

Venous Ulcers Contributions of Superficial, Perforator, and Deep Venous Procedures on Wound Healing

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Disclosures

None



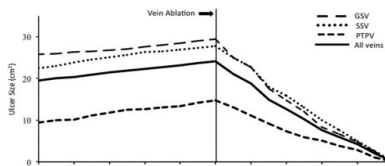
The impact of ablation of incompetent superficial and perforator veins on ulcer healing rates

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Endovenous ablation of incompetent perforating veins is effective treatment for recalcitrant venous ulcers

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Successful ablation of IPV's reduces ulcer recurrence and facilitates healing



Venous Ulcer Study: Effectiveness of Treatment of Superficial, Perforator, and Deep veins

- 9 Institutions in the United States enrolled data
- Inclusion criteria:
 - Active venous ulcer, treated between 2013 and 2016
 - Patients treated with compression, ablation, angioplasty and/or stenting were enrolled



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Patients

832 patients

- Mean age = 62
- Mean BMI = 33.4
- History of DVT = 27%
- Reflux
 - Deep: 34%
 - Superficial: 92%
 - Perforators: 76%
- Stenosis > 50%
 - Iliac vein: 5%
 - Femoral vein: 3%

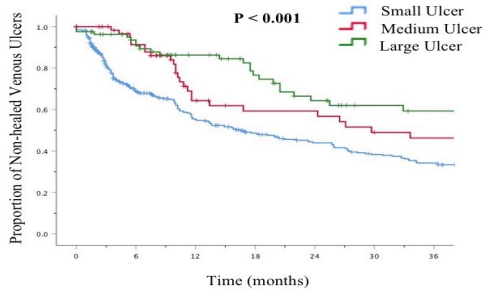


Evaluate the contribution of correction of superficial, perforator, and deep vein abnormalities on healing of venous leg ulcers

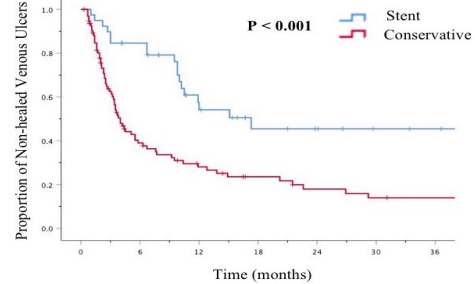
All patients started with compression



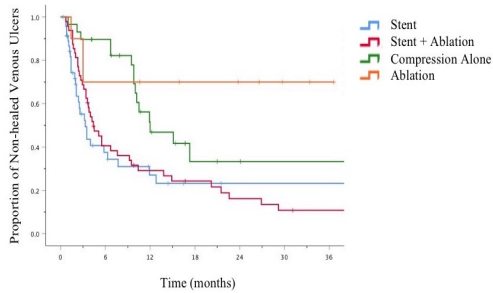
Ulcer Size and Healing After Ablation of Superficial and Perforating Veins



Ulcer Healing After Iliac Stenting



Ulcer Healing After Combinations



Treatment of Superficial and Perforator Reflux and Deep Venous Stenosis Improves Healing Of Chronic Venous Leg Ulcers

Multicenter retrospective study 832 patients with chronic venous leg ulcers

36-Month Venous Ulcer Healing

Initial compression alone	75%
Ablation of truncal veins after failed compression (AFC)	51%
Ablation of perforators (AFC)	68%
Iliocaval Stenting (AFC)	77%
Iliocaval Stenting + Ablation of truncal/perforators (AFC)	87-91%

87-91% of venous ulcers healed after stenting + truncal and perforator vein ablation

All patients had compression therapy

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Conclusions

- Wound care and compression remain a mainstay for all patients with venous ulcers
- Each treatment modality contributes to ulcer healing
 - Compression
 - Truncal ablation
 - Iliac stenting
 - Perforator ablation
- Long-term compression is critical to maintain wound healing

Remaining Questions

1. When there are multiple levels of occlusion or reflux, which should be treated first?
2. How should proximal venous disease be identified? Duplex ultrasound, CT or MR Venogram, IVUS?
3. Should RFA, Laser, liquid sclero, glue, or foam be used to treat incompetent perforators
4. Should all VLU have the sub-ulcer venous plexus sclerosed?

