

ORIGINAL ARTICLE

Outcome of management of varicose veins

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ABSTRACT:

Background: Varicose veins are dilated branches of the great saphenous vein and small saphenous vein; the incidence of varicose veins varies from 10% to 30%. The present study was performed to assess the outcome of the management of varicose veins. **Materials & Methods:** 90 cases of varicose veins of both genders were divided into 2 groups of 45 each based on the management given. Group I was conservative and group II was surgical procedures. **Results:** Out of 90 patients, males were 50 and females were 40. The side involved was left was 20, right side in 15 and both in 10 cases in group I and 19, 14 and 12 cases in group II. The mean duration of hospital stay was 5-10 days in 45, in group I and in 34, 10 and 1 day in group II. The difference was significant ($P < 0.05$). VDS score 0 was seen in 25 in group I and 28 in group II, score 1 in 13 in group I and 10 in group II, score 2 in 5 in group I and 3 in group II and score 3 in 2 in group I and 4 in group II. VCSS was mild in 20, moderate in 16 and severe in 9 cases in group I and 13, 22 and 10 in group II. VRS was mild in 18, moderate in 14 and severe in 13 patients in group I and 12, 19 and 14 in group II respectively. The difference was non-significant ($P > 0.05$).

Conclusion: Patients with varicose veins responded better to surgical management than to conservative treatment.

Key words: Surgery, Duplex ultrasound, Varicose veins

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INTRODUCTION

Varicose veins are dilated branches of the great saphenous vein and small saphenous vein; the incidence of varicose veins varies from 10% to 30%. Risk factors of varicose veins include family history, age, and pregnancy; a possible risk factor is standing for a long period of time.¹ Patients with varicose veins present from asymptomatic to significant symptoms, including discomfort, aching, pain, itching or eczema, and deep vein thrombosis (DVT). The symptoms reported in relation to varicose veins are common in the general population and the degree of benefit obtained from surgical treatment or sclerotherapy is not clear. The diagnosis of varicose veins is based on clinical manifestation and ultrasound. Duplex ultrasound is considered the gold standard for diagnosis of superficial venous incompetence.²

Venous reflux is a significant cause. Studies have also shown the importance of pelvic vein reflux (PVR) in the development of varicose veins. Varicose veins in the legs could be due to ovarian vein reflux. Risk factors include obesity, not enough exercise, leg trauma, and a family history of the condition.³ They also occur more commonly in pregnancy. Occasionally they result from chronic venous insufficiency. The underlying mechanism involves weak or damaged valves in the veins. Diagnosis is typically by examination and may be supported by ultrasound. In contrast, spider veins involve the capillaries and are smaller.⁴ Surgery has become the

preferred treatment option for most patients with symptomatic varicose veins. Sclerotherapy has been abandoned by many hospitals, resulting in further variation in the access to different treatments for varicose veins.⁵ The present study was performed to assess the outcome of the management of varicose veins.

MATERIALS & METHODS

The present study consisted of 90 cases of varicose veins of both genders. All patients gave their written consent to participate in the study.

Data such as name, age, gender etc. was recorded. A thorough clinical examination was carried out. Patients were divided into 2 groups of 45 each based on the management given. Group I was conservative and group II was surgical procedures. Conservative management consisted of lifestyle advice relating to exercise, leg elevation, management of weight and diet, and the use of compression hosiery. All patients in group II underwent surgery such as flush ligation of sapheno-femoral junction, subfascial ligation of perforators, segmental excision of varicosities, sapheno-popliteal ligation and split skin graft. In all patients, colour doppler examination was performed. Venous clinical severity score [VCSS] and venous disability score [VDS] were assessed. Results thus obtained were assessed statistically. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 90		
Gender	Male	Female
Number	50	40

Table I shows that out of 90 patients, males were 50 and females were 40.

Table II Assessment of parameters

Parameters	Variables	Group I	Group II	P value
Side	Left	20	19	0.94
	Right	15	14	
	Both	10	12	
Duration of hospital stay	5-10 days	45	34	0.01
	10-15 days	0	10	
	15-20 days	0	1	

Table II, graph I shows that side involved was left was 20, right side in 15 and both in 10 cases in group I and 19, 14 and 12 cases in group II. The mean duration of hospital stay was 5-10 days in 45, in group I and in 34, 10 and 1 day in group II. The difference was significant ($P < 0.05$).

Graph I Assessment of parameters

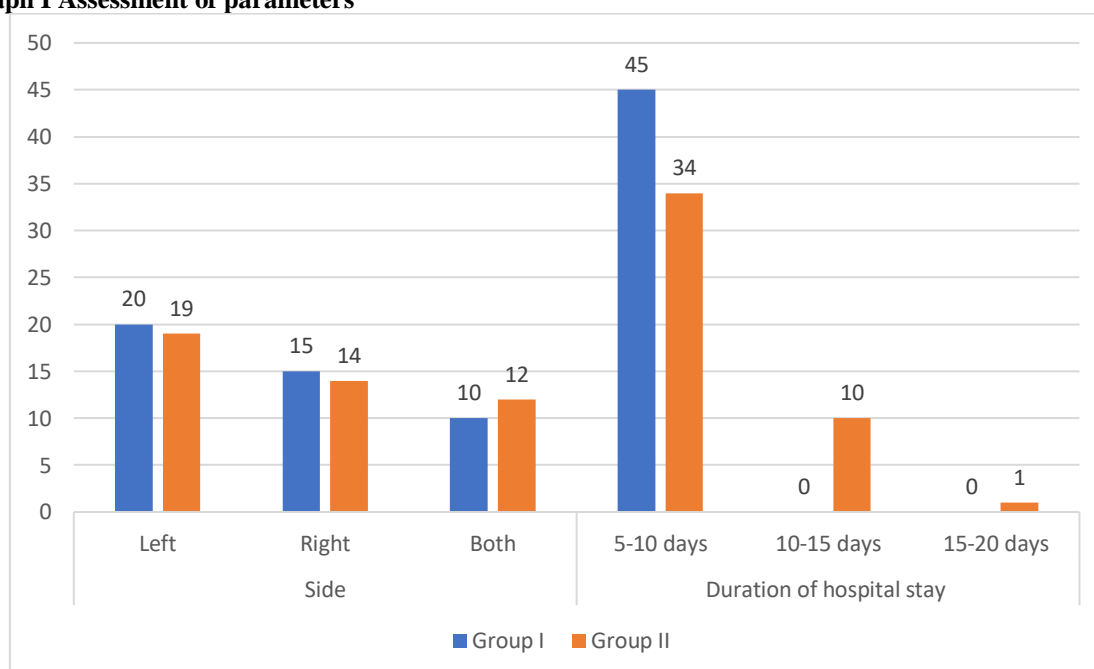


Table III Comparison of score

Score	Variables	Group I	Group II	P value
VDS	0	25	28	0.82
	1	13	10	
	2	5	3	
	3	2	4	
VCSS	Mild	20	13	0.21
	Moderate	16	22	
	Severe	9	10	
VRS	Mild	18	12	0.64
	Moderate	14	19	
	Severe	13	14	

Table III shows that VDS score 0 was seen in 25 in group I and 28 in group II, score 1 in 13 in group I and 10 in group II, score 2 in 5 in group I and 3 in group II and score 3 in 2 in group I and 4 in group II.

VCSS was mild in 20, moderate in 16 and severe in 9 cases in group I and 13, 22 and 10 in group II. VRS was mild in 18, moderate in 14 and severe in 13 patients in group I and 12, 19 and 14 in group II.

respectively. The difference was non-significant ($P > 0.05$).

DISCUSSION

Lower limb varicose veins are a common clinical condition. The word varicose, which describes dilated, convoluted, and elongated veins in the lower limbs, comes from the Latin word "varix," which means bent.⁶ The cause of lower limb varicose veins is loss of valvular efficiency, which is a byproduct of standing-related venous hypertension. According to western studies, it happens more frequently in females than in males. In the subcutaneous tissues of the legs, varicose veins are widened, tortuous veins that are frequently easily noticeable.⁸ Because their valves are typically incompetent, blood reflux happens, which can lead to venous hypertension and associated symptoms.^{7,8} Most people believe that varicose veins are not medically significant and should not be treated with great urgency. They frequently have an impact. Visible varicose veins of the leg affect approximately 25–30 percent of adult women and 15 percent of men in Europe and the USA.^{9,10} Many providers of healthcare consider varicose veins to be relatively minor and undeserving of treatment, and hospital admissions for intervention produce a considerable burden on health services.¹¹ The present study was performed to assess the outcome of the management of varicose veins.

We found that out of 90 patients, males were 50 and females were 40. The side involved was left was 20, right side in 15 and both in 10 cases in group I and 19, 14 and 12 cases in group II. The mean duration of hospital stay was 5-10 days in 45, in group I and in 34, 10 and 1 day in group II. Tuchsens F et al¹² found that men working mostly in a standing position, the risk ratio for varicose veins was 1.85 in a comparison with all other men. The corresponding risk ratio for women was 2.63. Thus, working in a standing position is associated with subsequent hospitalization due to varicose veins for both men and women. Vasquez CF et al¹³ studied to identify the usefulness of VCSS system in varicose vein risk assessment and to evaluate the changes after varicose vein treatment in 68 patients. The study concluded that VCSS was useful in the above measurement.

We observed that VDS score 0 was seen in 25 in group I and 28 in group II, score 1 in 13 in group I and 10 in group II, score 2 in 5 in group I and 3 in group II and score 3 in 2 in group I and 4 in group II. VCSS was mild in 20, moderate in 16 and severe in 9 cases in group I and 13, 22 and 10 in group II. VRS was mild in 18, moderate in 14 and severe in 13 patients in group I and 12, 19 and 14 in group II respectively. Michaels et al¹⁴ studied uncomplicated varicose veins suitable for surgical treatment. Conservative management, consisting of lifestyle advice, was compared with surgical treatment (flush ligation of sites of reflux, stripping of the long saphenous vein and multiple phlebectomies, as

appropriate). Changes in health status were measured using the Short Form (SF) 6D and EuroQol (EQ) 5D, quality of life instruments based on SF-36 and EuroQol, complications of treatment, symptomatic measures, anatomical extent of varicose veins and patient satisfaction. In the first 2 years after treatment there was a significant quality of life benefit for surgery of 0.083 quality-adjusted life years (QALYs) based on the SF-6D score and 0.13 based on the EQ-5D score. Significant benefits were also seen in symptomatic and anatomical measures.

CONCLUSION

Authors found that patients with varicose veins responded better to surgical management than to conservative treatment.

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