

2019 MID-ATLANTIC CONFERENCE

9th ANNUAL CURRENT CONCEPTS IN VASCULAR THERAPIES

2019

Hilton Virginia Beach Oceanfront
Virginia Beach, Virginia

MAY 2-4



2019 MID-ATLANTIC
CONFERENCE

9th ANNUAL CURRENT CONCEPTS IN
VASCULAR THERAPIES

2019



C Scott McEnroe, MD, FACS

Medical Director
Vein Center of Virginia

Sentara Vascular Specialists
Sentara Medical Group

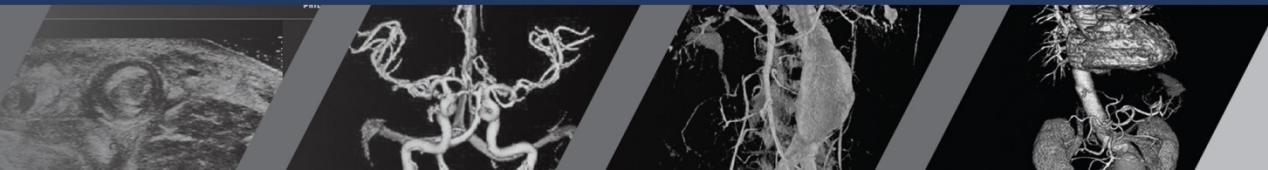
May 3, 2019

**VARICOSE VEINS SHOULD BE REMOVED AT
THE PRIMARY PROCEDURE**



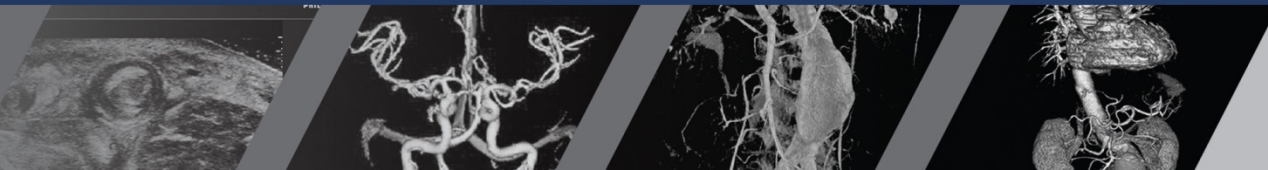
VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- Rules of engagement
- *C2, C3 venous disease*
- *C4, C5, C6 venous disease: phlebectomy probably contraindicated at initial treatment*



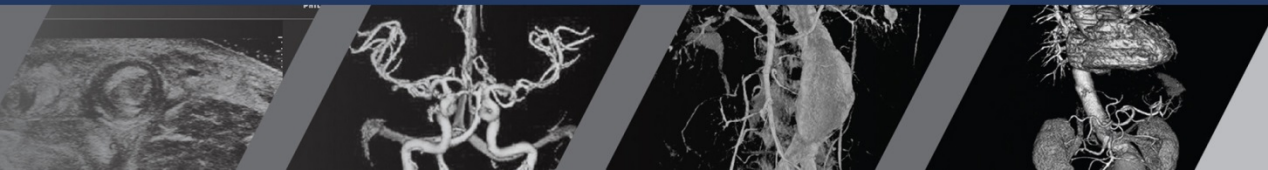
VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- Historical Gold Standard C2, C3-” **stripping** “, *excision of varicose veins*
- 1998-RF ablation
- 2002-Laser ablation
- ERA of staged management



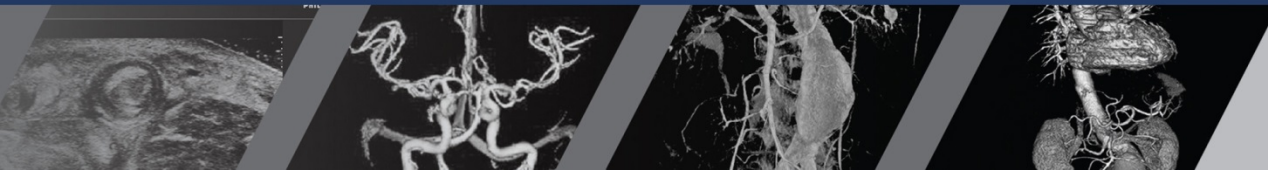
VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- **What Changed??????**



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- **Nothing!!!!!!!!!!!!!!**



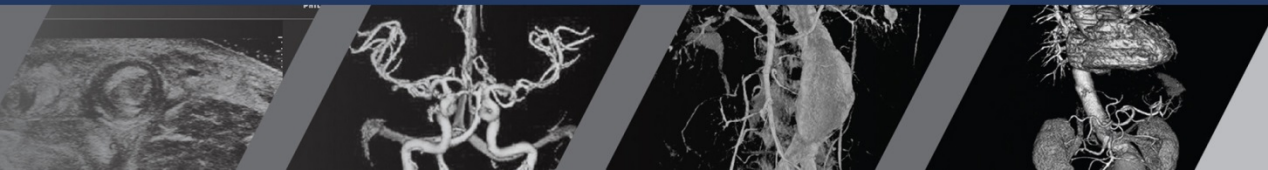


VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- **Nothing?????????**
- **Patient:** resolution of pain
minimize recurrence
improved appearance



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE



Varicose veins be gone.
Never has it been this easy to have beautiful legs.

Office based treatment • Radio-frequency ablation of veins • Sclerotherapy of spider veins • Specialist venous ulcer management

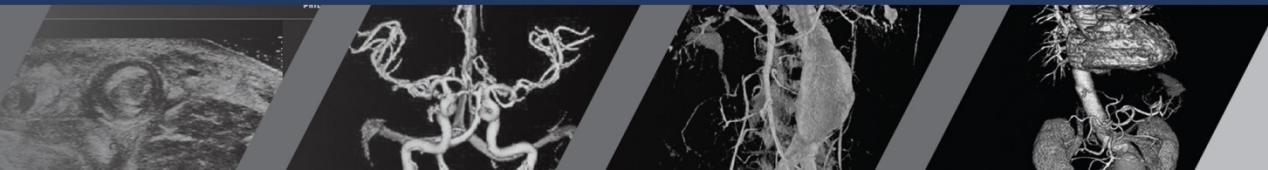
VEIN CENTRES
SOUTH AFRICA
DURBAN

Dr Johan Wijnhout, Specialist Surgeon, MBChB, LMCC, FCS(SA) |
031-261-7111 | info@veinsurgery.co.za | www.veinsurgery.co.za
Medigate Centre 2, Umhlanga (Next to Umhlanga hospital)

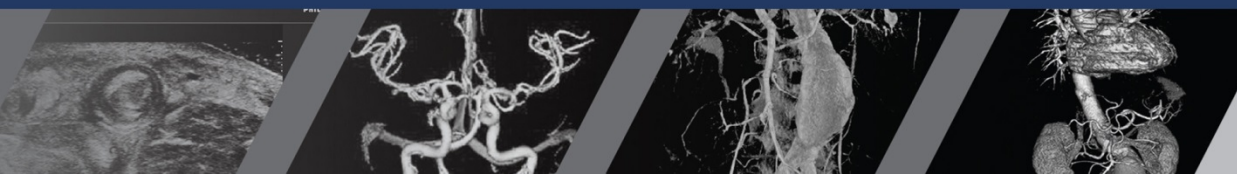
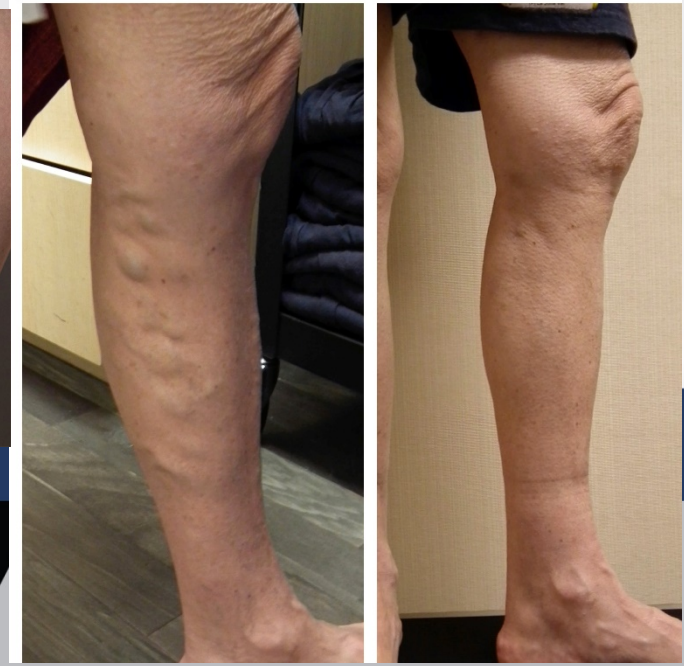
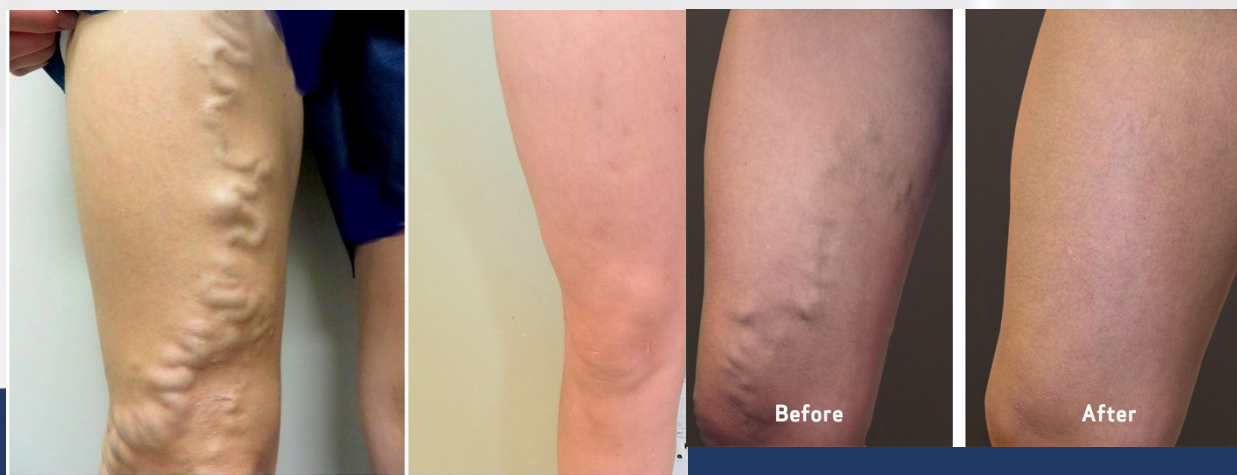


VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- **Nothing????????**
- **Surgeon(treating MD): ablation only, easy, profitable intervention, 6 week post ablation assessment, then phlebectomy if needed**



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- THE RUB: C2, C3

- Quality of life issue

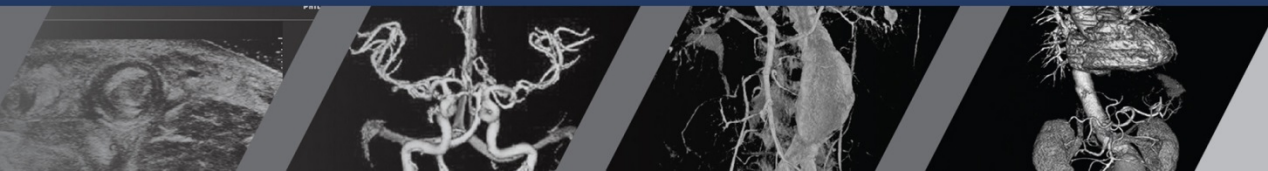
- Feel better
- ***Look better***
- Don't want to wait months or years
- Don't want multiple procedures

- Associated

- » *Down time*

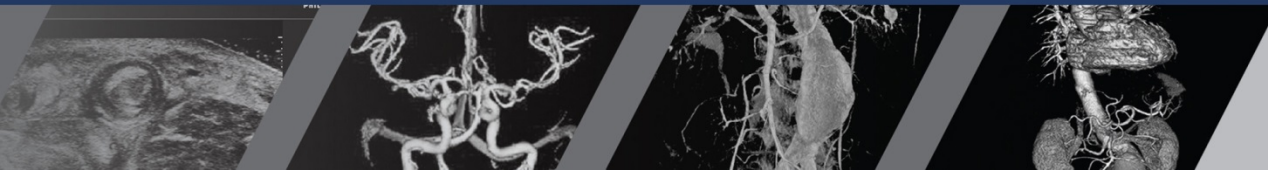
- » *Additional lost time from work, social activity, Instagram modeling*

- » *Additional costs from procedure co-payments*



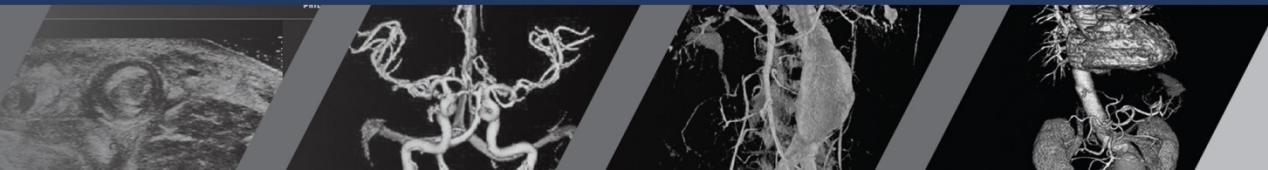
VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- **WHY NOT GIVE THEM WHAT THEY WANT?**
Most patient's want varicose veins removed at primary procedure, just ask them!!!!!!
- ***Phlebectomy***: not painful, doesn't change recovery, shouldn't cause scarring, gives immediate results, extra 15-20 minutes to perform, saves patient money and downtime



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- **WHY NOT GIVE THEM WHAT THEY WANT?**
- *LAZY*
- *LACK SKILLS TO PERFORM MICROAVULSION PHLEBECTOMY*
- *FINANCIAL INCENTIVE: discounted secondary procedures*



**BYE, BYE...GOTTA FLY!!!!!! GOOD NEWS YOUR ABLATION WENT FINE.
DON'T WORRY YOUR VARICOSE VEINS WILL GO AWAY SOME DAY.
IF THEY DON'T IT'S BECAUSE YOU DID SOMETHING WRONG.
YOU CAN ALWAYS COME BACK AND MCENROE WILL FINISH THE JOB.**

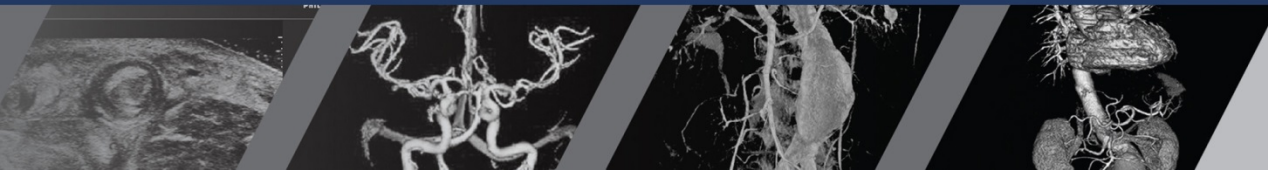


VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- **THE RUB: C2, C3**

- **Personal Experience**

- C2, C3 patients rarely happy with ablation *alone* if they were unhappy with appearance of varicose veins on presentation
 - Outside second opinions
 - Patients within practice

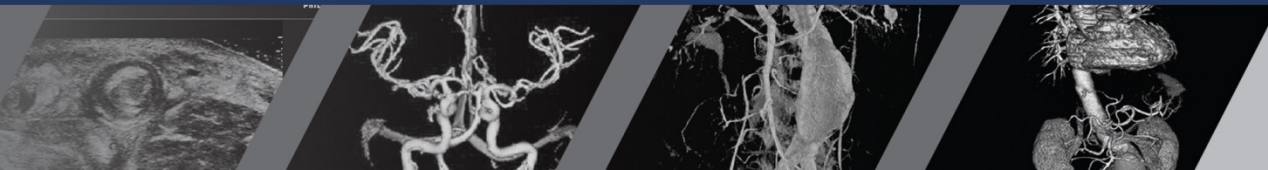


VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

- **THE RUB: C2, C3**

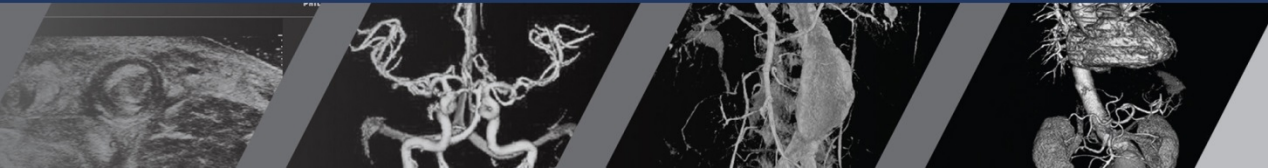
- **Personal Experience**

- Ablation alone: unpredictable effect on varicose veins
 - *Complete/partial disappearance of varicose veins with future recurrence in same distribution*
 - *Partial disappearance of varicose veins*
 - Complete, permanent disappearance of varicose veins
 - No change
 - Phlebitis common with larger varicosities



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

SHOW ME THE DATA



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE



Format: Abstract

Full text links

Int Angiol. 2009 Aug;28(4):311-4.

Fate of varicose veins after great saphenous vein stripping alone.

Nishibe T¹, Kondo Y, Dardia A, Muro A, Nishibe M.

Author information

Abstract

AIM: The aim of this study was to observe prospectively the clinical sequelae of varicose veins after great saphenous vein (GSV) stripping alone, and to examine whether spontaneous varicose vein regression or disappearance continued for a long period (>3 years).

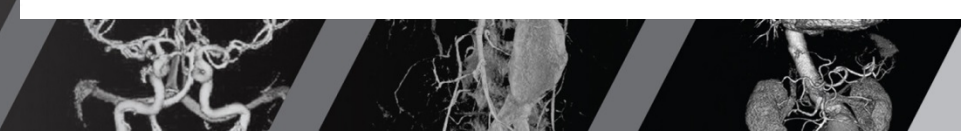
METHODS: Thirty-nine consecutive patients (20 males and 19 females; mean age 57.2), who underwent GSV stripping in Fujita Health University (55 limbs) between November 1, 2002 and December 31, 2003 were enrolled.

RESULTS: At four to six weeks, varicose veins spontaneously resolved in 50 limbs (91%), in which subsequent sclerotherapy was not necessary. Five limbs subsequently underwent sclerotherapy for residual varicose veins (5%). At more than three years, 49 limbs (89%) completed the follow-up study. The recurrence after GSV stripping alone occurred in four of the 45 limbs (9%), while those of GSV stripping with sclerotherapy was one of the four limbs (25%).

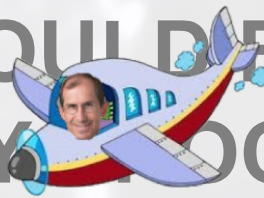
CONCLUSIONS: This study definitely demonstrated that spontaneous varicose vein resolution can continue for more than three years after GSV stripping alone, suggesting that varicectomy can be deferred or avoided in many patients.

PMID: 19648876

[Indexed for MEDLINE]



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE



J Vasc Surg. 2005 Dec;42(6):1145-9.



Can phlebectomy be deferred in the treatment of varicose veins?

Monahan D, et al.

Author information

Abstract

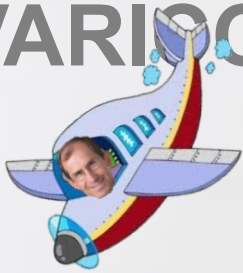
OBJECTIVE: This study was designed to observe the clinical sequelae of varicose veins after great saphenous vein (GSV) ablation and to assess possible predictability of spontaneous varicose vein regression.

METHODS: Patients with symptomatic varicose veins secondary to GSV insufficiency treated with radiofrequency ablation (RFA) were enrolled in the study. Up to five of the largest varicose veins in each limb were mapped, sized, and documented before RFA. No varicose vein was treated either at the time of RFA or within 6 months postoperatively. Varicose vein status was recorded at follow-up visits.

RESULTS: Fifty-four limbs in 45 patients were included. A total of 222 varicose veins were documented before RFA (4.1 +/- 1.1 varicose veins per limb) with an average size of 11.4 +/- 3.7 mm. During the follow-up period, complete resolution of visible varicose veins was seen in 13% of limbs after RFA alone and 63 (28.4%) varicose veins spontaneously resolved. A further 88.7% (141/159) of varicose veins decreased in size an average of 34.6% (4.3 +/- 3.4 mm). Preoperatively, 19.4% of varicose veins were above the knee and 75.7% were below the knee. Complete varicose vein resolution was 41.9% (18/43) above the knee and 25.6% (43/168) below the knee. For the above-knee varicose veins 88.4% (38/43) were located medially, and all the resolved ones (47.4%, 18/38) were medial varicose veins. Resolution rates of the 168 below-knee varicose veins were 30.6% (33/108) of medial, 23.1% (6/26) of anterior, 20.0% (3/15) of lateral, and 5.3% (1/19) of posterior.

CONCLUSIONS: Great saphenous vein ablation resulted in subsequent resolution or regression of many lower-limb visible varicose veins. With further study, the predictability of varicose vein regression may perhaps be increased, which can then direct the treatment strategy to further leverage the advantages of minimally invasive endovenous procedures.

VARIKOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE



J Vasc Surg. 2013 Jul;58(1):166-72. doi: 10.1016/j.jvs.2012.12.054. Epub 2013 Apr 6.



Endovenous ablation with concomitant phlebectomy is a safe and effective method of treatment for symptomatic patients with axial reflux and large incompetent tributaries.

Harlander-Locks M¹, Jimenez JC, Lawrence PE, Denuberts JG, Rigberg DA, Gelabert FA.

Author information

Abstract

OBJECTIVE: To examine outcomes following 1000 consecutive endovenous radiofrequency ablation (RFA) closures of saphenous veins and 500 ambulatory phlebectomy procedures for chronic venous insufficiency. Based on the outcomes in this patient cohort, we aim to determine whether concomitant or staged phlebectomy is preferred and examine the rate and optimal treatment of complications using a dedicated treatment algorithm based on our classification system for level of closure following these procedures.

METHODS: Between 2004 and 2012, patients with symptomatic superficial venous incompetence who underwent endovenous RFA of incompetent saphenous veins were identified as well as patients with concomitant or staged microphlebectomy. Demographics, risk factors, procedural success rate, concurrent procedures, complications, and symptom relief were recorded.

RESULTS: One thousand radiofrequency ablations (95.5% great saphenous vein and accessory great saphenous veins, 4.5% small saphenous vein) were performed in the ambulatory setting (patients = 735, limbs = 916); 355 limbs with large (>3 mm) symptomatic incompetent tributaries underwent concomitant phlebectomy. Additionally, 145 limbs required phlebectomy at a later setting for persistent symptoms following saphenous RFA. Indications for treatment included lifestyle-limiting pain (94.8%), swelling (86%), lipodermatosclerosis (5.3%), ulceration (9.4%), and/or bleeding (1.4%). All patients (100%) underwent a follow-up ultrasound 24 to 72 hours following the procedure to assess for successful closure and to rule out deep venous thrombosis. The majority of patients (86.7%) had relief of their symptoms at a mean follow-up of 9 months. No patients developed postoperative deep venous thrombosis; however, saphenous closure extended partially into the common femoral vein wall in 13 patients (1.8%) and flush with the saphenofemoral junction in 47 (4.7%). One patient developed a pulmonary embolus despite a normal

CONCLUSIONS: The majority of patients with symptomatic chronic venous insufficiency benefit from endovenous RFA of incompetent saphenous veins with comparable results to published surgical outcomes for endovenous closure. The great majority of patients with refluxing tributary veins greater than 3 mm in diameter required phlebectomy in addition to saphenous ablation. These patients may benefit from concomitant phlebectomy along with endovenous saphenous closure.

VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE



Br J Surg. 2014 Aug;101(9):1093-7. doi: 10.1002/bjs.9665. Epub 2014 Jun 11.



Clinical outcomes and quality of life 5 years after a randomized trial of concomitant or sequential phlebectomy following endovenous laser ablation for varicose veins.

El-Sheikha J, Nanchra S, Caradice D, Wallace T, Samuel N, Smith GE, Chatter IC.

Author information

Abstract

BACKGROUND: Endovenous laser ablation (EVLA) is a popular treatment for superficial venous insufficiency. Debate continues regarding the optimal management of symptomatic varicose tributaries following ablation of the main saphenous trunk. This randomized trial compared the 5-year outcomes of endovenous laser therapy with ambulatory phlebectomy (EVLTA) with concomitant ambulatory phlebectomy, and EVLA alone with sequential treatment if required following a delay of at least 6 weeks.

METHODS: Patients undergoing EVLA for great saphenous vein insufficiency were randomized to receive EVLTA or EVLA alone with sequential phlebectomy, if required. Outcomes included disease-specific quality of life (QoL) (Aberdeen Varicose Vein Questionnaire; AVVQ), requirement for secondary procedures, clinical severity (Venous Clinical Severity Score; VCSS), residual and recurrent varicose tributaries, and generic QoL. Patients were followed up for 5 years.

RESULTS: Fifty patients were randomized equally into two parallel groups. The EVLTA group had lower VCSS scores at 12 weeks (median 0 (i.q.r. 0-1) versus 2 (0-2); $P < 0.001$), and lower AVVQ scores at 6 weeks (median 7.9 (i.q.r. 4.1-10.7) versus 13.5 (10.9-18.1); $P < 0.001$) and 12 weeks (2.0 (0.4-7.7) versus 9.6 (2.2-13.9); $P = 0.015$). VCSS and AVVQ scores were equivalent by 1 year, but only after 16 of 24 patients in the EVLA group, compared with one of 25 in the EVLTA group ($P < 0.001$), had received a secondary intervention. From 1 to 5 years both groups had equivalent outcomes.

CONCLUSION: EVLA with either concomitant or sequential management of tributaries is acceptable treatment for symptomatic varicose veins, with both treatments achieving excellent results at 5 years. Concomitant treatment of varicosities is associated with optimal improvement in both clinical disease severity and QoL.

VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

Ann Surg. 2015 Apr;251(4):654-61. doi: 10.1097/SLA.0000000000000711

Ambulatory varicosity avulsion later or synchronized (AVULS): a randomized clinical trial.

Lane TR¹, Kelleher D, Shepherd AC, Franklin JJ, Davies AH.

Author Information

Abstract

OBJECTIVE: A randomized clinical trial assessing the difference in quality of life and clinical outcomes between delayed and simultaneous phlebectomies in the context of endovenous truncal vein ablation.

BACKGROUND: Endovenous ablation has replaced open surgery as the treatment of choice for truncal varicose veins. Timing of varicosity treatment is controversial with delayed and simultaneous pathways having studies advocating their benefits. A previous small randomized study has shown improved outcomes for simultaneous treatment.

METHODS: Patients undergoing local anesthetic endovenous thermal ablation were randomized to either simultaneous phlebectomy or delayed varicosity treatment. Patients were reviewed at 6 weeks, 6 months, and 1 year with clinical and quality of life scores completed, and were assessed at 6 weeks for need for further varicosity intervention, which was completed with either ultrasound-guided foam sclerotherapy or local anesthetic phlebectomy. Duplex ultrasound assessment of the treated trunk was completed at 6 months.

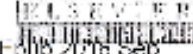
RESULTS: 101 patients were successfully recruited and treated out of 221 suitable patients from a screened population of 393. Patients in the simultaneous group (n = 51) showed a significantly improved Venous Clinical Severity Score at all time points, 36% of the delayed group required further treatment compared with 2% of the simultaneous group (P < 0.001). There were no deep vein thromboses, with 1 superficial venous thrombosis in each group.

CONCLUSIONS: Combined endovenous ablation and phlebectomy delivers improved clinical outcomes and a reduced need for further procedures, as well as early quality of life improvements.



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

J Vasc Surg Venous Lymphat Disord. 2017 Jan;5(1):134-137. doi: 10.1016/j.jvsv.2016.07.009. Epub 2016 Sep 26.



Evidence summary of combined saphenous ablation and treatment of varicosities versus staged phlebectomy.

Heger ES¹, Ozvath KJ², Dillavou ED³.

Author information

Abstract

OBJECTIVE: The objective of this review was to create an evidence summary of the available literature comparing saphenous vein ablation and concomitant phlebectomy vs ablation with staged phlebectomy.

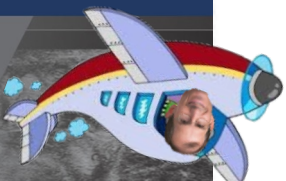
METHODS: A review of the literature for ambulatory patients treated for venous insufficiency with saphenous ablation and phlebectomy was conducted. A literature search was performed using MEDLINE, Cochrane Library, Google Scholar, and PubMed with the keywords phlebectomy, endovenous ablation, staged procedures, vein stripping, superficial venous disease, and powered phlebectomy. All studies that described a single approach, systematic reviews, case series (N < 20), and nonclinical studies were excluded.

RESULTS: Eight clinical comparative studies of combined saphenous ablation and phlebectomy vs staged procedures were found: three randomized prospective studies, two prospective comparisons, and three retrospective reviews.

CONCLUSIONS: Combined treatment of saphenous incompetence and symptomatic varicosities results in better short-term and better to equivalent long-term patient outcomes.

Copyright © 2016 Society for Vascular Surgery. Published by Elsevier Inc. All rights reserved.

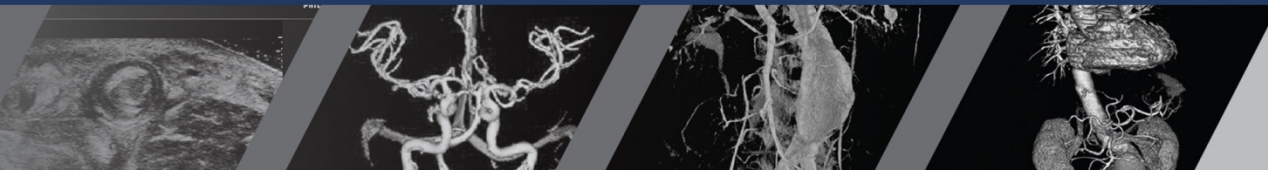
PMID: 27987603 DOI: 10.1016/j.jvsv.2016.07.009



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE

SUMMARY

- No standard of care
- Impossible to predict fate of varicose veins after ablation alone
- Experience, data demonstrate that some do improve after ablation alone, but that significant number will require subsequent intervention (symptoms, appearance)
- Informed that ablation only is a “crap shoot.” Good chance additional procedures will be required
- Obligated to ask. If patient wants vv’s gone they should be removed at the same time as ablation
- Higher patient satisfaction, fewer interventions, lower cost, lower recurrence rate



VARICOSE VEINS SHOULD BE REMOVED AT THE PRIMARY PROCEDURE



CRAP!!!!

**WOULD HAVE MISSED THE STORM IF I
TOOK THE TIME TO DO THAT
PHLEBECTOMY**