



A Comparative Study on Outcome of Surgical Management of Lower Limb Varicose Veins With and Without Venous Stripping

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ABSTRACT-

Varicose veins of lower limbs are dilated, tortuous and palpable veins larger than 3mm. These are manifestations of chronic venous disease. It affects 15-20% of the population and about 2% of cases also have skin changes. The main predisposing factors are hereditary, pregnancy, prolonged standing, obesity and heavy exercise. Most patients present with pain, swelling, pigmentation and ulceration.

KEY WORDS- chronic venous disease, prolonged standing, pain, pigmentation.

I. INTRODUCTION-

The main objective of this comparative study is to compare the outcome of two surgical treatment modalities of varicose veins.

One group of patients undergoes Trendelenburg procedure with Subfascial ligation of incompetent perforators and multiple ligations of GSV whereas the other group undergoes Trendelenburg procedure with Subfascial ligation of incompetent perforators with stripping of long saphenous vein from groin to knee.

The two modalities are compared in terms of

1. Hematoma formation in the thigh.
2. Healing of wounds in the leg at the site of incompetent perforators.
3. Comfortable ambulation without much pain on first post-operative day.
4. Postoperative hospital stay.
5. Pain relief of the patient after two months

II. CASE REPORT-

MATERIALS AND METHODS:

- Type of study- It is a comparative prospective observational study
- Source of data- After admission, investigations and treatment done at this institute.
- Period of study- from December 2020 to June 2022
- Sample size- 50 patients

INCLUSION CRITERIA:

1. Varicose vein with saphenofemoral valve incompetence and perforators incompetence.
2. Age between 16 and 70

EXCLUSION CRITERIA-

1. Age extremes <16 and >70yrs.
2. Patients with deep vein thrombosis.
3. With associated short saphenous vein varicosity.
4. With venous ulcer or other skin changes
5. Recurrent varicosity.

Methodology:

After explaining the procedure and getting informed consent from the patients, they were subjected to one of the two types of surgical treatment modality.

GROUP I

- In one group 25 patients underwent Trendelenburg procedure by making a transverse incision of length 3cm just below the groin crease extending from femoral artery pulsation site towards medially. The incompetent perforators in the thigh and leg are ligated and divided subfascially by making small transverse incision across the path of the vein at the site of incompetent perforators marked preoperatively.
- Then the long saphenous vein is stripped from groin to just below the knee by passing stripper into the vein.

GROUP II

- In the other group 25 patients underwent Trendelenburg procedure is done by making a transverse incision of length 3cm just below the groin crease extending from the site femoral artery pulsation medially. The incompetent perforators in the leg are ligated and divided subfascially by making small transverse incision across the path of the vein at the site of incompetent perforators marked preoperatively.



- In both groups the wounds closed with good hemostasis, limb elevated and elastocrepe bandage applied.
- All the patients were followed in the postoperative period and for a period of next two months.
- The factors that are taken for comparison are

1. Hematoma formation in the thigh:

All the patients were examined daily in the postoperative period to look for hematoma formation in the thigh.

2. Healing of wounds in the leg at the site of incompetent perforators:

The time taken for the wound in the leg made for approaching the incompetent perforators was note down. If the wound takes more than 6 days to heal it was considered as delayed and were recorded

3. Comfortable ambulation without much pain on first post-operative day:

On the first postoperative day, all the patients were encouraged to walk for some time with elastic stockings. The patients who were able to walk comfortably on first postoperative day with minimal pain were recorded.

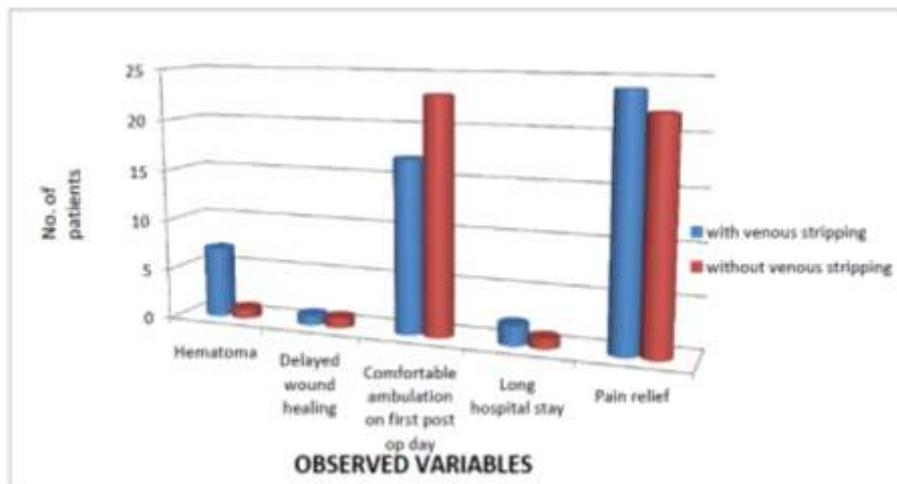
4. Postoperative hospital stay:

Usually the patients were discharged on third postoperative day. Those who were in the ward for more than 6 days because of pain, delayed wound healing were noted.

5. Pain relief of VISUAL ANALOG SCALE:

- 0 – No pain
- 2 – Mild pain
- 4 – Discomfort
- 6 – Distressing pain
- 8 – Intense pain
- 10 – Excruciating pain

III. RESULTS



- In this study males contribute the maximum bulk of about 82%. As for as the age is considered, patients aged between 40 – 70 yrs was more, which was about 58%.
- The hematoma formation after venous stripping was 28% whereas it was only 4% in the other group. There was no significant difference in healing of leg wounds in both the studies.
- The first postoperative comfortable ambulation with minimal pain was possible in more patients who did not undergo venous stripping (92%) than who underwent stripping (68%).
- Long postoperative stay of more than 6 days was found in 8% of those who underwent

stripping and 4% of the other group. The long stay was mostly due to pain and delayed wound healing.

- Pain relief was seen in 96% of those who had venous stripping and 88 % of those who did not undergo venous stripping at the end of second month.

IV. CONCLUSION

- In this comparative study which was done in 50 patients, the observations of short term variables show that the venous stripping has increased incidence of hematoma formation and the ambulation of patients on first post operative day was very painful.



- With reference to wound healing, hospital stay and pain relief there is no significant difference between the two procedures.
- So, as for as the variables observed, the Trendelenburg procedure with incompetent perforators ligation without venous stripping appears to be better than Trendelenburg procedure with incompetent perforators ligation with venous stripping.

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