



A CLINICAL STUDY AND MANAGEMENT OF VARICOSE VEINS IN LOWER LIMBS

Dr. Gaje Venu

Assistant Professor, Department Of General Surgery, Kakatiya Medical College Warangal.

Dr. Srinivasa Karthik*

Corresponding Author Assistant Professor, Department Of General Surgery, M.n.r. Medical College Sangareddy.

ABSTRACT

To study the clinical presentations, surgical management and its outcome and complications associated with varicose veins in lower limbs. A total 50 number of patients with primary varicose veins admitted, investigated operated and followed up. Final outcome evaluated. All the information was taken down in the proforma designed for the study. : In the study it was noted that the varicose veins affect the young adult and middle age population (20-60yrs). Most of the patients were males (84%) and majority of patients sought medical help for one or the other complications (92%). Long saphenous vein involvement was seen in 60% of patients and both LSV & SSV involvement in 12%.

KEYWORDS :

INTRODUCTION:

Varicose veins involve at least 1 out of 5 in world. The prevalence has been variously reported from as little as 2% to over 20% in population studies Varicose veins and their associated symptoms and complications constitute chronic vascular disorders leading to surgical treatment.—It's in the developed countries where attire reveals more than it conceals; patients turn up for treatment of cosmetic reasons. In our Indian scenario it's the complications not the cosmetic reasons bring the patient to the doctor. That is the reason, why, though common, varicose veins remain as an ice-berg phenomenon In developing countries like India, study encompassing the clinical evaluation and management of varicose veins on the conventional lines seems a necessity to improve the quality care with the available resources. —varicosity is the penalty for verticality against gravity. Though varicose veins were recognized pre historically only in the present century considerable knowledge has been gained concerning the anatomy of venous system of the leg, the physiological mechanism of venous return to heart against gravity and pathology of the disorder, which has lead to many newer modalities of treatment.

Majority of the patients with varicose veins associated with complications and surgical management with stripping of path of incompetence (i.e. LSV trunk) with incompetent perforator ligation appear to be best option for lower limb varicose veins under our settings.

MATERIALS AND METHODS:

The present study clinical study and management of varicose veinsl was done at Osmania General Hospital during the period between February 2017 – July 2018. During this period 50 number of cases of varicose veins were studied, which were admitted to surgical wards at Osmania General Hospital. The selection of cases was random.. Patients with unilateral and bilateral varicose veins in lower limbs, Patients with complicated varicose veins in lower limbs, both male and female patients are included. Patients with lower limb varicose veins with deep vein thrombosis, patients with lower limb varicose veins with pregnancy, patients with lower limb varicose veins with per abdominal mass are excluded from the study. Routine follow up was done during the immediate post-operative period and every day till discharge. Attention was paid to note the development of any complications like, Treatment was administered from time to time according to the needs of patients. After removal of sutures and improvement of general condition, the patients were discharged from the hospital with an advice regarding diet, rest, type of work to done, drugs to be taken and to prevent long standing, and usage of elastic crepe bandage, etc and with a further advice to come to check up once in 15days for one month and further once in a month. Those who came for check up were examined in detail. The general condition and examination of operated limb were carried out to find out the healing of wounds, appearance of any scar, any presence of tenderness and recurrence.

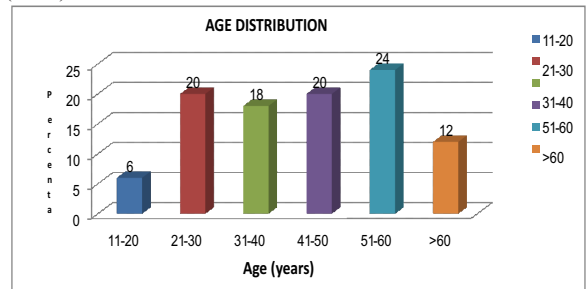
ANALYSIS OF RESULTS:

Fifty patients with primary varicose veins who were treated in the study were included for analysis.

AGE DISTRIBUTION:

The age of these patients ranged from 18yrs to 70 yrs.

The commonest age group of over patients was between 51 to 60 yrs (24 %).



SEX DISRIBUTION:

Out of 50 patients, 42 were male and 08 were female.

SIDE AFFECTED:

Left limb was more affected 22 cases (44%) than right limb 14 cases (28%). In 14 of the cases (28%), both the limbs were involved.

FAMILY HISTORY:

7 patients had family history of similar complaints (14%).

SYMPTOMATOLOGY:

SYMPTOMS	NO. OF CASES	PERCENTAGE
Pain	33	66
Dilated vein	46	92
Limb edema	09	18
Ulcer	13	26
Others(Skin changes etc.)	19	38

Our patens presented with varied symptoms, out of which dilated veins was most common 41 (82%) patients followed by aching pain 23 patients (46%).

VENOUS SYSTEM INVOLVED:

VENOUS SYSTEM INVOLVED	NO. OF CASES	PERCENTAGE
Long saphenous system	30	60
Short saphenous system	05	10
Both systems	06	12
Only perforator system	09	18
TOTAL	50	100

PERFORATOR INCOMPETANCE:

FINDINGS	CLINICAL SIGNS	COLOUR DOPPLER	INTRA OP FINDINGS
Thigh	08	11	08
Below knee	31	34	32
Above ankle	42	44	43
Unnamed	29	30	26
TOTAL	110	119	109

The total number of incompetent perforators are 110 clinically, 119 by Doppler and 109 intra-operatively.

The most common was the above ankle group with 42 preoperatively and 43 at surgery.

TREATMENT:

TREATMENT GIVEN	NO.OF CASES	PERCENTAGE
SFJ flush ligation with stripping of LSV with incompetent perforator ligation	26	52
SFJ flush ligation with incompetent perforator Ligation	07	14
SFJ, SPJ ligation with stripping of LSV with incompetent perforator ligation	06	12
SPJ ligation without stripping of SSV+IP ligation	03	06
Incompetent perforator ligation	08	16
TOTAL	50	100

COMPLICATIONS:

COMPLICATIONS	NO. OF CASES	PERCENTAGE
Bleeding	00	00
Haematoma	05	10
Delay healing	02	04
Pain	02	04
Wound infection	04	08
Recurrence	00	00
Others	02	04

DISCUSSION:

In the presents study a total number of 50 patients with primary varicose veins were admitted, investigated, operated and followed up. The results were analyzed. The analysis is as:

- In my study the age range is from 18 yrs to 70 yrs.
- In my series male to female ratio was found to be 5:1 The decreased occurrence of disease in females at our set up may be due to the fact that our middle class and lower class women are not much worried about the cosmetic appearance. Secondly the women may be resistant to complications of varicose veins probably due to ? hormonal influence or less average height compared to male which has a direct impact on venous hypertension or less violent muscular activity.
- In our study, left lower limb was involved in 22(44%) cases and right lower limb was involved in 14(28%) cases and in 14(28%) both limbs were involved.
- In the present study, the commonest symptom in 46 (92%) cases was that of dilated and tortuous veins. 33 (66%) cases had complaints of pain in the affected limb and 9(18%) cases had limb edema, venous ulcer was present in 13(26%) of cases
- In this study, long saphenous vein was involved in 60% of cases (30 patients), the short saphenous vein in 10% (5 patients) and both long and short in 12% (6cases).
- In our study we had a total of 110 perforators incompetent by clinical examination and 119 by color Doppler. The commonest group of perforators that were incompetent was the above ankle group, 42 of them by clinical and 44 by Doppler examination and 43 of them intra-operatively. Out of the total incompetent perforators, we had 29 in unnamed areas by clinical examination and 30 by Doppler and 26 intra-operatively.
- We had 05 case of sapheno-popliteal incompetence detected by Doppler and confirmed at surgery.
- Conservative treatment was given to all the patients pre-operatively with the idea of improving the limb and making it fit for surgery and post operative compression treatment was followed routinely to prevent haematoma formation after

stripping and were advised elastic crepe bandage/stockings for three to four months.

• Sclerosant therapy was not tried in this series, because of the paucity and non availability of the sclerosant agents and also because of presence of major incompetence.

• Out of 50 cases, saphenofemoral junction ligation including the ligation of anatomically constant tributaries at its termination with stripping of long saphenous vein by Myers stripper and ligation of incompetent perforator was done in 26cases. Sapheno- popliteal flush ligation was done in 3 cases, SFJ and SPJ ligation with stripping of LSV in 6 cases. SSV was not stripped to avoid nerve injury. Flush ligation of SFJ and incompetent perforator ligation was done in 7 cases. Only incompetent perforator ligation was done in 8cases.

• In our study, we encountered 15 cases of complication, the commonest being haematoma in 05 cases which cleared conservatively. There was no incidence of deep vein thrombosis or pulmonary embolism postoperatively in this series. We had no recurrence of varicosity in our study with a follow up of a minimum of 3 months.

CONCLUSION:

Fifty cases of varicose veins of the lower limb have been studied in detail. An analysis of the data has enabled this study to arrive at the following conclusions.

Varicosity of the lower limb is a fairly common clinical entity. The number of cases reporting to the hospital is much less than the real incidence; because in the absence of symptoms due to varicose veins patients do not seek treatment in our country. The commonest age group of patients suffering from varicose veins is 51 to 60 years. Most of the patient presented to the hospital for one or the other complications not for the cosmetic purpose. The majority of the patients were male. The reason for the less number of female in the study is not known. Probably our middle class and lower class women are not much worried about the cosmetic appearance and secondly women may be resistant to the complications of varicose veins by virtue of their ? hormonal mileau or less average height compared to male or less violent muscular activity.No definite conclusion could be drawn from the present series regarding etiology, as the number is small. However a definite relationship exists between the occupation and the incidence of varicose veins. The involvement of long saphenous system is more common than the short saphenous system and left limb is affected more common. The cause for the same is not known but could be attributed to the longer course traversed by the left iliac veins. For incompetent perforators, sub-fascial ligation results are satisfactory. The outcome of cases of primary varicose veins depends on a thorough and complete clinical examination and duplex scan by an experienced radiologists. Operative line of treatment is a primary procedure in the management of varicose veins of lower limbs. LSV stripping and non stripping of SSV is associated with less morbidity. In absence of Junctional incompetence, only sub-fascial ligation of incompetent perforators was associated with no recurrences. Complications are negligible if cases are meticulously selected and operated. The present procedures enable the patient to lead almost normal life after surgery and the mortality rate is very negligible.

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