

## ORIGINAL RESEARCH

### Assessment of outcome of management of varicose veins

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#### **ABSTRACT**

**Background:** Visible varicose veins of the leg affect approximately 25–30 per cent of adult women and 15 per cent of men. The present study assessed outcome of management of varicose veins.

**Materials & Methods:** 84 cases of varicose veins of both genders comprises of conservative (Group I) and surgical procedures (Group II). Venous clinical severity score [VCSS] and venous disability score [VDS] were assessed.

**Results:** Out of 84 patients, males were 44 and females were 40. Side involved was left was 15, right side in 16 and both in 10 cases in group I and 11, 18 and 12 in group II. Duration of hospital stay was 5-10 days in 41, 10-15 days in 0, 15-20 days in 0 in group I and in 34, 4 and 3 days in group II. VCSS was mild in 14, moderate in 16 and severe in 11 cases in group I and 10, 22 and 9 in group II. VRS was mild in 15, moderate in 14 and severe in 12 patients in group I and 11, 16 and 14 in group II respectively. The difference was significant ( $P < 0.05$ ). Aching was absent in 16 in group I and 21 in group II, heaviness in 18 in group I and 23 in group II, itching 19 in group I and 25 in group II and swelling 17 in group I and 28 in group II. The difference was significant ( $P < 0.05$ ).

**Conclusion:** Surgical management found to be effective as compared to conservative management in patients with varicose veins.

**Key words:** Varicose veins, Aching, Swelling

#### **INTRODUCTION**

Visible varicose veins of the leg affect approximately 25–30 per cent of adult women and 15 per cent of men in Europe and the USA. 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.<sup>1</sup>

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.<sup>2</sup> Risk factors include obesity, not enough exercise, leg trauma, and a family history of the condition.<sup>3</sup> 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.<sup>4</sup>

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. 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.<sup>5</sup>The present study assessed outcome of management of varicose veins.

## MATERIALS & METHODS

The present study consisted of 84 cases of varicose veins of both genders. All gave their written consent for the participation of the study.

Data such as name, age, gender etc. was recorded. A thorough clinical examination was carried out. Management comprises of conservative (Group I) and surgical procedures (Group II). All patients 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. Conservative management consisted of lifestyle advice relating to exercise, leg elevation, management of weight and diet, and the use of compression hosiery. Venous clinical severity score [VCSS] and venous disability score [VDS] were assessed. Colour Doppler examination was performed. Results thus obtained were assessed statistically. P value less than 0.05 was considered significant.

## RESULTS

**Table I Distribution of patients**

Total- 84		
Gender	Male	Female
Number	44	40

Table I shows that out of 84 patients, males were 44 and females were 40.

**Table II Assessment of parameters**

Parameters	Variables	Group I (41)	Group II (41)	P value
Side	Left	15	11	0.84
	Right	16	18	
	Both	10	12	
Duration of hospital stay (Days)	5-10	41	34	0.01
	10-15	0	4	
	15-20	0	3	
VDS	0	24	27	0.92
	1	12	10	
	2	3	2	
	3	2	2	
VCSS	Mild	14	10	0.08
	Moderate	16	22	
	Severe	11	9	
VRS	Mild	15	11	0.17
	Moderate	14	16	
	Severe	12	14	

Table II shows that side involved was left was 15, right side in 16 and both in 10 cases in group I and 11, 18 and 12 in group II. Duration of hospital stay was 5-10 days in 41, 10-15 days in 0, 15-20 days in 0 in group I and in 34, 4 and 3 days in group II. VCSS was mild in 14, moderate in 16 and severe in 11 cases in group I and 10, 22 and 9 in group II. VRS was mild in 15, moderate in 14 and severe in 12 patients in group I and 11, 16 and 14 in group II respectively. The difference was significant ( $P < 0.05$ ).

**Table III Symptoms reported at 1-year assessment**

Symptoms	Group I				Group II				P value
	Absent	Better	Same	worse	Absent	Better	Same	worse	
Aching	16	12	10	3	21	16	3	1	0.04
Heaviness	18	15	4	4	23	17	1	0	0.05
Itching	19	12	9	1	25	10	4	2	0.02
Swelling	17	10	13	2	28	12	0	1	0.01

Table III shows that aching was absent in 16 in group I and 21 in group II, heaviness in 18 in group I and 23 in group II, itching 19 in group I and 25 in group II and swelling 17 in group I and 28 in group II. The difference was significant ( $P < 0.05$ ).

## DISCUSSION

Varicose veins of the lower limbs is a common clinical condition. The term varicose is derived from the Latin word “varix” meaning bent and refers to dilated, tortuous and lengthened veins of lower limbs.<sup>6</sup> Varicose veins of lower limb occur due to loss of valvular efficiency, which is a product of the resultant venous hypertension in standing position. Most commonly occurs in females compared to males according to western studies.<sup>7</sup> Varicose veins are tortuous, widened veins in the subcutaneous tissues of the legs and are often easily visible.<sup>8</sup> Their valves are usually incompetent so that reflux of blood occurs, and the resulting venous hypertension can cause symptoms.<sup>9</sup> Varicose veins are widely seen as medically unimportant and deserving low priority for treatment. They are common, affecting nearly a third of adults in Western societies, and few people with varicose veins are ever harmed by them.<sup>10</sup> However, they cause concern and distress on a large scale, most of which can be dealt with by good explanation and reassurance, or by a variety of treatments which are evolving rapidly at present. Patients can now be referred for more precise assessment and a greater range of therapeutic options than ever before.<sup>11</sup> The present study assessed outcome of management of varicose veins.

We found that out of 84 patients, males were 44 and females were 40. Michaels et al<sup>12</sup> 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.

We found that side involved was left was 15, right side in 16 and both in 10 cases in group I and 11, 18 and 12 in group II. Duration of hospital stay was 5-10 days in 41, 10-15 days in 0, 15-20 days in 0 in group I and in 34, 4 and 3 days in group II. VCSS was mild in 14, moderate in 16 and severe in 11 cases in group I and 10, 22 and 9 in group II. VRS was mild in 15, moderate in 14 and severe in 12 patients in group I and 11, 16 and 14 in group II respectively. Vasquez CF et al<sup>13</sup> 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 aching was absent in 16 in group I and 21 in group II, heaviness in 18 in group I and 23 in group II, itching 19 in group I and 25 in group II and swelling 17 in group I and 28 in group II. Tuchsén F et al<sup>14</sup> 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.

## CONCLUSION

Authors found that surgical management found to be effective as compared to conservative management in patients with varicose veins.

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