

ORIGINAL RESEARCH**Assessment of patients with varicose veins**

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ABSTRACT

Background: Lower limb varicose veins are a prevalent clinical problem. The phrase varicose, which describes dilated, convoluted, and elongated veins in the lower limbs, comes from the Latin word "varix," which means crooked. The present study was conducted to assess management of cases of varicose veins. **Materials & Methods:** 75 cases of varicose veins of both genders were assessed for venous disability score (VDS) and vein clinical severity score (VCSS). **Results:** Age group 20-30 years had 12, 30-40 years had 20, 40-50 years had 32 and 50-60 years had 11 patients. The difference was non-significant ($P > 0.05$). The side was left was 18, right side in 25 and both in 32 cases. The duration of hospital stay was 5-12 days in 21, 12-17 days in 39, 17-22 days in 15 cases. VRS was mild in 15, moderate in 11 and severe in 49 patients. VDS was 0 in 12, 1 in 18, 2 in 20 and 3 in 15 cases. VCSS was mild in 28, moderate in 40 and severe in 7 cases. The difference was significant ($P < 0.05$). **Conclusion:** The majority of patients with varicose veins had intermediate VCSS scores and severe VRS, and age group 40-50 years accounting for the majority of instances.

Key words: Convoluted, Limbs, Varicose veins

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INTRODUCTION

Lower limb varicose veins are a prevalent clinical problem. The phrase varicose, which describes dilated, convoluted, and elongated veins in the lower limbs, comes from the Latin word "varix," which means crooked. Lower limb varicose veins are caused by a decrease of valvular efficiency, which is a byproduct of standing-related venous hypertension. According to western studies, it happens more frequently in girls than in males. Severe bleeding or superficial thrombophlebitis are examples of complications. Hemorrhoids are the term for varices that form around the anus, whereas varicoceles occur in the scrotum. There is frequently no clear cause. Obesity, insufficient exercise, leg damage, and a family history of the illness are risk factors. They also happen more frequently.

They can occasionally be caused by long-term venous insufficiency. The veins' weakened or broken valves are the fundamental mechanism. The diagnosis is made by examination most of the time, with ultrasound help if needed. Spider veins, on the other hand, are tiny and involve capillaries. Venous reflux is a major contributor. Studies have also demonstrated the significance of pelvic vein reflux (PVR) in the varicose vein formation process. Ovarian vein reflux may be the cause of varicose veins in the legs. Leg varicose veins can be caused by both ovarian and

internal iliac vein reflux, according to research by Whiteley and colleagues. This issue affects 14% of women who have varicose veins and 20% of women who have had vaginal deliveries. Furthermore, data indicates that neglecting to search for and treat pelvic vein reflux can be a cause of recurrent varicose veins.⁶ The present study was conducted to assess management of cases of varicose veins.

MATERIALS & METHODS

The present study consisted of 75 cases of varicose veins of both genders. All agreed to participate in the study and gave their written consent.

Data such as name, age, gender etc. was recorded. A clinical examination and a questionnaire were used to assess the venous disability score (VDS) and vein clinical severity score (VCSS). A color Doppler examination was conducted, and metrics including the patency and competency of the lower limb's deep vein system, the competency of the SPJ, and the grading of venous reflux at the SFJ were recorded. Based on the length of time recorded by venous doppler examination, they were classified as grade I, grade II, and grade III. Venous reflux is typically not seen at SFJ. Reflux is seen as abnormal when it occurs. Reflux duration was quantified and categorized. Depending on the clinical severity, each patient received surgery using the Trendelenburg

procedure, which included flush ligation of the sapheno-femoral junction, subfascial ligation of perforators, segmental excision of varicosities,

sapheno-popliteal ligation, and split skin graft. Results thus obtained were assessed statistically. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Age group (Years)	Number	P value
20-30	12	0.71
30-40	20	
40-50	32	
50-60	11	

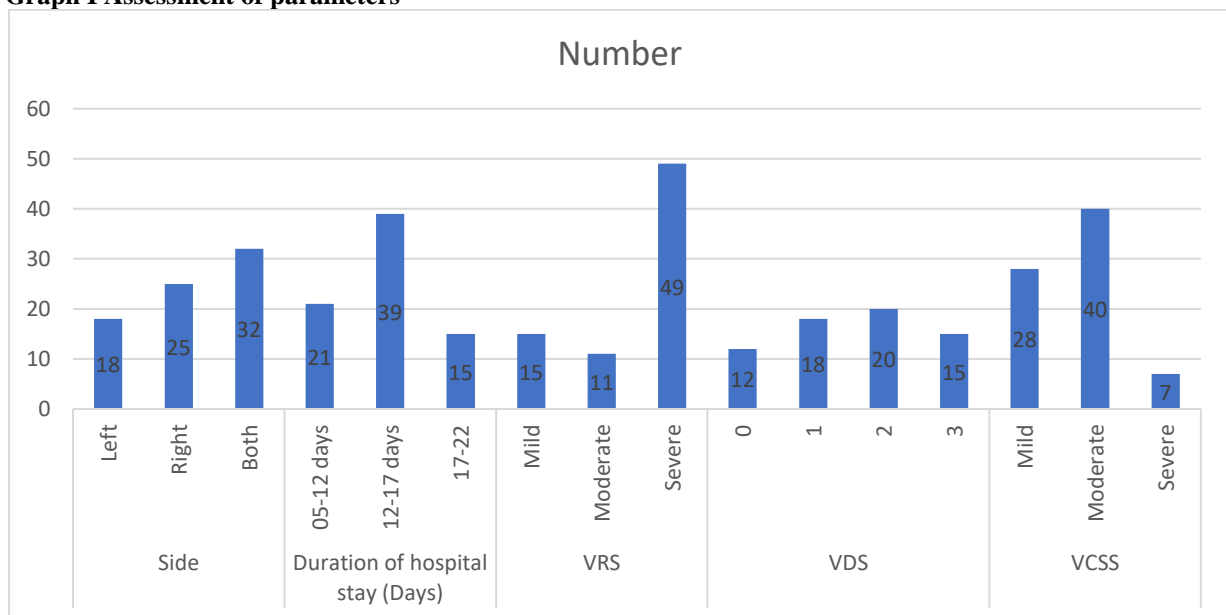
Table I shows that age group 20-30 years had 12, 30-40 years had 20, 40-50 years had 32 and 50-60 years had 11 patients. The difference was non- significant (P> 0.05).

Table II Assessment of parameters

Parameters	Variables	Number	P value
Side	Left	18	0.12
	Right	25	
	Both	32	
Duration of hospital stay (Days)	5-12	21	0.05
	12-17	39	
	17-22	15	
VRS	Mild	15	0.03
	Moderate	11	
	Severe	49	
VDS	0	12	0.75
	1	18	
	2	20	
	3	15	
VCSS	Mild	28	0.04
	Moderate	40	
	Severe	7	

Table II, graph I shows that, sidewas left was 18, right side in 25 and both in 32 cases. The duration of hospital stay was 5-12 days in 21, 12-17 days in 39, 17-22 days in 15 cases. VRS was mild in 15, moderate in 11 and severe in 49 patients. VDS was 0 in 12, 1 in 18, 2 in 20 and 3 in 15 cases. VCSS was mild in 28, moderate in 40 and severe in 7 cases. The difference was significant (P< 0.05).

Graph I Assessment of parameters



DISCUSSION

About 30% of people have experienced varicose veins at some point in their lives. As we age, they become more prevalent. Approximately twice as many women as men are impacted. Since at least A.D. 400,⁶ varicose veins have been documented throughout history and have been surgically treated. In the past, imaging methods were only used to look into varicose veins if there was a possibility that they involved the sapheno-popliteal junction, were recurring, or suggested deep venous insufficiency. These days, fewer people embrace this behavior. Venous ultrasonography of the lower limbs should now be used to investigate people with varicose veins. There is a substantial difference in the recurrence and reoperation rates at 2 and 3 years after the completion of a randomized controlled trial involving patients who had routine ultrasounds and those who did not.⁷ There's growing evidence that varicose veins and recurring varicose veins are formed by incompetent perforator veins, or "perforators". Hyperhomocysteinemia can also lead to varicose veins because it can break down and prevent the artery's three primary structural elements- collagen, elastin, and proteoglycans- from forming.⁸ Protein function and structure are gradually impacted by homocysteine's persistent degradation of lysine amino acid residues and cysteine disulfide bridges. Put simply, homocysteine is a "corrosive" of proteins that are either lifelong (such as fibrillin) or long-living (such as collagen or elastin).⁹ The present study was conducted to assess management of cases of varicose veins.

We found that age group 20-30 years had 12, 30-40 years had 20, 40-50 years had 32 and 50-60 years had 11 patients. Viljamaa et al¹⁰ evaluated how patient characteristics and duplex ultrasound findings influence management decisions of physicians with specific expertise in the field of chronic venous disease. 346 physicians with a known interest and experience in phlebology were invited to participate in an online survey about management strategies in patients with great saphenous vein (GSV) reflux and refluxing tributaries. A total of 211 physicians (68% surgeons, 12% dermatologists, 12% angiologists, and 8% phlebologists) from 36 different countries completed the survey. In the basic case vignettes 1 and 2, respectively, 55% and 40% of participants proposed to perform endovenous thermal ablation, either with or without concomitant phlebectomies ($p < .001$). Looking at the modified case vignettes, between 20% and 64% of participants proposed to adapt their management strategy, opting for either a more or a less invasive treatment, depending on the modification introduced. The distribution of chosen management strategies changed significantly for all modified vignettes ($p < .05$).

We observed that side was left was 18, right side in 25 and both in 32 cases. The duration of hospital stay was 5-12 days in 21, 12-17 days in 39, 17-22 days in

15 cases. VRS was mild in 15, moderate in 11 and severe in 49 patients. VDS was 0 in 12, 1 in 18, 2 in 20 and 3 in 15 cases. VCSS was mild in 28, moderate in 40 and severe in 7 cases. Tuchsien et al¹¹ determined whether or not prolonged standing at work involves an excess risk for the occurrence of varicose veins. For men working mostly in a standing position, the risk ratio for varicose veins was 1.85 [95% confidence interval (95% CI) 1.33-2.36] in a comparison with all other men. The corresponding risk ratio for women was 2.63. The results were adjusted for age, social group, and smoking. Working in a standing position is associated with subsequent hospitalization due to varicose veins for both men and women. Vasquez CF et al¹² 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.

CONCLUSION

Authors found that the majority of patients with varicose veins had intermediate VCSS scores and severe VRS, and age group 40-50 years accounting for the majority of instances.

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