

Different types of venous reflux identified in 100 consecutive patients with their CEAP classification and percentage.

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Disclosure

I don't have any potential conflict

Introduction

- It has been established that in cases of great saphenous vein (GSV) reflux, the terminal valve is often continent. In the literature the frequency of sub-terminal or more distal trunk reflux was evaluated at around 50%.

• Pitaluga et al, JOURNAL OF VASCULAR SURGERY, 2008; Volume 47, Number 6: 1300-1303

Introduction

Reflux Distribution and Anatomical Location of the Great Saphenous Vein: Implications for Venous Disease Management

Su-kyung Kwon, M.D.¹, Jin Hyun Joh, M.D., Ph.D.² and Hyangyoung Kim, M.D., Ph.D.³

- GSV reflux in 450 patients were included in this study. The distal end of reflux was located below the knee segment in 290 (52.9%) limbs.

• Ann Phlebology 2023; 21(1): 33-36

Gold standard of varicose vein treatment

- GSV
- GSV Stripping or ablation groin to knee
- HIFU Ablation for 20 CM


Introduction

- In EVLA, we usually ablate the GSV from groin to the knee.
- While in HIFU we only ablate 20 CM of the vein, and one year follow up didn't show difference in results regarding the recurrence

should we ablate a competent segment of the GSV?

Hypothesis

- In treating GSV varicosity, we must standardize duplex study of venous reflux regarding the incompetent valve and extension of **REFLUX** and tailor ablation accordingly.




Patient & methods

100 patients were admitted to the Royal vascular center, with Primary varicose veins, from 1st January - 31st December 2022


All patients were subjected to

- Enforced medical consent
- Standing Duplex venous examination
- GSV Diameter measuring
- Extent of the venous reflux
- Categorization of venous reflux

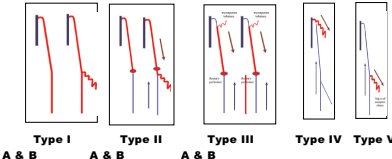


Results

- GSV Diameter:** 0.6-1.2 CM & 8.06 ± 0.7CM
- Reflux duration:** 0.5 - 0.9 Sec. & 0.6±0.02 Sec



Types of venous reflux in primary varicose veins – “ Fakhry classification “



Type I A & B Type II A & B Type III A & B Type IV Type V

Types of venous reflux & treatment in primary varicose veins


Type	%	Reflux Pattern	Treatment
Type I - A	5%	Terminal valve GSV to ankle	EVLA to below knee
Type I - B	7%	Terminal valve GSV +trib.	EVLA to below knee
Type II - A	22%	Terminal valve GSV to thigh	EVLA to mid thigh
Type II - B	17%	Terminal valve GSV +trib.	EVLA to mid thigh
Type III - A	16%	Preterminal valve GSV to thigh + perforator	EVLA to mid thigh
Type III - B	28%	Preterminal valve GSV to ankle + perforator	EVLA to mid thigh
Type IV	1%	Isolated ASV	Phlebectomy
Type V	4%	Superficial veins	Sclerotherapy

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Reflux Type & C Stage		
	Day 1	Three months
Type I	12%	C 2 - 4
Type II	39%	C 2-4
Type III	44%	C 3 - 4
Type IV	1%	C 2 - 6
Type V	4%	C 1

Reflux recurrence				
	Day 1	Three months	Six Months	One year
Type I	Zero	1/12	1/12	2/12
Type II	zero	2/39	2/39	2/39
Type III	zero	2/44	2/44	3/44
Type IV	zero	Zero	Zero	Zero
Type V	zero	Zero	Zero	1/4



Conclusion

In treating GSV varicosity, we must standardize duplex study (Fakhry Classification) of venous reflux regarding the incompetent valve and extension of this reflux then tailoring ablation process accordingly.



Thank you