

Surgical Management of Varicose Veins (New Modalities Introduction) A Jersey Prospect

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Received: 23 August 2018; Accepted: 18 September 2018

Citation: Muhammad Aleem. Surgical Management of Varicose Veins (New Modalities Introduction) A Jersey Prospect. J Med - Clin Res & Rev. 2018; 2(5): 1-4.

ABSTRACT

Radiofrequency segmental thermal ablation of great and small saphenous vein with Closure FAST Catheter is superior; widely accepted alternative to conventional ligation and stripping of great and small saphenous Vein in the treatment of lower extremity venous insufficiency.

Purpose: This study evaluated endovenous closure for superficial venous insufficiency due to great and short saphenous vein incompetency at Jersey General Hospital.

Patient and Methods: During thirty months period patients with symptomatic venous insufficiency were studied, total patient treated were three hundred and sixty two. Patient followed up in clinic after six weeks to report the clinical outcome of treatment and also to register any immediate and late complication from the procedure and recurrence rate.

Result: Total number of saphenous vein endovenous closure with Fast closure technique operation performed three hundred and sixty two, with good outcome in three hundred ten patients and poor out come in forty five patients.

Conclusion: There are significant advantages in endovascular obliteration of saphenous vein, minimally invasive technique based on endothelial ablation are progressively supplanting conventional surgery in the treatment of varicose veins.

Keywords

Radiofrequency segmental thermal ablation of saphenous veins, Closure FAST catheter technique, Endovenous closure of short and long saphenous veins.

Abbreviations

RF: Radiofrequency; QOL: Quality of life.

Introduction

Radiofrequency segmental thermal ablation of great and small saphenous vein with Closure FAST Catheter is superior, widely accepted alternative to conventional ligation and stripping of great

and small saphenous Vein in the treatment of lower extremity venous insufficiency.

This study evaluated endovenous closure for superficial venous insufficiency due to great and short saphenous vein incompetency at Jersey General Hospital.

Method

During thirty months period patients with symptomatic venous insufficiency were studied, pre-treatment examination included, leg assessment using the Venous clinical severity score, venous duplex Scan.

VNUS closure was performed with the Closure Plus System



Cannulation of Saphenous vein



Patients follow up in clinic in six weeks' time for post-operative pain, bruising, erythema, neuroprexia were recorded.

Quality of life (QOL) was assessed at six weeks follow up

Total patient treated three hundred and sixty two, Day surgical unit Minor Ops Room procedure were two hundred, Day surgical unit Theatre procedure were one hundred patients and sixty two patients have procedure in main operating theatre.

Complications

Three patients noted Numbness & Paraesthesia (Neuroprexia), nine patients noted superficial phlebitis, seven patients noted induration, bruising and discoloration, in six patients' tributaries become more prominent, one Patient developed numerous purple thread veins which patient find disagreeable. Six patients not completely satisfied with the result (Residual Varicosity).

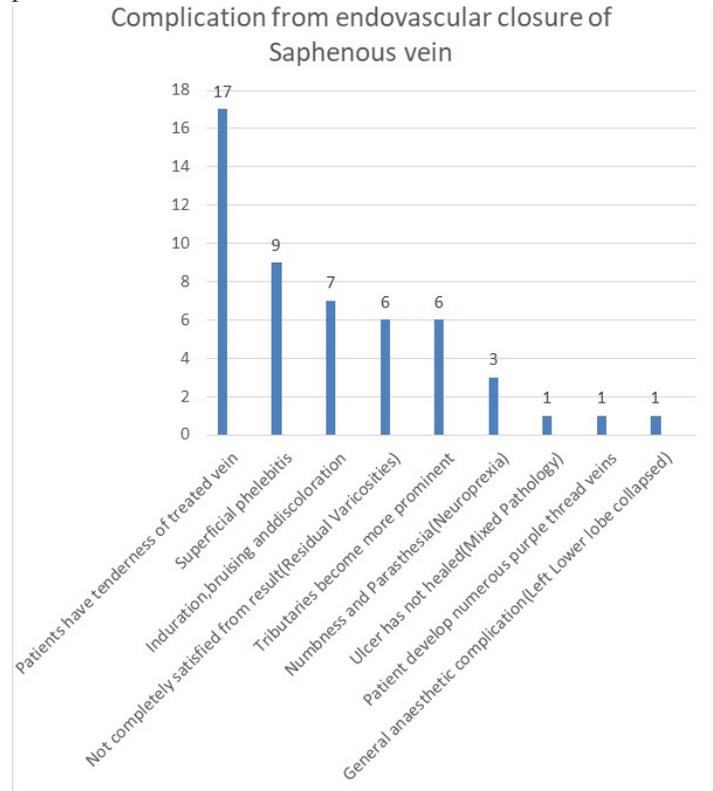
Two patients disappointed with result overall, one patient ulcer has not healed (Mixed pathology)

Seventeen patients have tenderness of treated saphenous vein, one patient have general anaesthetic complication (Left lower lobe Collapse).

Recurrence

Two recurrences confirmed by duplex scan: Further treatment offered of either repeat VNUS Closure, combined with phlebectomies or traditional high tie, stripping and

phlebectomies.

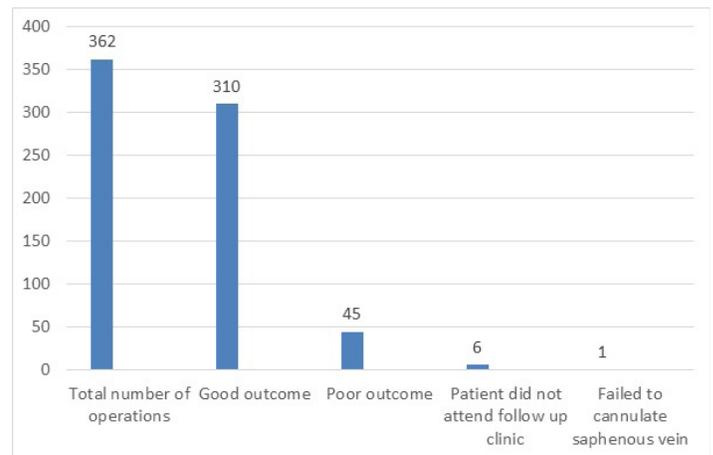


One patient anterior accessory thigh vein becomes more prominent and symptomatic after VNUS Closure of great saphenous vein.

One patient due to small vein calibre (Small Saphenous Vein) and thrombus in the vein procedure was not successful, six patients did not attend follow-up clinic.

Results

Total patient treated were three hundred and sixty two with good outcome reported in three hundred and ten patients.



Measures of Good outcome

Reduced swelling, venous ulcer healed, reduction in varicosities, reduction in pain.

Conclusion

There are significant advantages in endovascular obliteration of saphenous vein, minimally invasive technique based on endothelial ablation are progressively supplanting conventional surgery in the treatment of varicose veins.

VNUS Closure effectively reduce of superficial venous insufficiency

VNUS Closure provides a more secure closure over the long-term than open technique (99.6%) with no recanalization (Medline Literature Review).

No serious adverse events were reported, In effect the” Closure” procedure, offers reduced post-operative pain, shorter sick leaves, faster return to normal activities compared with vein stripping, and it appears to be cost-saving for society. The endovenous treatment of varicose veins has been developed to eliminate disadvantages associated with conventional surgery (Prolonged incapacity, scar, inguinal recurrence, neovascularization) and to improve quality of life.

Mid-term follow up required comparing results after RF Obliteration vs Conventional surgical management.

Acknowledgments

This work is closely supported by quality improvement and audit department at Jersey general hospital and with close collaboration with Mr. Gerard Williams Consultant vascular surgeon at Jersey General Hospital who closely supervise me to prepare this valuable paper for publication.

Author contributions

Dr. Muhammad Aleem, designed the research, analysis and reviewed the manuscripts. Dr. Muhammad Aleem participated in data interpretation, reviewed the manuscripts, and provided critical comments. All authors reviewed and approved the final report.

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