Ayurvedic management of Venous Ulcer - Case study

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ABSTRACT

Varicose ulcers are wounds that are thought to occur due to improper functioning of venous valves, usually of the legs. They are the major chronic wounds, occurring in 70% to 90% of leg ulcer cases. In Sushrut Samhita, where get the most scientific description of wound and its management. Similarly, Sushrut has given the almost importance to bloodletting therapy in Siravikara and Twakdosha. Aforesaid description let us to try Siravyadha. In venous ulcer followed by dressing with Gomutraarka and Jathyadikeram. This treatment proved very effective and the ulcer healed completely within 30 days. However further evaluation is required to be done by taking a large samples size to prove its significance in treating Venous ulcer.

Key words: Venous Ulcer, Siravyadha, Vranashodhana, Gomutra Arka, Jathyadikeram

INTRODUCTION

Varicose ulcers occur due to increased venous hydrostatic pressure on varicose vein. Generally, manifests on the medial side of lower one third of the leg, (Long saphenous varicosity) called gaiters zone and also occasionally on the lateral aspect of lower leg region (short saphenous varicosity). It is generally shallow and superficial, edge is sloping, never penetrates deep fascia, floor is covered by pale granulation. Usually painless, unless effected by secondary infections or penetrates deep causing peridotites tibia. Shows features of healing.

Generally associated with varicosity of vein. The neighboring area of the ulcer is hyper pigmented (owing to stasis of blood), indurated and tender. Women are affected more often.

Occurs secondary to many years of venous disease. Discomfort, skin discoloration, itching and tenderness of skin exists prior to ulceration. Fibrin cuff theory and White cell trapping theory were explained in the pathology of varicose vein. Considering that we can say that the blood which is stuck in the vein is impure and hindering the wound healing. So removing the impure blood and dressing will help the wound healing.

Gomutra Arka

It is the distilled form of Gomutra. Central institute of Medicinal and Aromatic plants, Central Scientific and Industrial Research (CSIR), Go- Vigyan Anusandhan Kendra, Nagpur have reported that cow urine distillate is having bio-enhancing activity, anti-microbial effect, anti-fungal agents, anti-infective agents and anticancer agent etc. properties. Studies also proven about the use of it on chronic non healing ulcers like diabetic foot ulcer.

CASE REPORT

A 51 year old male patient with a known history of Diabetes Mellitus, complaints of 6 non healing ulcers on both legs. (On right leg, 2 on medial malleolus, 1 on
lateral malleolus, and 2 on dorsum of foot. On left leg, 1 on medial malleolus.) since 3 months.

At first the patient developed varicose vein on both legs from the level below the knee on the Posterior aspect, followed by hyperpigmentation and Oedema. He experienced severe itching then gradually developed ulcers due to scratching with nails. He tried to manage by himself, but the condition get worsened. There was pain and also having watery discharge from the wound. There was no history of direct trauma and also doesn’t have any family history of the same. There was no history of constipation, chronic cough, weight loss, pain in abdomen. His bladder and bowel habits were regular and had a normal appetite. His sleep was disturbed due to severe itching. He was under medication for DM since 4 years (Metformin). His medical history doesn’t reveal any other illnesses like Hypertension, Thyroid, Hyperlipidemia.

**General Examination**

Weight - 82kg, Height - 168 cm (BM I= 29.05kg, which is overweight). The skin of both lower legs are hyperpigmented and thickened. No pallor, No icterus, cyanosis, clubbing, lymph adenopathy. Mild oedema observed around the ulcer.

The vitals of the patient was pulse - 56 bpm, BP - 130/80 mmHg, Respiration - 12times/min, Heart rate - 60bpm. His Prakruti was Kapha-Vata predominant.

**Physical Examination**

On examination dilated tortious veins seen on the both legs from the area below the knees on the posterior aspect.

Varicosity of vein was confirmed by Trendelenburg’s test and was found positive. There were 6 ulcers present on both legs. An ulcer which was 3x3x.2cm in size was present on the medial aspect of left leg, just above the medial malleolus. Ulcers of size 2x.5x.05 cm and 2.5×1×.1cm are present on medial aspect of right leg just on the sides of medial malleolus. A linear ulcer of size 6x2x.2cm was found on the lateral aspect of right leg on the lateral malleolus. And an ulcer of size 2×1×.1cm which is present on dorsum of right foot.
Investigations
Hb - 14.4gm%
TC - 7900 cells / Cumm
ESR - 30 mm/hr
Neutrophil - 56%
Lymphocytes - 41%
Eosinophils - 03%.
RBS - 79mg%
HIV - Negative
HBs Ag - Negative

Diagnosis and Assessment of Case
From detailed history and investigations, the case was diagnosed as venous ulcer and differentiated from diabetic ulcer since ulcer was not present on the planter aspect (i.e., not at the weight bearing sites of foot), edge was sloping and also by the history of varicosity.

Therapeutic interventions

Internally
1. Guggulutiktakam Kashayam + Aragwadhadi Kashayam + Mahamanjishtadi Kashayam + Punarnavadasakam Kashayam + Kaisora Guggulu (15 Each) 30ml Kashayam + 45ml luke warm water B/D, B/F

Externally
3. Daily dressing x 2
   At morning - Dressing with Gomutra Arkam. At evening - Dressing with Jatyadikeram
4. Pariseka before dressing (at morning) with Aragwadhadi Kashayam + Triphalakashayam.
5. Crepe bandaging after Pratilomaabhyanga avoiding the wound (with Sahacharadi Thailam)
6. Siravyadham - Once in every 3 months.

List of internal and external medicines with their possible effect

<table>
<thead>
<tr>
<th>SN</th>
<th>Medicine</th>
<th>Possible effect</th>
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<tbody>
<tr>
<td>1.</td>
<td>Guggulutiktakam Kashayam</td>
<td>Vata Kaphahara, Vranaropaka effect</td>
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<tr>
<td>2.</td>
<td>Aragwadhadi Kashayam</td>
<td>Helps to reduce itching, rashes on the skin, Kaphopithahara.</td>
</tr>
<tr>
<td>3.</td>
<td>Mahamanjishtadi Kashayam</td>
<td>Rakta Vatahara</td>
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<tr>
<td>4.</td>
<td>Punarnavadasakam Kashayam</td>
<td>Kaphavataharam, Reduces oedema</td>
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<td>5.</td>
<td>Kaisora Guggulu</td>
<td>Tridoshahara, Vranaropaka effect</td>
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<tr>
<td>6.</td>
<td>Gomutra Arkam</td>
<td>Kapha Vatahara, Reduces oedema, itching, Vranalekhana &amp; Ropana effect</td>
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<tr>
<td>7.</td>
<td>Jathyadikeram</td>
<td>Vranaropaka effect</td>
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<td>8.</td>
<td>Triphalakashayam</td>
<td>Tridoshasamana,Vranaropaka effect.</td>
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Diet and regimen
Following regular diet and regimen is important for the management of venous ulcer.

Here the patient was advised to avoid spicy, sour, oily, refrigerated, fermented food items and also asked to avoid sweets due to known history of diabetes mellitus.

He was advised to avoid sun exposure, contact of water over the wound, longstanding, walking, sleeping in the day time and staying late night.

Follow-up
The patient has underwent treatment from 29/09/2023 to 11/10/2023. On discharge, pain (+), tenderness (+), itching (+), hyperpigmentation (++), localized oedema (++), wound depth reduced.

He came here for first follow up on 14/11/2023. We noticed marked improvement in the healing process. Two ulcers on the medial malleolus and one on the...
dorsum of foot of right leg get healed. Decrease in wound size than previous of other wounds noticed. Pain reduced, itching occasionally, hyperpigmentation (++), scab present.

Second follow up on 13/12/2023, much improvement in pigmentation and scar present. Pain reduced, itching reduced, no localized tenderness.

**DISCUSSION**

Varicose ulcer and its complications are a common recurring problem. The primary goal is to reduce venous congestion and enhancing tissue perfusion and promotes tissue healing. Typically, conservative management consists of conventional regime of elastic stocking, elevation of the leg at rest and calf muscle exercise and the majority of patient responds to it.

However, some ulcers become refractory to treatment causing significant disability and need amputation of limbs. Various scholars have mentioned on the leech application in venous leg ulcer with a better outcome. Ayurvedic medicines have shown its potentiality in many chronic and challenging disorders.

There are numerous formulations in Ayurveda to treat skin ailments. In the presenting case, the drugs possessing *Vranaropaka* (wound healing), *Vranalekhana, Raktashodhaka* (blood Purifier), *Sothahara* (anti-inflammatory), *Raktaprasadaniya* (haematinic), drugs strengthening the blood vessels are used.

*Guggulutikthaka Kashayam* is an Ayurvedic ingredient-based formulation possesses blood purifying, anti-inflammatory and anti-infective properties. It is *Kapha Vatahara, Kledahara, Chedaniya, Lekhaniya* and has both *Vrana-Shodhana* and *Vrana-Prasadan* activities. It helps to heal wounds, ulcers, sinus, abscess and deep-seated skin conditions. It possesses *Guggulu* (anti-inflammatory), *Nimba* (antibacterial and anti-fungal) as effective ingredient.
Aragwadhadikashayam, an Ayurvedic Kashaya based preparation helps to reduce itching and rashes on the skin. It contains Aragwadha, Nimba etc.

Mahamanjishtadi Kashaya, an ayurvedic preparation acts as a blood purifier, reduces pitta vitiation, improves complexion. This Kashaya mainly works on Kapha and Pitta Doshas. This reduces toxins in blood.

Punarnavadasakam Kashayam acts as Kaphavataharam and it helps to reduce oedema.

Jatyadi Taila is a medicated oil formulation (Taila) popularly used in the treatment of various topical wounds. It is also useful in Marmastrhita Vrana (ulcers of vital regions), Kledi Vrana (weeping ulcer). It exhibits better wound healing activities by a significant increase in protein, hydroxyproline and hexosamine content in the granulation tissue.

Gomutra Arkam is a preparation which is Kapha-Vatahara in nature. Gomutra Arka application is effective by their faster, effective Shodhana, Lekhana, Vedana Shamaka, Kandu Shamaka, Daha Shamaka properties.

Gomutra Arka was having good results in reducing burning sensation, itching, smell, size, depth, discharge, edge, floor and presence of granulation tissues.

Kaishora Guggulu is used to support healthy joints, muscle, and connective tissues. It is Pittahara (anti-inflammatory), anti-microbial and immunomodulative in nature.

Triphala Kashaya (decoction prepared out of Terminalia chebula, Terminalia bellirika & Emblica officinalis) is used for Prakshalana and has anti-inflammatory effect.

CONCLUSION

Venous ulcer, a common cause of leg ulcer, known for its recurrence. The conventional treatment options available are not satisfactory and very expensive. The venous ulceration can be effectively managed and venous insufficiency can be prevented through Ayurveda without any adverse effect. This observation endorses a step towards the validating.

REFERENCES


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