

2022 MID-ATLANTIC CONFERENCE
10th ANNUAL CURRENT CONCEPTS IN
VASCULAR THERAPIES

2022



Hilton Virginia Beach Oceanfront
Virginia Beach, Virginia

APRIL 28-30



Sentara Vascular Specialists



CEPHALIC VEIN THROMBOSIS
WITH DILATED ARTERIOLES

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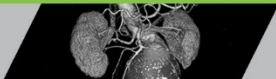
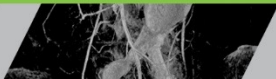
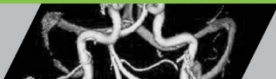
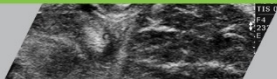
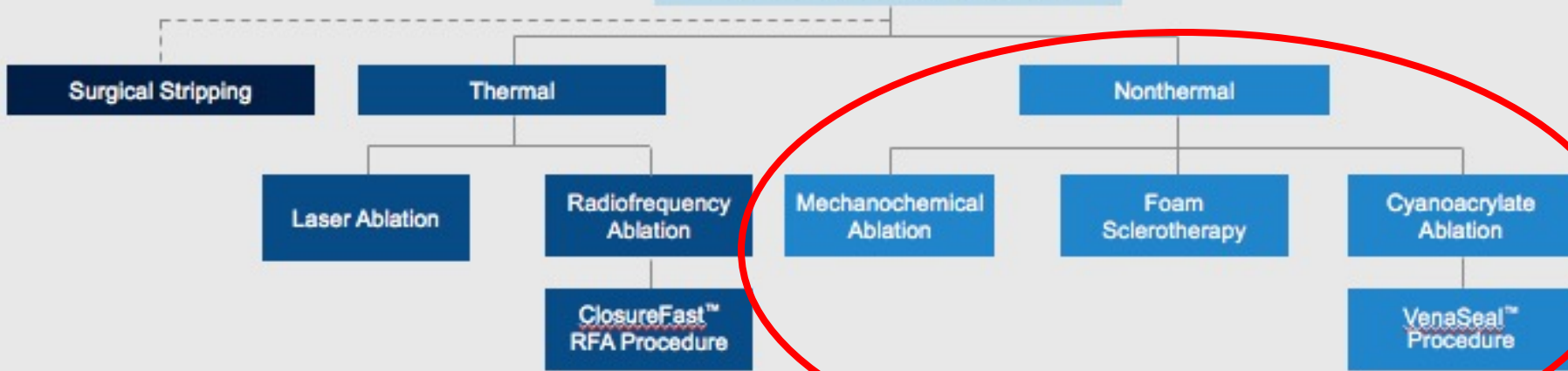


Non Thermal, Non
Tumescent Therapy for
Superficial Venous
Insufficiency

S Sadie Ahanchi, MD
Sentara Vascular Specialists

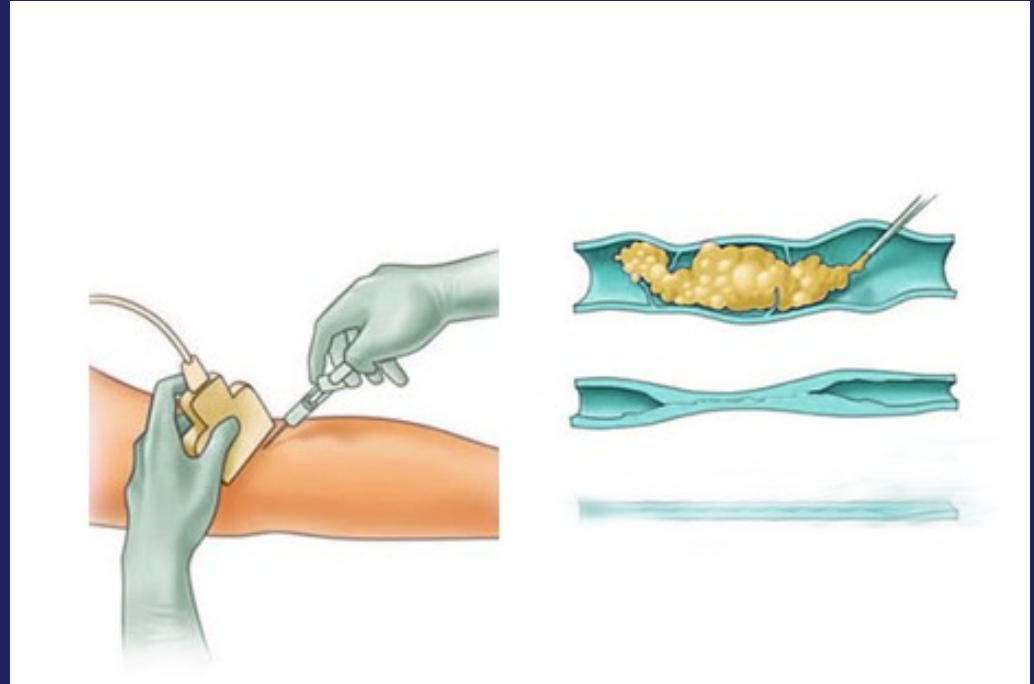
April 29th, 2022

Treatment Options for Chronic Venous Insufficiency



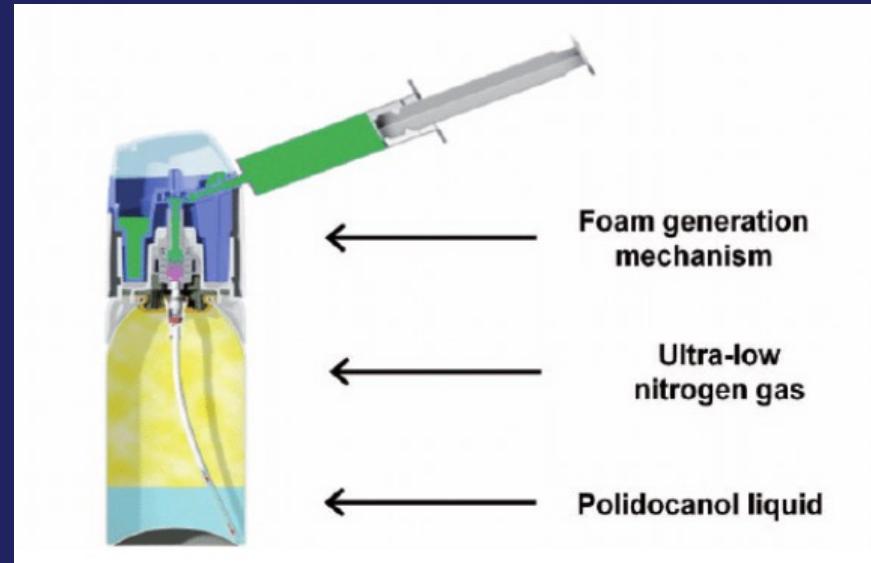
Foam Sclerotherapy

- Sclerosant, a chemical irritant, is introduced into the target vessel that causes the vein spasm and collapse
- Delivery of sclerosant agents administered via needle or catheter
- Eliminates need for tumescent anesthesia
- Compression stockings still required



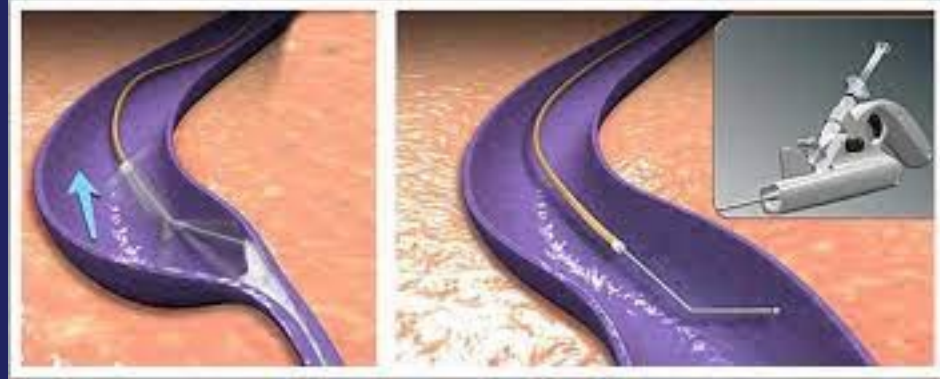
Foam Sclerotherapy

- Example is Varithena a polidocanol microfoam
- Great option for short segments veins, perforators, venous ulcers
- VANISH I & II trial
 - 85% occlusion at 1 year (sometimes requiring 2 treatments)
 - Improvement in all primary endpoints
 - 1-2% EHIT/prox DVT all resolved (50% AC)



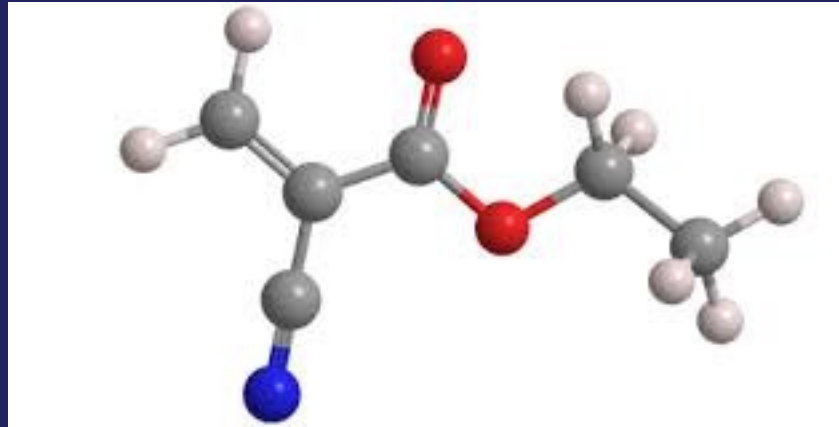
Mechanochemical

- Sclerosant, a chemical irritant, is introduced into the target vessel that causes the vein spasm and collapse
- Mechanical mechanism is employed in addition to the injection of sclerosant agent
- Eliminates need for tumescent anesthesia
- 95% occlusion rate at 1 year with <1% incidence of EHIT/DVT
- Compression stockings still required



Cyanoacrylate Ablation

- Anionic substances like plasma or blood cause polymerization leading to venous thrombosis
- Intravascular injection also triggers an acute inflammatory reaction
- Ultimately leading to intimal damage and venous ablation

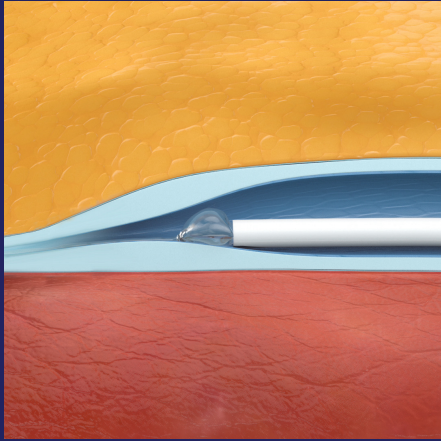


Cyanoacrylate Ablation

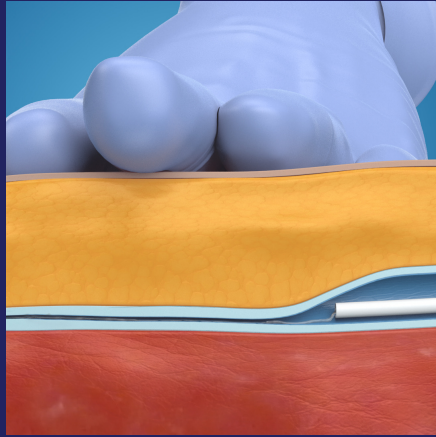
- Proprietary medical adhesive is used to seal the vein
- Adhesive polymerizes and compression is applied to effectively close vein
- Eliminates needs for tumescent anesthesia
- Compression stockings are not required*



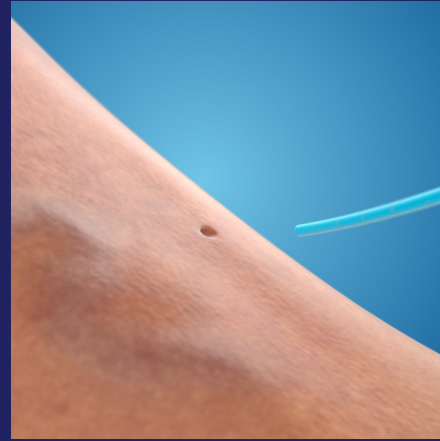
Cyanoacrylate Ablation



Adhesive is placed in the vein via catheter.



Pressure is applied to the leg to help seal the vein.



The small catheter is removed from the vein.



A bandage is applied to cover the wound.



Cyanoacrylate Ablation



FORMULATION MATTERS

Designed for stability in blood, allowing time for compression before it polymerizes.



CONFORMABILITY MATTERS

VenaSeal adhesive is designed to be soft and flexible and is less likely to be felt by the patient.



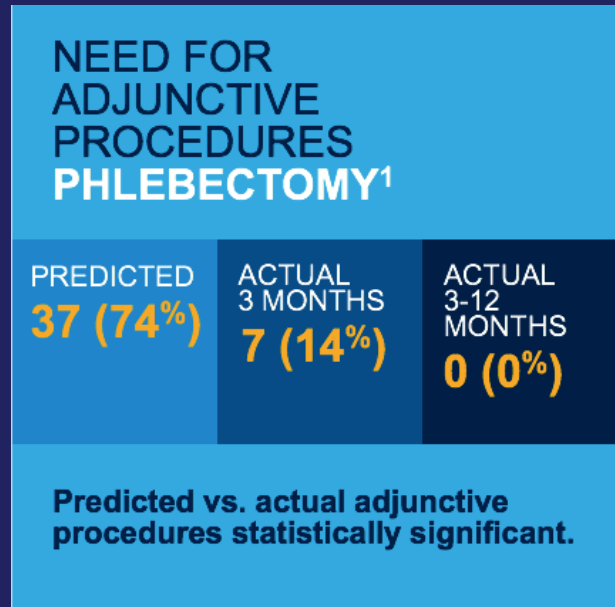
PRECISION MATTERS

VenaSeal closure system offers superb accuracy and precision in adhesive placement.

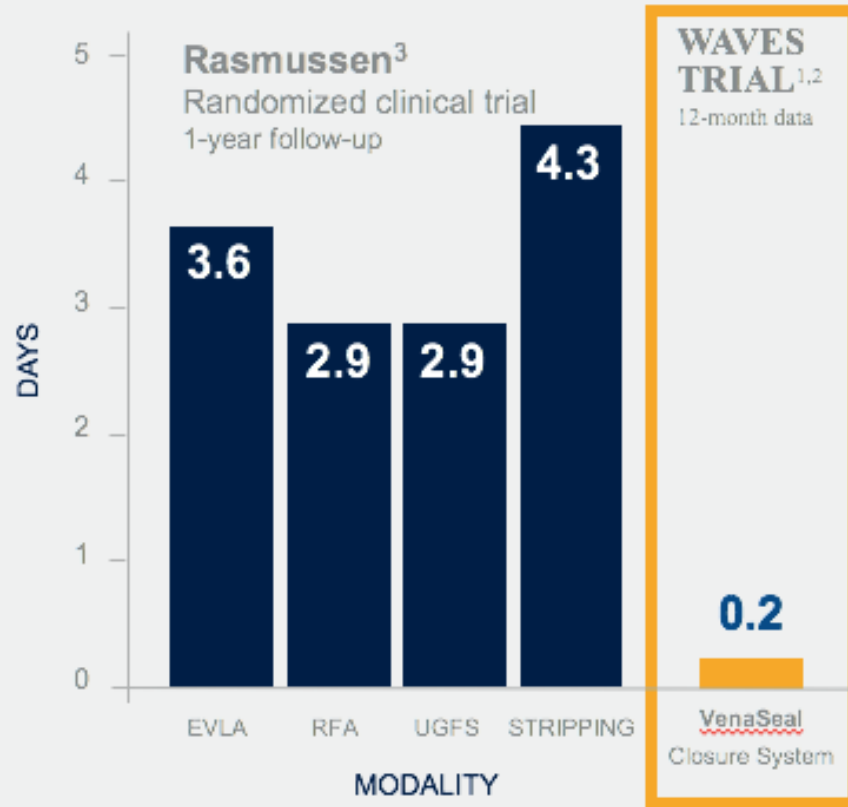


Waves Trial

- The first published prospective trial conducted in the United States to report on the performance of the VenaSeal closure system for incompetent truncal veins
- 20mm max vein diameter treated
- Average procedure time 22 min
- 98% closure rate at 1 year



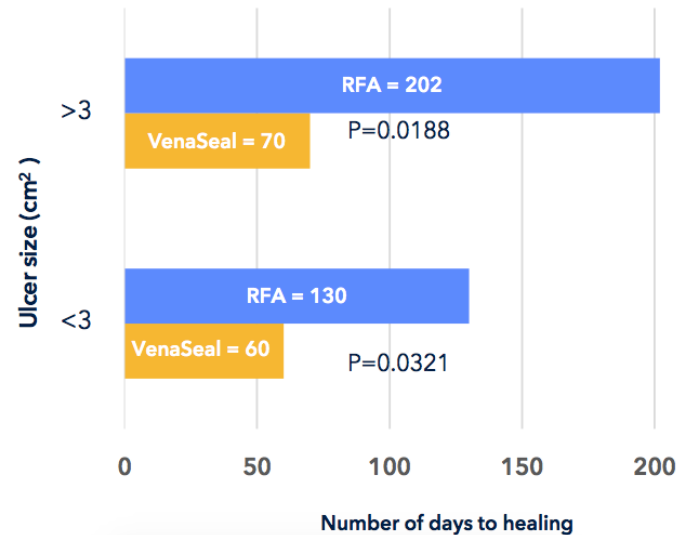
RETURN TO WORK (MEAN TIME)*



RFA vs cyanoacrylate in CEAP6

- Retrospective study of 119 CEAP 6 patients
- RFA group
 - Higher incidence of h/o DVT 29% vs 10% and deep femoral vein reflux
- Venseal group
 - Older and higher incidence of deep popliteal vein reflux
- No difference in ulcer recurrence ~19%

Figure 6. Controlling for ulcer size at a cutoff of 3 cm²: Number of days to ulcer healing by arm and ulcer size category



Conclusion

- Many options for non thermal venous treatment
- All with similar ablation efficacy with low complications
- The biggest advantage of avoiding tumescent and heat is the rapid recovery
- “THE FUTURE OF NON THERMAL ABLATION IS THE FUTURE OF ENDOVENOUS ABLATION”



References

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6. Leigh Ann A. O'Banion, Kyle B.Reynolds², Mariya Kochubey¹, Bianca Cutler², Eshetu A.Tefera², Rachel Dirks¹, Misaki M.Kiguchi² DOI: <https://doi.org/10.1016/j.jvsv.2020.12.082> University of California, San Francisco, Fresno, Fresno, Calif ² MedStar Washington Hospital Center, Washington, D.C.

