

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

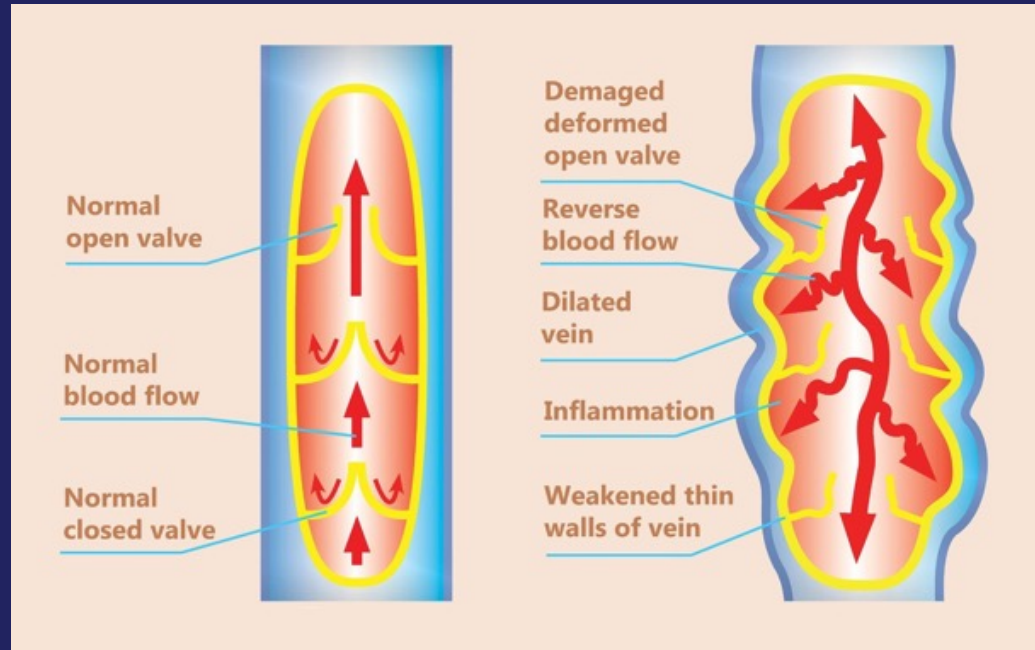
2022



Tumescent Based Therapy for Superficial Venous Insufficiency

Emily Reardon, MD

Superficial Venous Insufficiency (SVI)

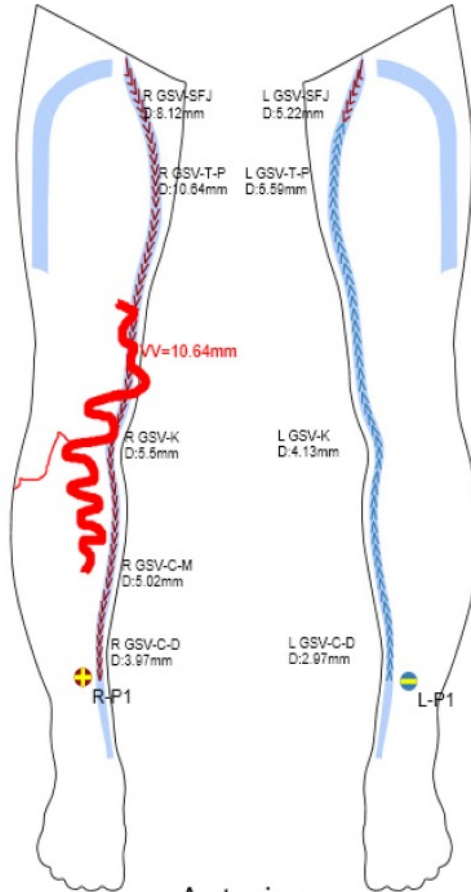




R+ R- Partially Open Perforator + Perforator - Varicose Veins

Right

Left



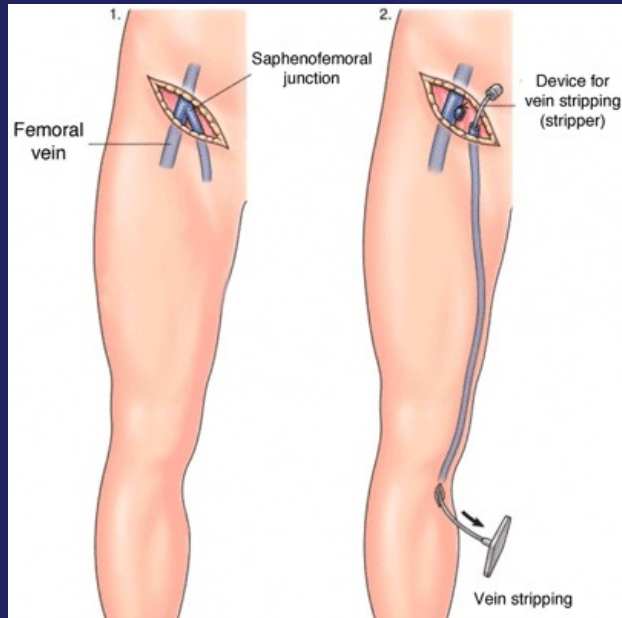
Anterior



Treatment Selection



Tumescent based therapies emerged in response to the disadvantages of open surgery



Tumescent based therapies emerged in response to the disadvantages of open surgery



↓↓ Pain and bruising

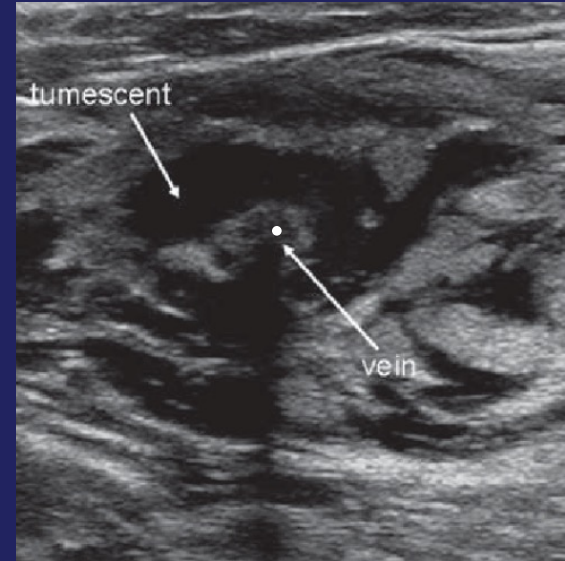
↓↓ Recovery time



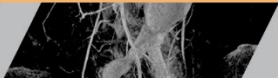
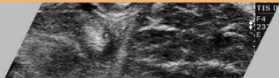
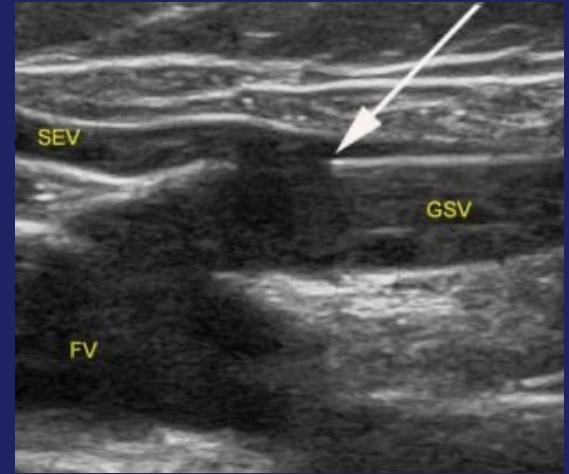
Tumescent and Endovenous Ablation Technique

Tumescent anesthesia

- Large volume of dilute anesthetic is administered around the vein
- Lidocaine, epinephrine, and bicarbonate in NS solution



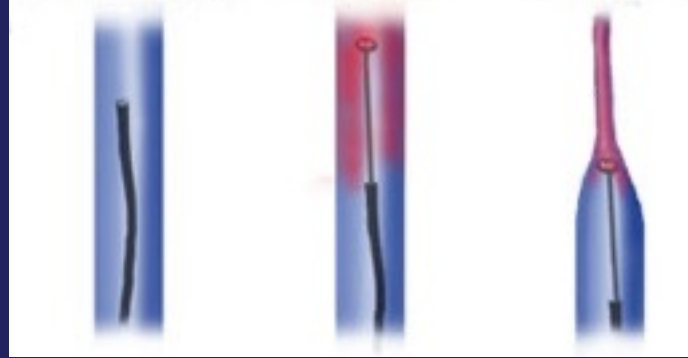
Tumescent and Endovenous Ablation Technique



Tumescent and Endovenous Ablation Technique



RFA



Catheter inserted and withdrawn Vein heated



EVLA





Results

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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Table 2 Failure rates up to 1 year after treatment of varicose veins

	EVLA	RFA	UGFS	Stripping	P*
3 days	0 (0)	0 (0)	3 (2.1)	4 (2.8)	0.053
1 month	1 (0.7)	0 (0)	2 (1.4)	3 (2.2)	0.202
1 year	7 (5.8)	6 (4.8)	20 (16.3)	4 (4.8)	< 0.001





Results

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Table 4 Time to resume normal activities and work

	EVLA	RFA	UGFS	Stripping
Time to resume normal activity (days)*	2 (0–25)	1 (0–30)	1 (0–30)	4 (0–30)
Time to resume work (days)*	3.6 (0–46)	2.9 (0–14)	2.9 (0–33)	4.3 (0–42)

LH Rasmussen et al; 2011

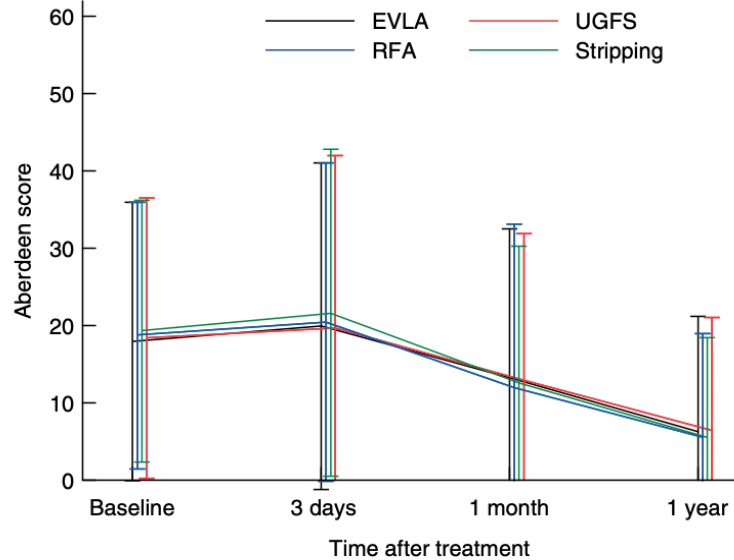




Results

Randomized clinical trial

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



LH Rasmussen et al; 2011

Fig. 3 Mean(s.d.) disease-specific quality-of-life score (AVVSS) up to 1 year after treatment



Complications

Complications of endovenous ablation in randomized controlled trials

Meghan Dermody, MD, MS,^a Thomas F. O'Donnell, MD,^a and Ethan M. Balk, MD, MPH^b *Boston, Mass*

Table IV. Complications by intervention

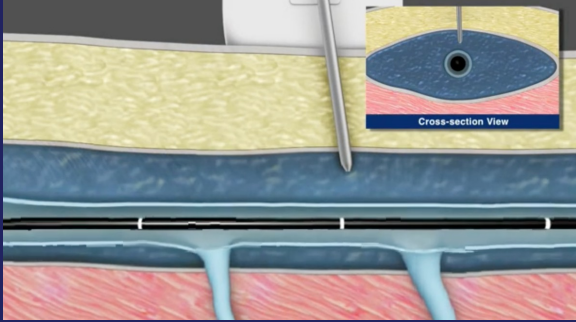
		<i>L&S</i>	<i>RFA-CF</i>	<i>EVLA</i>	<i>P values</i>		
<i>No. of treated limbs</i>		975	330	1057			
<i>No. of studies</i>		15	4	13	<i>L&S vs RFA</i>	<i>L&S vs EVLA</i>	<i>RFA vs EVLA</i>
★ DVT/PE	Pooled incidence, %	0.7	0.5	0.4	.71	.52	.84
	95% CI, %	0.2, 1.3	0.1, 1.2	0.1, 1.0			
	No. of studies reporting event	12	4	10			
Infection	Pooled incidence, %	2.1	1.0	0.7	.094	.006	.52
	95% CI, %	1.3, 3.1	0.3, 2.0	0.3, 1.3			
	No. of studies reporting event	12	4	12			
★ Paresthesia	Pooled incidence, %	6.7	7.8	3.3	.43	<.001	<.001
	95% CI, %	5.3, 8.3	5.8, 10.1	2.4, 4.5			
	No. of studies reporting event	15	4	12			
★ SVT	Pooled incidence, %	2.9	5.2	5.5	.003	.003	.6
	95% CI, %	1.9, 4	3, 7.8	4.2, 7			
	No. of studies reporting event	12	4	11			
★ Bruising	Pooled incidence, %	36.1	3.1	34.5	<.001	.55	<.001
	95% CI, %	32.6, 39.6	0.12, 9.9	31.2, 38			
	No. of studies reporting event	8	1	8			
Hematoma	Pooled incidence, %	13.5	0.2	2.1	<.001	<.001	.8
	95% CI, %	11.1, 16.1	0, 1.3	1.1, 3.5			
	No. of studies reporting event	11	2	6			
★ Skin burn	Pooled incidence, %		0.7	0.7			.74
	95% CI, %		0.04, 2.3	0.2, 1.4			
	No. of studies reporting event		2	6			

CI, Confidence interval; DVT, deep venous thrombosis; EVLA, endovenous laser ablation; L&S, conventional ligation and stripping; PE, pulmonary embolism; RFA, radiofrequency ablation; RFA-CF, ClosureFAST catheter; SVT, superficial venous thrombosis or thrombophlebitis. Bold values indicate statistical significance.

TF O'Donnell et al; 2013



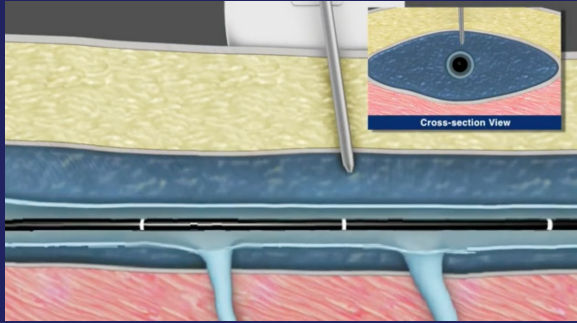
Multimodality Individualized Patient Care



Tumescent Based Therapies



Multimodality Individualized Patient Care



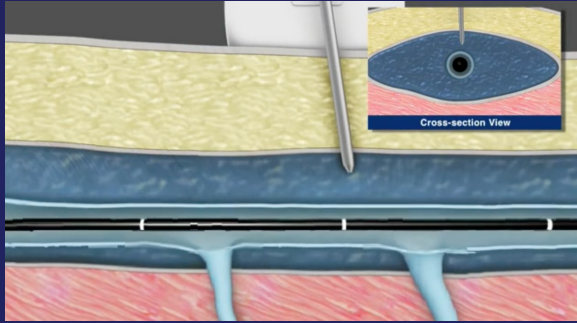
Tumescent Based Therapies



Ambulatory Phlebectomy



Multimodality Individualized Patient Care



Tumescent Based Therapies



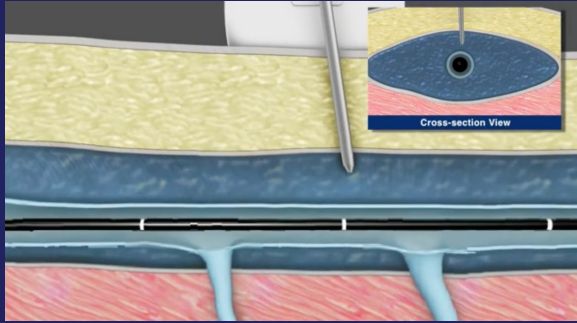
Sclerotherapy



Ambulatory Phlebectomy



Multimodality Individualized Patient Care



Tumescent Based Therapies



Sclerotherapy



Ambulatory Phlebectomy

Other Non-Thermal/
Non-Tumescent Based
Therapies...



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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 ILLUSTRATION

