# Don't Forget the Vein, when treating venous stasis ulcerations



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#### Introduction

2.5 million Americans are diagnosed with chronic venous insufficiency, with over 20% later developing venous leg ulcers (VLUs). Over 30% of VLUs fail to heal in a 24-week period, despite multiple treatment options and algorithms. VLU recurrence rates can be as high as 70%, resulting in over \$500 million in annual treatment cost.[5] With chronic VLUs often taking months to years to heal, it is important not to forget to treat the underlying cause: the "**vein**" when attempting to heal these difficult wounds.

#### **Methods**

We present a series of 8 patients with recalcitrant venous leg ulcers who underwent endovenous ablation with 1% polidocanol injectable microfoam, Varithena.\* Treatment of the great saphenous, accessory saphenous and the ulcer bed were treated. All VLUs had failed prior conservative treatment. At initial presentation, wound sizes ranged from 1.5 x 1.5cm to 9.2 x 6.5 cm. The ulcer age was 4 weeks-2 yrs at first presentation and the mean compression therapy duration was over 24 weeks prior to treatment.







#### \*1% polidocanol foam, Varithena, Boston Scientific

### Results

100% of the patients presented with great saphenous vein incompetence and a lower leg VLU. All were treated with great saphenous vein ablation, and ulcer bed injection of any perimeter feeding branch tributary veins. The periwound inflammation decreased by 65% from baseline, and wound size decreased by 45% in the first 2 weeks post-procedure. 4 VLUs were resolved in 3 wks. 5 of the 8 pts VLUs were resolved by 6 wks. The median time to ulcer closure was 42 days. 100% of the resolved VLUs remained closed at 12-week follow-up. Incidentally, we noted decreased patient activity post procedure





Patient Number/ulcer location	Ulcer original size	Ulcer Age at treatment	Ulcer size 2wks – post	Ulcer size 6 wks- post
1-R med ankle	1.5 x 2.0 x .7cm	lyr	RESOLVED	Healed
2- L med leg	6.5 x 3.5 x .3cm	2yrs	.8 x 1.1 x .2cm	Healed
3- R ant foot	1.5 x 1.5 x .4cm	2yrs	.4 x .7 x .1cm	Healed
4- L med ankle	2.6 x 4.7 x .1cm	4 months	2.3 x 4.0x .1cm	OPEN
5- L lat leg	3.5 x 2.3 x.4cm	3 months	2.0 x 1.2 x .2cm	Healed
6- R med leg	3.3 x 3.0 x 1.0cm	8 months	2.7 x 1.7 x .2cm	Lost to f/u
7- R ant leg	5.0 x 1.6 x .5cm	4 weeks	4.5 x 1.3 x .5cm	OPEN
8- R med leg	9.2 x 6.5 x .3cm	6 months	5.5 x 3.2 x.1 cm	Healed





#### Discussion

Treatment of the great saphenous vein reflux and ulcer bed with 1% polidocanol microfoam was associated with faster wound healing, reduced recurrence, and overall improved quality of life. These results support recent studies indicating favorable outcomes with "vein" and ulcer bed tributary treatment for VLUs. Despite this challenging patient population, Varithena is a viable option to include in the treatment algorithm of VLUs and can potentially save thousands of dollars. [4]





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