

# A Rare Presentation of Giant Thrombus in a Case of Long- Standing Varicose Vein

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**Abstract:** ***Objectives:** To evaluate long standing varicose veins and to bring into notice a rare presentation of Giant Thrombus in a case of long-standing varicose veins **Design:** Interventional with prospective observational study. **Place & Duration:** This case report was done at Sri Lalithambigai Medical College and Hospital during my residency year 2022 - 2023. **Methods:** A standard technique of sapheno femoral ligation with stripping of the long saphenous vein to just below knee and multiple stab avulsions of varicosities after subfascial ligation of perforators was performed. Case was reviewed postoperatively for eight weeks. **Results:** There was a rare presentation of varicose vein with giant thrombus located above knee, he underwent surgery, post operative period was uneventful, and patient was observed periodically for 8 weeks, patient recovered well. **Conclusion:** A rare presentation of giant thrombus was encountered and has been operated, brought to notice for educational purposes.*

**Keywords:** Varicose veins. Rare presentation. Giant thrombus. Sapheno - femoral ligation. Stripping

## 1. Introduction

Through the historic progressive events by Herophilus and Erasistrates at Alexandria in 391 A. D in Hippocrates times, the management of the varicose veins went on modified till mid-19<sup>th</sup> century when Brodie recommended the surgical management for the first time.

The hallmark of venous stasis disease is presence of dilated, tortuous, elongated vessels with incompetent valves, which may manifest as telangiectatic blemishes to overt varicose ulcerations.<sup>2-7</sup> The first step in the evaluation of a patient with primary varicose veins is a careful history and clinical examination including tourniquet tests.<sup>2-4, 8-9</sup> When physical examination remains inconclusive, Doppler USG, Duplex color scanning and phlebography is required for an accurate diagnosis.<sup>10-12</sup> The principle of the varicose vein surgery still remains the interruption of all insufficient communications between deep and superficial venous system and removal of the varicosities as mentioned by Muller for the ambulatory surgery.<sup>13-14</sup>

A number of alternative techniques such as the endoscopic surgical procedures, cryosurgery, laser surgery, laser surgery and incompetent valve replacement have been applied in outpatient departments.<sup>15</sup> The procedure can be carried out under any anesthesia but the tumescent anesthesia technique is an important adjunct to the ambulatory phlebectomy<sup>19-17</sup>. Deprivation of blood supply with a pneumatic or other tourniquets during surgery is beneficial for ambulatory treatment of varicose veins.<sup>18-19</sup>

Complications of varicose vein surgery are comparatively rare, with excellent cosmetic results thus making it an ideal procedure. These include cutaneous nerve injuries, hematomas, infections, lymphatic fistula, injuries to the femoral vein or artery and compartment syndrome.<sup>20-22</sup> Adaptation of treatment policies for varicose veins varies

center to center due to different factors including patient's preference.<sup>23-25</sup>

## Patient & Methods

This study was conducted at Sri Lalithambigai Medical College and Hospital during my resident ship year 2022 - 2023. This patient who has attended the surgical outdoor of unit I with complaint of varicose veins were initially assessed thoroughly by history and physical examination including tourniquet tests and was diagnosed with varicose veins clinically and radiologically.

## 2. Case History

MR X, 45 years old, residing at Vellore, a tea shop owner, Came to opd of general surgery unit 1 with complaints of multiple swelling in both of his lower limbs for the past 5 years with the largest swelling noted over his medial aspect of left knee extending above to the thigh for 5 cms, his major complaints was pain over both lower limbs, swelling over both lower limbs, and change of his gait for past 2 years.

He was examined clinically, A special mention about the swelling occupying the medial aspect of the left knee, this swelling was irregular in shape, 7\*5\*3 cms in size, extending from medial aspect of left knee above to the thigh, skin over the swelling appears normal, skin surrounding the swelling is normal, On palpation the swelling was tender, smooth surface, firm in consistency, no induration was present around the swelling, all other Inspectory Findings was confirmed.

All the routine blood and radiological investigations taken. Patient was planned for Surgery.

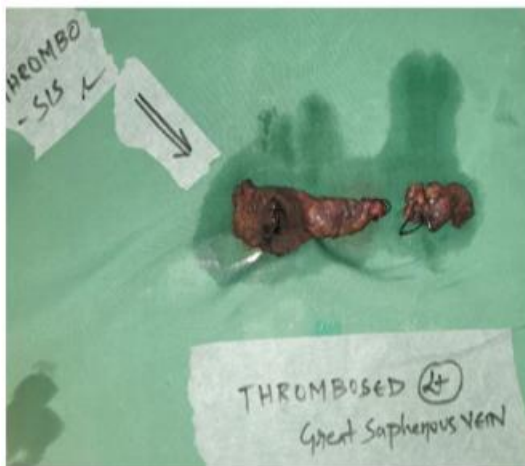
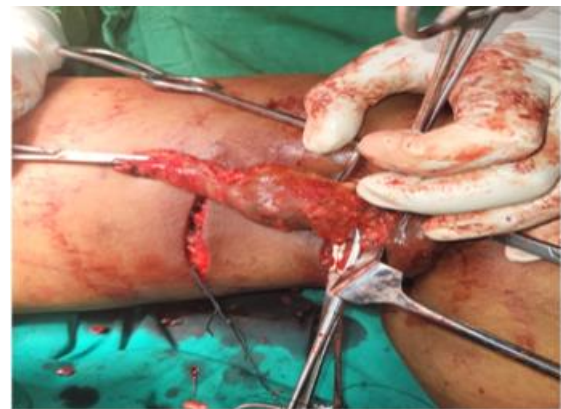
The preliminary treatment with antibiotics and antiseptic dressings on outdoor basis was given for this patient. In addition to the base line investigations, Doppler sonography

or Duplex color scanning in this patient was carried out to see the status of deep veins, superficial veins and their perforators. The appointment date and the explanation about surgical procedure with pre - medication were given in the outdoor before the coming operative list. This patient underwent surgery under Epidural and Spinal anaesthesia. A standard technique of saphenofemoral ligation with stripping of the long saphenous vein up to just below the knee and multiple stab avulsions of varicosities after ligation of perforators was performed. All limbs were dressed with cotton in crepe bandages with compression dressings. Intra operative period was uneventful. This patient was discharged on the post operative day 5 and advised to review periodically and complications were explained.

**PREOP picture of swelling occupying medial aspect of left knee joint:**



Intraop Pictures of Giant Thrombus:



### 3. Results

This was to bring to notice of fellow surgeons about this rare presentation of this Giant thrombus in a case of long-standing varicose veins. who has been operated and was reviewed periodically for 8 weeks, patient symptoms were improved and his gait was recovered back to normal. Post operative edema was present as complication in this patient and no other complication was present,

### 4. Discussion

In this case study, this patient has reported to the surgical outpatient department had varicose veins and was having primary varicosities. The fact that majority of our patients first presented to the general practitioners and were laborers

and field workers belonging to poor socioeconomic class, which is not consistent to the Western studies where varicose veins are commonly seen in sedentary, overweight with tight clothing people of good socioeconomic class beside the racial factors<sup>29 - 32</sup> It is worth mentioning to note that the bilateral involvement was seen predominantly in this patient having positive family history suggesting the genetic predisposition of vein wall collagen defect in causation of primary varicosities.<sup>35 - 36</sup>

Though the common presentation of patients was with heaviness and dull pain in the legs but on third of our patients in the study presented with no varicose leg ulceration. This patient in our study was of poor socioeconomic class belonging mostly to remote rural areas with very poor awareness about their disease.

During intra operative period the thrombus was found within the vessel and was found with adhesions surrounding it, it was a single giant thrombus of irregular size noted inside the vessel wall, no calcification was noted. The specimen was excised and sent for histopathological examination, which later confirmed as thrombus inside the vessel wall. The preoperative clinical assessment of the patients was done. The standard technique of Trendelenburg ligation, stripping and stab avulsion of perforators was done. The Procedure was performed under general and spinal anaesthesia favoring the study by the Mofidi Retal.<sup>25</sup> Although no tourniquet was used during the surgery including tourniquet tests and the Doppler or Duplex scan was needed to assess the status of deep / superficial veins and the perforators preoperatively.

We recommend the preoperative assessment of the patients clinically by thorough and careful examination which is quick and compatible to our low socioeconomic setup and should not waste time and money unnecessarily on sophisticated investigations when the clinical examination is much conclusive.

On first follow up visit patient developed postoperative complications like limb edema in contradiction to the Western studies but the percentage of individual complications that is 6.67% for each of wound hematoma, infection and saphenous nerve lesion is comparable to the 6%, 5% and 6% of Lacroix H et al and to the 9%, 7% & 5.5% of Nelzen et al respectively for the three complications.<sup>27, 38</sup>

In many countries the varicose veins are probably the commonest disorder presenting to general surgeons. An average of 30% of the district nursing time is estimated to be spent on caring the patients with venous ulcers. For a disease of such magnitude relatively little epidemiological research seems to have been carried out which is the status seems to be fact in our country.<sup>26, 39</sup> Although no population-based study has been carried out but the total incidence of the varicose veins may be quite higher than reported in a few randomized studies thus suggesting it an underestimated public health problem like the Western countries and it may put a great socioeconomic impact on our health policies.<sup>26</sup>

## 5. Conclusion

Although the varicose vein surgery is safe, acceptable, cost-effective surgical procedure, the principles of selective surgical procedures are followed, the surgeon is able to perform with a low complication rate and excellent cosmetic results. There is also an immense need to adopt a national health policy for proper epidemiological study of varicose veins to collect data regarding this rare presentation of giant thrombus in a case of long-standing varicose veins and bring into literature for future usage in well fare of the society for upcoming generations.

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