Are Non-Tumescent Ablation Procedures Ready to Take Over?

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Tumescent anesthesia refers to the percutaneous administration of large volume anesthetic to cause the target tissue to become swollen or firm. The use of tumescent anesthesia is essential for the treatment of refluxing truncal veins using endothermal technologies. In order to obviate the use of tumescent anesthesia as an adjunct to treatment, one has to evaluate the technologies that do not employ thermal energy as the modality for treatment. These technologies include foam sclerotherapy, mechanicochemical ablation (MOCA), and the use of glue (Sapheon™ closure system). The following review juxtaposes the literature supporting the use of tumescent-based techniques to the literature supporting the use of tumescent-less techniques.

Faculty Disclosure

• Lowell S. Kabnick, MD

- For the 12 months preceding this CME activity, I or my spouse/partner disclose the following types of financial relationships:
  - Honoraria received from: International Venous Congress, VEITH Symposium, Veniti
  - Consulted for: AngioDynamics, Amsel, BTG International Inc, Vascular Insights, Veniti
  - Held common stock in: AngioDynamics
  - Research, clinical trial, or drug study funds received from: CR Bard

- I will not be discussing any product that is investigational or not labeled for the use under discussion.

Similar Arguments Regarding Open Surgery Vs Minimally Invasive Risk/Benefits? Insurance Coverage?

Does Size Matter?

Sweet Spot for NT <12MM

No Differences in efficacy between RFA and Laser
Prospective comparative cohort study evaluating incompetent great saphenous vein closure using radiofrequency-activated segmental ablation or 1470 nm antireflection laser ablation with 3650A fibers (K-ratio 2 study).

Summary

• Thermal treatment (TT) with RFA or EVLA is the mainstay of varicose vein treatment at present.
• Both RFA and EVLA appear to have similar efficacies.
• TT is associated with discomfort during tumescent infiltration and not ablation part of procedure itself.
• NIVs do not require tumescent and do not use thermal energy—potentially more advantageous.
• Foam sclerotherapy is cheap but associated with higher recurrence rate.
JUST WHEN YOU THOUGHT....
New RFA Devices

KABNICK THE FORTUNE TELLER

IS THERMAL ABLATION OBSOLETE?

2018-2023
NO

In Conclusion
• As of now and 2023
• There is not one perfect modality for venous ablation
  • Each has there sweet spot
  • Thermal – long track record and larger veins
  • Perforator approval
  • Non-Thermal – NT, shorter procedure, nerve sparing
• RECOMMENDATION
  • Only afford one device – Thermal
  • My recommendation would be to have a Thermal and Non Thermal Device/Drug