



General Surgery

IS RADIOFREQUENCY ABLATION REPLACING THE TRENDELENBERG PROCEDURE IN THE MANAGEMENT OF VARICOSE VEIN.

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**ABSTRACT**

To compare the results of TRENDELENBURG procedure and RADIOFREQUENCY ABLATION in the treatment of varicose veins in patients who presented to the department of general surgery IRT- Perundurai medical college in the past 30 months .

**KEYWORDS :**

**INTRODUCTION :**

Varicose vein surgery is one of the commonest surgical procedure and is an important training operation for young surgeons.

Varicose veins is dilated torturous veins of lower limb veins (great saphenous and short saphenous systems) with skin changes. varicose vein is due to a vessel wall pathology or valvular pathology . it usually affects the people who work by standing for a long time.

Trendelenburg operation is juxta femoral flush ligation of saphenous veins and stripping of veins upto below knee, followed by multiple phlebectomy for the below knee dilated veins.

Radiofrequency ablation is a minimally invasive procedure and has replaced trendelenburg technique in the Tamilnadu state government health scheme. Also getting popular because of smaller scar. It acts by thermal destruction of venous tissues using electrical energy passing through tissue in form of high frequency alternating current.

Thus, the need of study is to compare the trendelenburg and radiofrequency in terms of early ambulation, early return to work, intensity of post operative pain, recovery time and complications in the selected group.

**MATERIALS AND METHODS :**

Between January 2016 to June 2018, over the period of 30 months,100 patients presenting with varicose veins were studied.58 patients underwent radiofrequency ablation and 42 patients underwent trendelenburg procedure in IRT,Perundurai medical college, Perundurai.

To emphasize the best form of treatment among the Trendelenburg and radiofrequency ablation in the age group of 18-70 years who are fit to undergo both the surgical procedures in terms of early ambulation, early return to work , intensity of post operative pain, recovery time and complications in the selected group.

**INCLUSION CRITERIA :** patient in the age group of 18-70 years who are healthy are included

**EXCLUSION CRITERIA:** Following patients were excluded – obese, recurrent varicosities, post DVT.

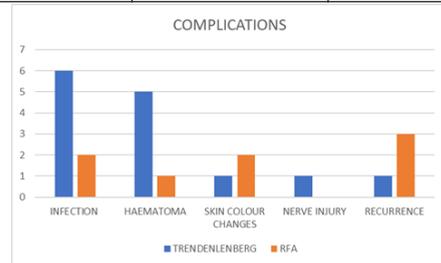
**RESULTS:**

	Trendelenberg	Radiofrequency ablation
Comfortable ambulation(1 <sup>st</sup> POD)	26/42	44/58
Hospitalization stay	4 days	2 days
Early return to work (2 weeks)	20/42	42/58

**COMPLICATIONS :**

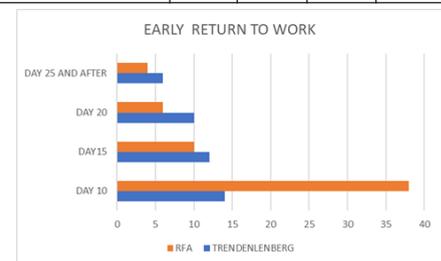
COMPLICATIONS	Trendelenberg	RFA
Infection	6	2
Haematoma	5	1

Skin colour changes	1	2
Nerve injury	1	0
Recurrence	1	3



**EARLY RETURN TO WORK**

DAY OF RETURN TO WORK	Day 10	Day 15	Day 20	Day 25 and after
TRENDELENBERG	14	12	10	6
RFA	38	10	6	4

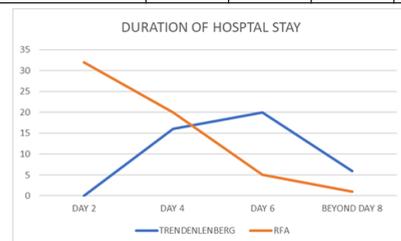


**AVERAGE NUMBER OF DAYS PATIENT NEEDED INJECTABLE ANALGESIA**

NUMBER OF DAYS	POD 1	POD 2	BEYOND POD 5
TRENDELENBERG	6	20	16
RFA	32	22	4

**DURATION OF HOSPITAL DAYS :**

DAYS OF DISCHARGE	D 2	D 4	D 6	Beyond D 8
TRENDELENBERG	0	16	20	6
RFA	32	20	5	1



**RESULTS :**

In our study , 42 patients underwent TRENDLENBERG and 58 patients underwent RADIOFREQUENCY ABLATION

44 out of 58 who underwent Radiofrequency ablation were able to ambulate freely in first POD Whereas only 26 out of 42 patients were able to do so in trendelenberg group .

Similarly average hospital stay in RFA group is 2 days which is significantly lower when compared to the Trendelenburg group (4 days).

Most striking advantage with the RFA group is in regard to the EARLY RETURN TO WORK. About 76 % of the patients in the RFA were able to return to their work by the end of 2 weeks, whereas just 47 % were able to return to their work in the same period among the trendelenberg group.

Analgesia requirement for RFA patients was strikingly low compared to Trendelenburg.

In view of complications, infection was observed in 6 patients in Trendelenburg, whereas only 2 patients in RFA group.

In terms of hospital stay, 55 % were discharged on DAY 2, whereas none of the patients were discharged in trendelenberg operation.

**CONCLUSION :**

Thus we emphasize that RFA technique is safe operative procedure and it provides obvious advantages over trendelenburg in terms of early ambulation, early return to work , less intensity of post operative pain, rapid recovery time and low complications, so RADIOFREQUENCY ABLATION should be considered as the initial choice of surgery for patients presenting with varicose veins of lower limbs.

**REFERENCES :**

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