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**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3520008>Available online at: <http://www.iajps.com>**Research****STUDY OF VARICOSE VEINS OF LOWER LIMB; CLINICAL
PRESENTATION AND MANAGEMENT****¹Dr Isma Imtiaz, ²Dr Anum Pervaiz, ³ Dr. Pakeeza Afzal**¹ Foundation University Medical College² Fatima Memorial Hospital, College of Medicine and Dentistry³ Frontier Medical and Dental College**Abstract:**

Background: varicose veins are a common disorder of the lower limbs. Usually, the patient has an aesthetic problem that, if not treated in time, can lead to complications that lead to significant morbidity. Several options are available for surgical management. The present study was conducted to examine the demographic factors, to evaluate the clinical aspect and the outcomes of the different modalities of treatment of varicose veins of the lower limbs.

Methods: the present study was conducted from October 2016 to October 2018 in a third level academic hospital and 54 cases were included. The clinical aspect of varicose veins has been studied. The average age and gender prevail calculated. All patients underwent clinical and venoperative tests and were consequently treated as conservative, surgical or intravenous laser ablation. Complications after reviewing the procedures.

Results: Overall, 39 (72%) of the 54 patients were under 50 years old. The prominent veins on the lower limb were the most common. The sapheno-femoral transition was the most affected vein. Male obesity was observed with a male-female ratio of 12.5: 1. Venous Doppler has an accuracy of 92.59% in detecting sapheno-femoral and perforator incompetence. The results of intravenous laser ablation are similar to those of surgery but have lower morbidity.

Conclusions: this study found that the disease occurs mainly in men during the active phase of life. Most patients have a great incompetence of the saphenous vein and the complications are greater when both the large saphenous vein and the perforating systems are involved. Venous Doppler is the study of choice as it has a high precision.

Keywords: Incompetence, Varicose veins, Venous Doppler

Corresponding author:**Dr. Isma Imtiaz,**

Foundation University Medical College

QR code



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INTRODUCTION:

Varicose veins and associated symptoms and complications are the most common chronic vascular disease of the lower limbs. The term varicosis derives from the Latin word dilatata. Varicose veins are dilated, tortuous and elongated veins. Varicose veins are a common disease that affects at least 10% of the general population.¹ The symptoms of varicose veins vary from asymptomatic varicose veins to more serious complications such as ulcers and bleeding. Varicose veins can cause significant morbidity, including dermatitis, ankles, spontaneous bleeding, superficial thrombophlebitis, lipodermatosclerosis and ulcerations. Varicose veins have been recognized prehistorically and many inventions related to the diagnosis and treatment of varicose veins have been made by many phlebologists, including many techniques of bandaging, ligation and vein stripping. The main focus was on the mechanical effects of varices rather than on the root cause. Only in recent times has significant knowledge been acquired on the anatomy of the venous system of the leg, on the physiological mechanism of venous return to the heart against gravity and on the pathology of the disorder that has led to many

new methods of examination and treatment. Doppler ultrasound and duplex imaging have become a major target in the diagnosis of chronic venous insufficiency.² The treatment of varicose veins includes Trendelenburg surgery, stripping, ligation of the subfascial perforator, laser, sclerotherapy, surgery of the subfascial endoscopic perforator and ablation with radiofrequency. In the recent past, minimally invasive procedures have replaced more invasive procedures. The search for more effective agents for the diagnosis and treatment of varicose veins and for the prevention and treatment of their complications will continue. The purpose of this thesis is to study the distribution, the pathology, the clinical characteristics, the different methods of examination and the overall management of varicose veins of the lower limbs.³ The purpose of this study is to evaluate the demographic factors, the appearance clinical and the outcome of different treatment modalities of varicose veins of the lower limbs investigate.

METHODS:

The present study was conducted from October 2016 to October 2018 at the Holy Family Hospital Rawalpindi .54 cases were enrolled based on inclusion and exclusion criteria. Patients are included with dilated and elongated dilated veins of the lower limbs, diagnosed and confirmed with venous Doppler of the lower limbs, and patients with or without complications of venous

hypertension. Patients under the age of 18 with reticular veins or spider veins and reversible secondary varicose veins are excluded. The clinical evaluation was based on the history of previous treatment and clinical examination. The duration of symptoms was noted. The history of deep vein thrombosis, the treatment of varicose veins in the form of conservative treatment with compression stockings, sclerotherapy or surgery were found. The local examination is carried out standing or in a supine position. Presence and position of dilated veins, pigments and detected ulcers. The following tests are performed:

Brodie Trendelenberg test: the comparison between sapeno-femoral transposition and venous Doppler perforators and clinical studies was compared to calculate the accuracy between them.

Test: part I and part II are performed to determine the incompetence of the saphenofemoral valve and other communication systems.

The modified Perthes test was performed to exclude deep vein thrombosis. A multiple tourniquet test is performed to detect incompetence at various levels. Abdominal examination to rule out the causes of secondary varicose veins.

CEAP classification: the clinical-aetiological-pathological classification is used to classify patients based on signs. Studies were conducted in which a Doppler of the venous system was performed using a 10 MHz probe. The patient was examined in an upright position along the entire length of the Doppler system the long saphenous and short saphenous systems. Patients received the following treatments. Conservative treatment was performed in patients without sapeno-femoral ability or perforation with elastic compression stockings. In patients with venous ulcer, the Bisgaard treatment method was initially applied, so the patient underwent another definitive treatment.

Intravenous laser ablation, a minimally invasive ultrasound-guided technique for the treatment of varicose veins with laser energy for the treatment of varicose veins with a laser ablation machine at a frequency of 1020 nm. Trendelenburg operation, in which the incompetent saphenofemoral junction by ligation flush with the saphenofemoral junction and removal of a long saphenous vein approaches. Ligation of the sapeno-femoral junction with removal of the long saphenous vein at the knee. Subfascial facial ligation of perforators with ligation of incompetent radiographically identified perforators. Patients are examined for SSI after a period of 1 month, ulcer healing and symptomatic relief at 3 months and recurrence of varicose veins after 6 months. The statistical comparison method is accuracy.

RESULTS:

The average age of the patients was 43.40 years with a standard deviation of 10.93. Of the 54 patients, varicose veins occurred predominantly in men with 50 (92.6%) and in women with 4 (7.4%). The ratio between men and women is 12.5: 1. Most of the patients in the present study showed more symptoms. The most common symptom was visible vein dilation, which occurred in 50 (92.6%). 44 (81.5%) patients were involved in the large venous approach, 6 (12.2%) in the large venous line and 6 (12.2%) in the perforator 33 patients (61.1%) had involvement in the large saphenous venous system, 4 patients (7.5%) were involved only in the perforators. Each patient was classified according to the CEAP class. Venous Doppler was the cornerstone of the present study and was performed in all patients. The results were recorded as a gold standard. Of the 54 patients enrolled, 26 (48%) were treated conservatively with compression stockings, ankle pumping exercises and limb elevation. Ten (18.5%) of the 54 patients enrolled underwent intravenous laser ablation of

the saphenous vein. In 14 (26%) patients, Trendelenburg surgery was performed with ligation of the smooth saphenous femoral junction and stripping of the saphenous vein on the knee. Perforator ligation was performed in 4 (7.5%) patients with isolated perforating competence. Ecchymoses were observed in 2 (20%) patients who had EVLA. Other complications such as pain, hematoma, skin burns, DVT, SSI were not detected after EVLA. Ekchymoses were observed in 4 (28.2%) patients undergoing Trendelenburg surgery. Surgical site infection (SSI) was detected in 2 (14.28%) patients, in 1 (7.14%) patients saphenous nerve damage and deep venous thrombosis were reported in 1 (7.14%) patients on.

Patients with Duchi One stage did not receive postoperative chemotherapy and regular follow-up was recommended. 38 patients received postoperative chemotherapy. 18 patients received radiotherapy. New evidence suggests that anti-inflammatory drugs play a role in the treatment and prevention of colon and rectal cancer.

Table 1: Distribution of patients according CEAP classification.

CEAP	No of patients (%)
C2	26 (48)
C3	4 (7.4)
C4	5 (9.3)
C5	0
C6	19 (35.3)
Total	54

Table 2: Comparison between competent and incompetent saphenofemoral junction on Brodie-Trendelenburg test and venous Doppler.

Saphenofemoral junction	Brodie-Trendelenburg test (%)	Venous Doppler (%)
Competent	41 (76)	37 (61.3)
Incompetent	13 (24)	17 (38.7)
Total	54 (100)	54 (100)

Table 3: Comparison of tourniquet test with venous Doppler.

Site of incompetence	No of patients (Tourniquet test) (%)	No of patients (on venous Doppler) (%)
Above knee	4 (19)	7 (33)
Below knee	10 (47.6)	14 (66.7)

DISCUSSION:

The average age of the patients was 43.40 years and is comparable to the studies of Shankar, Reddy et al., Sharma et al., Srinivas et al., Vanakshijami et

al. And Algarsamy et al. The male-female relationship was similar to the studies of Shankar and Algarsamy et al., In which he was 14: 1.4.5. The dilated veins visible as the most common

symptom in the present study can be compared with the studies of Shankar, Rudofsky et al. O'Shaughnessy et al., Which are 90%, 92% and 84%. 4,10,11 In the present study, leg ulcers were the main symptoms in 35% of cases, which was 42% with the results of Sharma et al. Patients with skin lesions such as lipodermatosclerosis, eczema and pigmentation

The study was 14%, in line with the results of Sharma et al., Nagaraj et al., Reddy et al. and Shankar agrees. 4,6,12,15 The involvement of the right extremity was 35% and the involvement of the left extremity was 52% of the various studies conducted by the authors. The saphenous vein was affected in 81.5% of the cases, with the second victim the perforators, which represented 61.1% of the cases. Other studies also confirm this fact. Study by Delbe and Mocquet, Sharma et al., Kiran Shankar et al., Srinivas et al. It was 92.5%, which is quite consistent with the accuracy of Sharma et al., Mishra et al. and Prabhu et al. (80%, 85% and 100%) The test has an accuracy of 63.36%, which is consistent with Sharma and Mishra et al. stand, and Prabhu et al. reported a better accuracy of 85%. Patients undergoing Trendelenburg had an eczema of 28.5%, which was quite high compared to literature, where the incidence was between 3 and 10%. 6,14,15.

CONCLUSION:

In the present study varicose veins are often observed in males, at most in the 30-50 age group. The most common symptom is dilation of the visible lower limb vein, but more than half of the patients have one or more complications. The most commonly affected venous system is the large saphenous vein and the most commonly affected perforators are perforators below the knee. Patients treated conservatively were relieved symptomatically. Leg ulcers were completely cured in EVLA patients within 3 months, but leg ulcers that had undergone Trendelenburg regression of size and required a longer healing time.

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