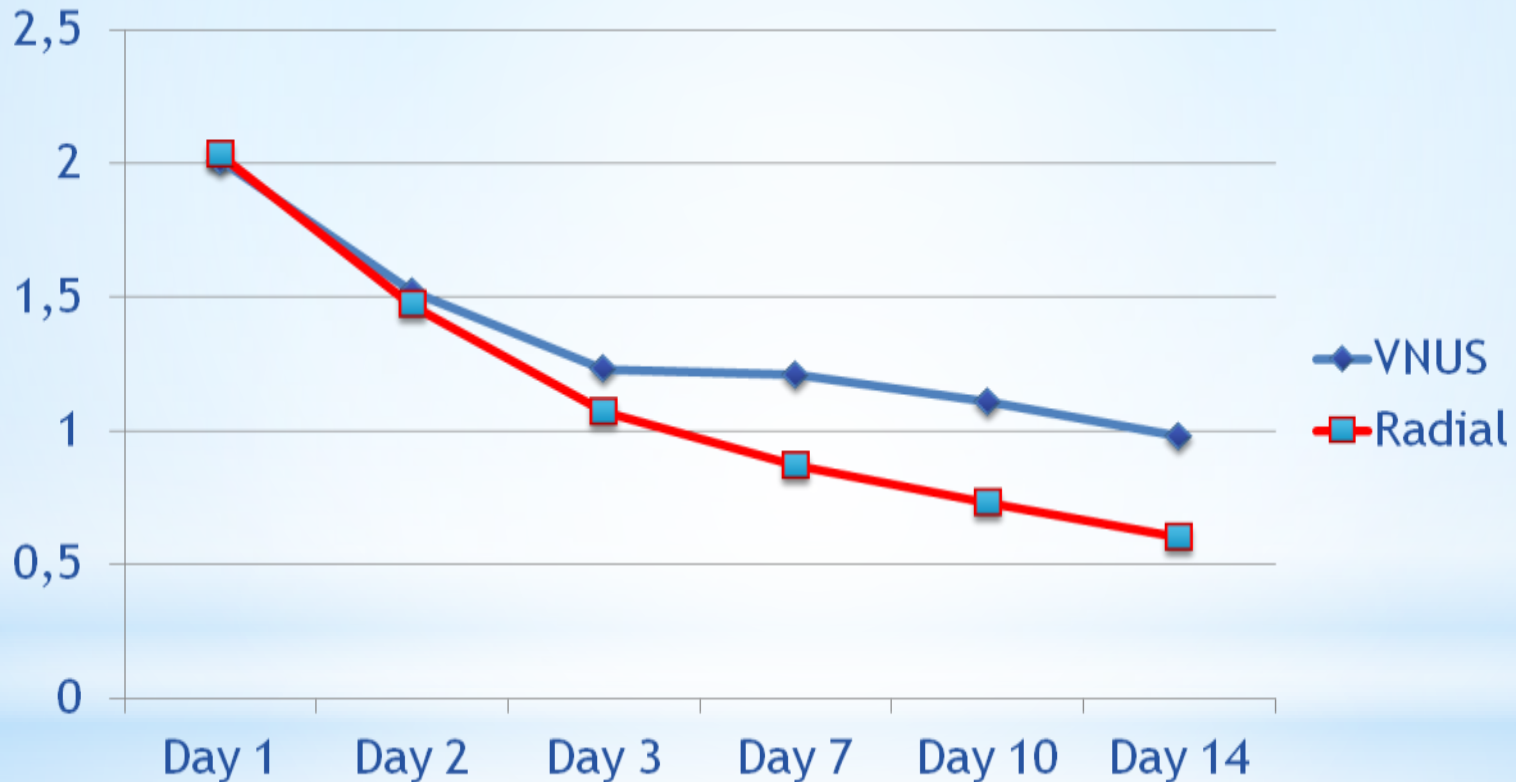
Aberdeen VVQ pre and 1 year



VCSS pre-operative and after one year



VAS pain scores VNUS vs Radial EVLA



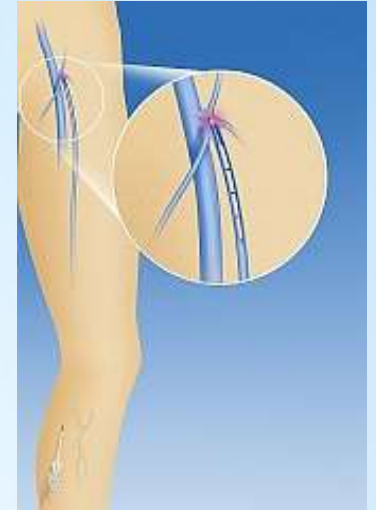
77 % of VNUS and 74% of radial patients does not use painkillers

Daily activities and back to work (EuroQuol5)

		N	Mean (days)	SD
Daily Activities	VNUS	122	1,45	1,40
	Radial	120	1,13	0,82
Back to Work	VNUS	122	2,10	1,93
	Radial	120	2,17	2,26

Does not want to undergo this surgery again : VNUS 3,9 % Radial 1,5%

VARICO II Occlusion



- **Partial occlusion** was observed after 1 ClosureFast procedure and 1 **failure** occurred after radial EVLA .
- Total primary occlusion rate after 12 months was 99,0 % after both treatments.

Conclusion

- RF VNUS Closurefast and EVLA (1470nm, radial tip) show no statistical difference in recurrences from the GSV or sapheno-femoral junction
- Successful recovery (daily activities and back to work)
- Both procedures are well tolerated, safe and effective



centrum
oosterwal
dermatologie
& flebologie

THANK YOU!