



Concomitant Treatment of Tributaries is the Gold Standard

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Conflicts of Interest

- None to declare

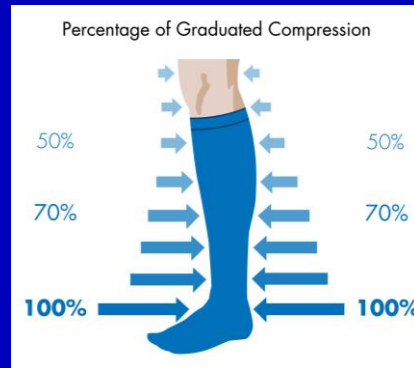


What do you know? How do you know that?

Claim + Evidence
+ Reasoning = Explanation

Why does your evidence
support your claim?

Which treatment?



Truncal Veins

Randomized clinical trial

Randomized clinical trial comparing endovenous laser ablation, radiofrequency ablation, foam sclerotherapy and surgical stripping for great saphenous varicose veins

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Vascular. 2010 Jul-Aug;18(4):205-20.

Surgical management of varicose veins: meta-analysis.

Brar R, Nordon IM, Hinchliffe RJ, Loftus IM, Thompson MM.

St George's Vascular Institute, St George's Hospital, London, UK. ranjeet@doctors.org.uk



Branch Varicosities

- Despite adequate treatment superficial varicosities may not resolve
- The treatment of residual varicosities is currently a matter of debate

Br J Surg. 2009 Apr;96(4):369-75. doi: 10.1002/bjs.6556.

Randomized clinical trial of concomitant or sequential phlebectomy after endovenous laser therapy for varicose veins.

Carradice D, Mekako AJ, Hatfield J, Chetter IC.

Academic Vascular Surgical Unit, University of Hull, Hull, UK. dan1@doctors.org.uk

J Vasc Surg. 2012 Feb;55(2):451-7. doi: 10.1016/j.jvs.2011.08.040. Epub 2011 Nov 21.

Long-term results of a randomized controlled trial on ultrasound-guided foam sclerotherapy combined with saphenofemoral ligation vs standard surgery for varicose veins.

Kalodiki E, Lattimer CR, Azzam M, Shawish E, Bountouroglou D, Geroulakos G.

Josef Pflug Vascular Laboratory and the Vascular Unit, Ealing Hospital, Department of Vascular Surgery, and Imperial College London, London, UK.

Phlebectomies

Concomitant

- One stop treatment
- Greater anaesthetic requirements
- Longer procedure
- ? Over-treating patients

Delayed

- Shorter initial procedure
- Can monitor for varicosity regression
- Need for secondary procedures

Phlebology. 2012 Apr;27(3):103-4. doi: 10.1258/phleb.2012.011130.

Phlebectomies: to delay or not to delay?

Onida S, Lane TR, Davies AH.



Recommendations – 6/7/8

-Treatment

Varicose veins in the legs

The diagnosis and management of varicose veins

Clinical guideline

Methods, evidence and recommendations

July 2013

Interventional treatment

6. For people with confirmed varicose veins and truncal reflux:

- Offer endothermal ablation (see Radiofrequency ablation of varicose veins [NICE interventional procedure guidance 8] and Endovenous laser treatment of the long saphenous vein [NICE interventional procedure guidance 52]).
- If endothermal ablation is unsuitable, offer ultrasound-guided foam sclerotherapy (see Ultrasound-guided foam sclerotherapy for varicose veins [NICE interventional procedure guidance 440]).
- If ultrasound-guided foam sclerotherapy is unsuitable, offer surgery.

If incompetent varicose tributaries are to be treated, consider treating them at the same time.

7. If offering compression bandaging or hosiery for use after interventional treatment, do not use for more than 7 days.

Non-interventional treatment

8. Do not offer compression hosiery to treat varicose veins unless interventional treatment is unsuitable.

A systematic review and meta-analysis on the role of varicosity treatment in the context of truncal vein ablation

TRA Lane¹, S Onida¹, MS Gohel^{1,2}, IJ Franklin^{1,3} and AH Davies¹

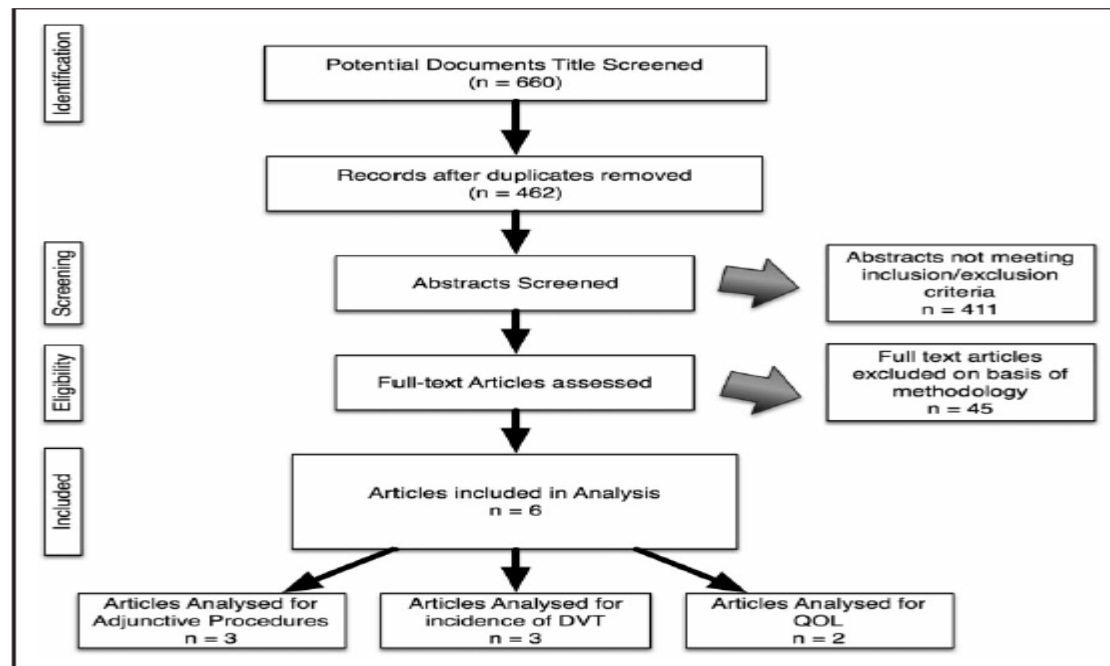


Figure 1. PRISMA diagram for systematic review of role of varicosity treatment in the context of truncal vein ablation. DVT: deep vein thrombosis; QOL: quality of life.

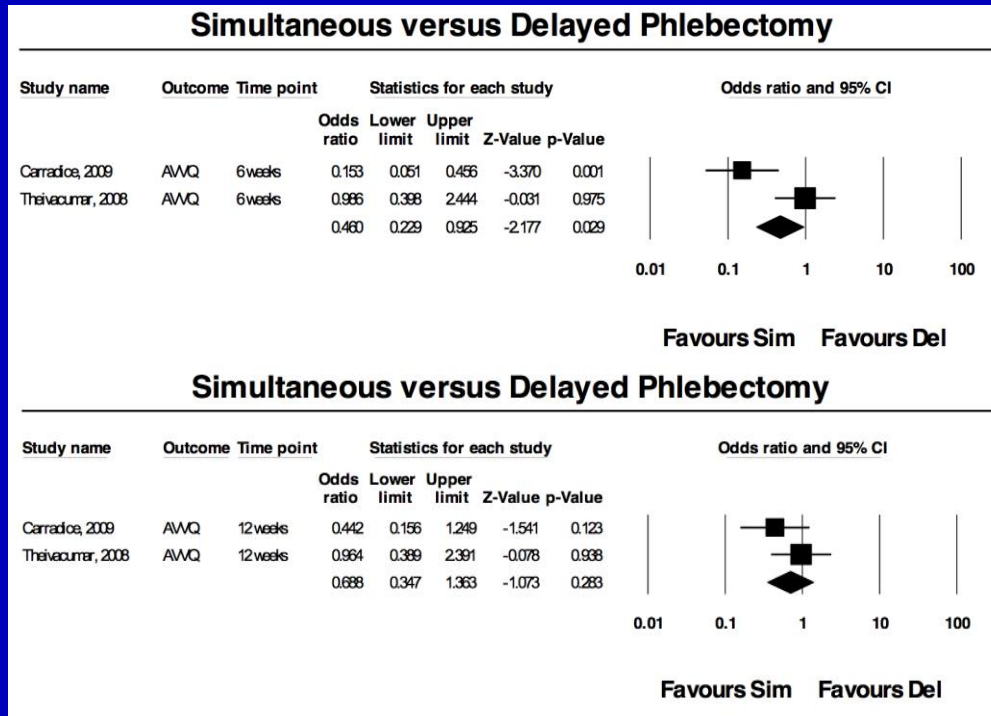
Search Outcomes

| Study | Study Type | Participants (Simultaneous/ Delayed) | Follow –Up (weeks) | Intervention | Anaesthesia | Outcomes Measured |
|--------------------|-------------|--------------------------------------|--------------------|----------------|-------------|-------------------|
| Carradice (2009) | RCT | 50 (25/25) | 52 | EVLA +/- Phleb | LA | Phleb/QOL |
| Theivacumar (2008) | RCT | 68 (22/46) | 12 | EVLA +/- UGFS | LA | Phleb/QOL |
| Kim (2009) | Case Series | 265 (132/133) | 104 | EVLA +/- Phleb | GA/LA | Phleb |
| Knipp (2008) | Case Series | 456 (135/321) | 28 | EVLA +/- Phleb | GA/LA | DVT |
| Puggioni (2009) | Case Series | 293 (90/203) | ? | EVLA +/- Phleb | GA/LA | DVT |
| Marsh (2010) | Case Series | 2820 (2470/350) | 1 | EVLA +/- Phleb | GA/LA | DVT |

RCT – Randomised Controlled Trial. EVLA – Endovenous Laser Ablation. Phleb – Phlebectomy.
UGFS – Ultrasound Guided Foam Sclerotherapy. QOL – Quality of Life. DVT – Deep Venous Thrombosis.

Quality of Life Outcomes

Two RCTs assessed Aberdeen Varicose Vein Questionnaire scores



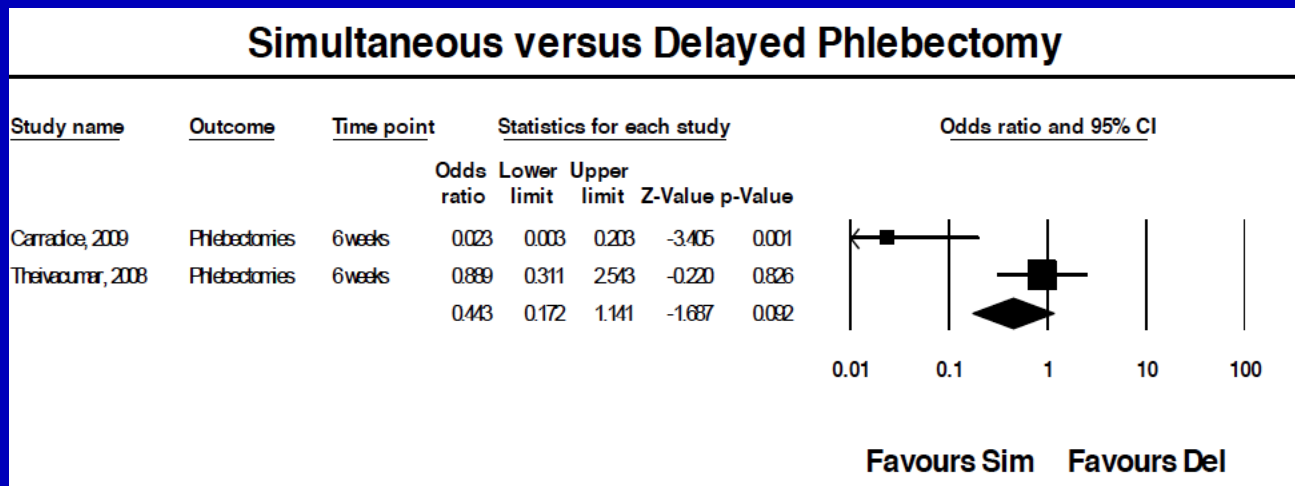
Scores at 6 weeks

Scores at 12 weeks

- Small but significantly improved QoL with simultaneous phlebectomy within the first 6 weeks of treatment
- The difference is not maintained at 12 weeks

Need for further intervention

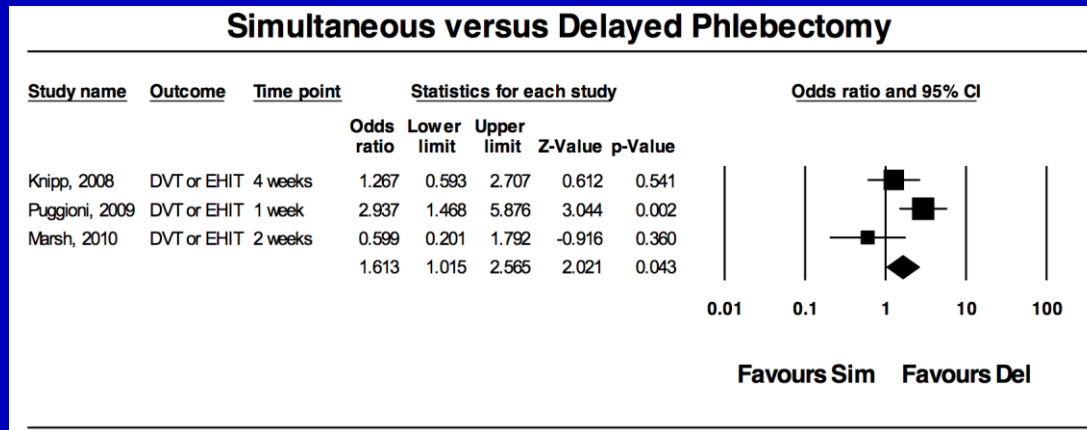
- Two Randomised Controlled Trials
- **Significant trend to favouring combined procedures**



- Total randomised number 118

Deep Venous Thrombosis

- Three studies examined the role of combined phlebectomy and venous ablation in the incidence of DVT
- Retrospective analyses



DVT – Deep Venous Thrombosis. EHIT – Endovenous Heat Induced Thrombosis

Significant difference in favour of delayed phlebectomies in order to prevent DVT

J Vasc Surg. 2008 Oct;48(4):947-52. doi: 10.1016/j.jvs.2008.05.029. Epub 2008 Aug 9.

Combined endovenous laser therapy and microphlebectomy in the treatment of varicose veins: Efficacy and complications of a large single-center experience.

Fernández CF, Roizental M, Carvallo J.

Unidad de Intervencionismo Cardiovascular, Policlínica Metropolitana, Caracas, Venezuela.

DVT rate 0.13% under LA

Ambulatory Varicosity avulsion Later or Synchronized (AVULS)

A Randomized Clinical Trial

Tristan R. A. Lane, MRCS, Damian Kelleher, FRCS,*† Amanda C. Shepherd, MD,*
Ian J. Franklin, FRCS (Gen Surg),*‡ and Alun H. Davies, FRCS**

TABLE 6. VCSS Outcomes Over Duration of Follow-up

| VCSS | Overall | Delayed | Simultaneous | Difference | <i>P</i> |
|----------|--------------|-------------|--------------|------------|----------|
| Baseline | 7.32 (2.55) | 7.65 (2.59) | 7.00 (2.50) | 0.65 | 0.212 |
| 6 wk | 2.99 (2.191) | 3.76 (2.18) | 2.26 (1.96) | 1.50 | <0.001 |
| 6 mo | 2.56 (2.356) | 3.20 (2.45) | 1.90 (2.09) | 1.30 | 0.012 |
| 12 mo | 1.90 (2.234) | 2.62 (2.46) | 1.14 (1.72) | 1.48 | 0.011 |

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But of those screened and deemed suitable for entry to the trial over 50% declined the trial as they had a preference for single visit treatment

Conclusion

- There is substantial evidence in favour of combined venous ablation and varicosity treatment at a single treatment.

