

## MANAGEMENT OF VARICOSE VEIN WITH ULCER: A CASE REPORT

Dr. Nimisha P. S.<sup>1</sup>, Dr. Hari R.<sup>2</sup> and Dr. Manjunatha Bhat<sup>3\*</sup>

<sup>1,2</sup>PG Scholar, Dept. of Shalya Tantra, Alvas Ayurveda Medical College, Moodbidri.

<sup>3</sup>MS(Ayu) Ph. D., Professor, HOD, Dept. of Shalya Tantra, Alvas Ayurveda Medical College, Moodbidri.

Article Received on  
27 April 2024,

Revised on 17 May 2024,  
Accepted on 07 June 2024

DOI: 10.20959/wjpr202412-32828



\*Corresponding Author

Dr. Manjunatha Bhat

MS(Ayu) Ph. D., Professor,  
HOD, Dept. of Shalya  
Tantra, Alvas Ayurveda  
Medical College,  
Moodbidri.

[dmbg2004@gmail.com](mailto:dmbg2004@gmail.com)

### ABSTRACT

A varicose ulcer is a complication of varicose veins and deep vein thrombosis. Area where varicose ulcer commonly develops is around and above the medial malleoli because of presence of large number of perforators which transmit pressure changes directly into superficial system. Varicose ulcer has a resemblance with *Dushta Vrana* mentioned in Ayurvedic classics. *Vrana* in Ayurveda is defined as *Gaatra avachurnana*, a structural deformity of the skin tissues associated with *Ruja* (pain), *Srava* (discharge) etc and caused either by the vitiation of the *Doshas* or by trauma. The chronic wound management principle includes compression therapy and antimicrobial therapy (if infected). However, in unresponsive cases, surgery (skin grafting) is preferred. A 39 years-old non-diabetic, non-hypertensive male was brought to Alva's Ayurveda Medical College for the Ayurvedic treatment of a wound over medial malleolus of his right leg since 3 months. The ulcer was painful to the extent of disturbing his

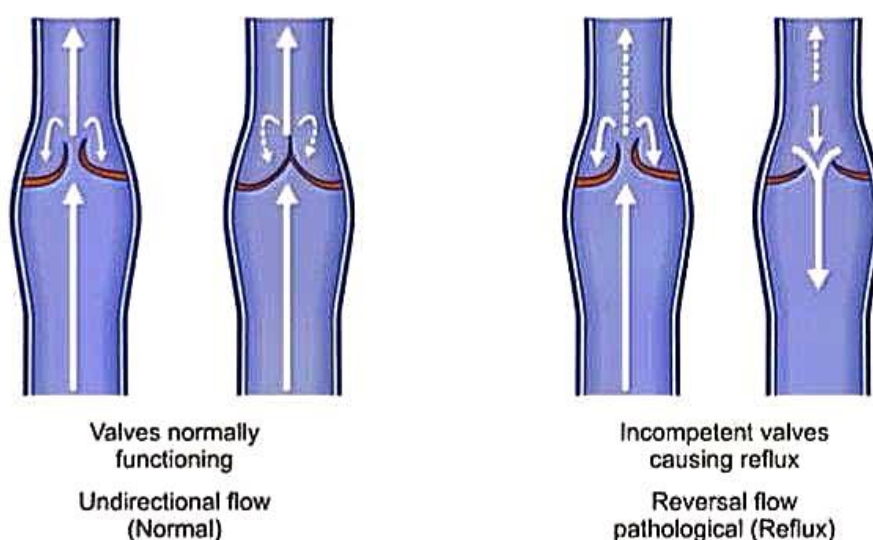
sleep and restricting his daily activities. His Ayurvedic treatment comprised of *Stanika Agnilepa* on both legs including sapheno-femoral opening, *Manjishtadi Kshara basti* and oral medicines are also prescribed, shows improvement in healing of ulcer. This suggests the efficacy of Ayurveda in the management of chronic ulcers. However, a detailed study of the same with larger sample sizes will help to formulate a treatment protocol for such cases.

**KEYWORDS:** Varicose ulcer, *Agnilepa*, *Manjishtadi Basti*, *Ayurveda*.

### INTRODUCTION

*Acharya Susruta* explained about *Vrana* in *Dwivrinia Adhyaya* in *Chikitsa Stana*. He classified *Vrana* into two types, *Nija* and *Agantuja*. *Nija Vrana* occurs due to the vitiation of three *Doshas*, whereas *Agantuja Vrana* occurs due to external factors.<sup>[1]</sup> He also given detailed description of *Dushta Vrana* in chapter 22 of *Sutrastana*. *Vrana* which is *Atisamvrita* (too much constricted), *Ativivrita* (too much extended), *Atikathina* (too hard), *Atimrudu* (soft), *Avasanna* (excessively depressed), *Utsanna* (elevated from the skin surface), associated with different colours, different types of pain and discharge are called as *Dushta Vrana*.<sup>[2]</sup>

Varicose vein is a dilated, tortuous and elongated superficial vein with reversal of blood flow due to incompetence of valves. As a result of continuous dilatation under pressure in course of time, varicose vein becomes elongated, tortuous, pouched, thickened, inelastic and friable structure. Incidence of varicose veins is 5% in general population.<sup>[3]</sup>



Varicose ulcer is a complication of varicose veins or deep vein thrombosis. Varicose veins or DVT which are re-canalised, eventually causes chronic venous hypertension around ankle → causes hemosiderin deposition in the subcutaneous plane from lysed RBC's, Eczema → dermatitis and lipo-dermatosclerosis → fibrosis → anoxia → ulceration. Area where varicose ulcer commonly develops is around and above the medial malleoli because of presence of large number of perforators which transmit pressure changes directly into superficial system. This area is called as Gaiter's zone.<sup>[3]</sup>

In conventional systems, supportive care such as wound dressing, elastic bandages, and compression stocking, self-care includes leg elevation, and physical exercise is being used

apart from medications like antibiotics, dietary supplements, and non-steroidal anti-inflammatory drugs. Surgical treatment includes skin grafting, sclerotherapy, laser ablation, correction of the venous plexus through reconstructive surgery is practiced which have their limitations.<sup>[4]</sup>

Many formulations are available in Ayurveda to treat skin ailments and various types of ulcers. Herein the details of a chronic venous leg ulcer case have been presented, which is successively intervened with Ayurvedic medication both internally and externally with special reference to *Agnilepa*. Considerable healing of wounds and reduction in varicosity and hyperpigmentation was observed after weeks of treatment.

### PATIENT INFORMATION

A 39 years-old male presented with complaints of a non-healing ulcers at the medial malleolus of the right leg since- 3 months. At first, the patient developed varicose veins on right leg below the knee before 2 years, followed by hyperpigmentation of the right foot and a small sore at the medial malleolus of the right leg, which eventually burst. The ulcer was gradual in onset and progressive in nature. There was no history of direct trauma. There was pain around the ulcer with scanty, non-foulsmelling discharge from the ulcer. The patient also had a dragging pain in the right lower leg, which worsened with erect posture and relieved on the lying down position. The patient also had itching without any muscle cramps either during activities or at night. There was no history of constipation, weight loss, pain abdomen, and fever. His bladder and bowel habits were regular and had a normal appetite and sleep pattern. His medical history did not reveal any other illness like diabetes, hypertension and thyroid diseases.

### GENERAL EXAMINATION

weight:70Kg; Height:154cm; Body builds: Moderate; the skin of lower right leg is hyperpigmented and thickened. No pallor, icterus, cyanosis, clubbing, lymphadenopathy were seen. Mild oedema (cellulitis) was observed around the ulcer. The vitals of the patient were stable with pulse rate: 80/min., regular; blood pressure: 130/80 mmHg; Respiratory rate: 18/min. His Prakriti was Pitta-kapha predominant.

### CLINICAL ASSESSMENT

**INSPECTION:** In standing position, tortuous, dilated veins were seen extending from above the medial malleolus and are more prominent. The skin of the lower right leg was hyperpigmented and thickened. There was no impulse on coughing at the saphenous opening. A solitary ulcer (2.5cm X 2cm) with an irregular margin the surrounding area was hyperpigmented. The left leg was intact and no engorged veins.

**PALPATION:** Mild tenderness present at medial malleolus of right leg is observed. No calf tenderness, no neurological deficit noticed on right leg. Mild increase in local temperature around the ulcer felt. Also, the dorsalis pedis arterial pulsation was felt and differentiated it from a deep vein thrombotic ulcer. Varicosity of the vein was confirmed by Trendelenburg's test and was found positive. No lymph node is found palpable.

**SYSTEMIC EXAMINATION:** No abnormalities were noticed.



**Fig 1: Before Treatment.**

#### TREATMENT INTERVENTION

LIST OF INTERNAL MEDICINE ADMINISTRATION			
Sl No	Medicine	Dose	Mode of action
1.	<i>Triphala Guggulu</i>	1-1-1	<i>Tridosahara</i>
2.	<i>Kaishora Guggulu</i>	1-1-1	<i>Tridosahara</i> <i>Vranaropaka</i>
3.	<i>Punarnava Mandoora</i>	1-1-1	<i>Raktha praasadakara</i>
4.	<i>Mahamanjishtadi Kwatha</i>	15ml-0-15ml	<i>Rakta prasadaka</i>

LIST OF EXTERNAL MEDICINE ADMINISTRATION	
1.	<i>Agnilepa</i>
2.	<i>Manjishtadi Kshara Basti</i>
3.	<i>Jaloukavacharana</i>



**Fig 2: After 5 Days of Treatment.**

### **JALOUKAVACHARANA**

On 6<sup>th</sup> day Jaloukavacharan done with 4 leeches.



**Fig 3.**

### **DIET AND REGIMEN**

Diet and regimen play a very important role in the outcome of treatment. Here, the patient was advised to follow a dietic regimen which would help to balance *Pitta*, *Rakta* and *Vata doshas*. The patient was asked to avoid spicy, sour, oily, fermented, and refrigerated food items. He was advised to avoid sun exposure, sleeping in the day time and late-night sleep.



**FOLLOW UP AND OUTCOME**

Picture of the ulcer and affected leg was taken at the time of commencement of the treatment and successively on every visit as per the methods used by Rastogi et al.<sup>[5]</sup> and Ratha et al.<sup>[6]</sup> (Figs 1 to 6)



**Fig 4: Wound after 10 days.**



**Fig 5: Wound after 20 days.**



**Fig 6: Wound after 28.**

This shows a substantial improvement in the ulcer following the therapy to the before treatment starts. No adverse effect pertaining to the prescribed drug was also reported. On follow-up for 28 days, there is no recurrence of the ulcer witnessed. Symptoms like pain, discolouration, size of wound got drastic changes.

## DISCUSSION

In the varicose vein, vitiated *Vyana Vayu* causes the vitiation of *Rasa* and *Rakta* dhatus and ultimately vitiates their *Upa-dhatus* like *Sira* (Veins) and *Kandara* (tendons/fibrous collagen) structure supports the vein's architect such as its valves and walls to lose their elasticity and becomes tortuous. Varicose ulcer is one of the most important complications of varicose vein. 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.

## MODE OF ACTION OF AGNILEPA

NAME OF DRUGS	SCIENTIFIC NAME
<i>Bandha</i>	-
<i>Agnimantha</i>	<i>Clerodendrum Phlomidis</i>
<i>Nirgundi</i>	<i>Vitex Negundo</i>
<i>Tulasi</i>	<i>Ocimum Sanctum</i>
<i>Lasuna</i>	<i>Allium Sativum</i>
<i>Lavanga</i>	<i>Syzygium Aromaticum</i>
<i>Saindava</i>	<i>NaCl</i>
<i>Haridra</i>	<i>Curcuma Longa</i>

*Agnilepa* is a folklore treatment which is practicing in some parts of Karnataka. *Agnilepa* can be considered as *Alepa* type of *Lepa* which is explained in classical texts. As the name *Agnilepa* indicates drugs having *Ushna Veerya Pradhana*, possessing *Ruksha*, *Teekshna*, *Ushna guna*, *Katu Rasa Pradhana* and having *Shothahara*, *Stambhahara*, *Vedanasthapaka*, *Suptihara* and has *Vata kapha hara* properties.

## MODE OF ACTION OF MANJISHTADI KSHARA BASTI<sup>[7]</sup>

INGREDIENTS	QUANTITY
<i>Madhu</i>	80 ml
<i>Saindava Lavana</i>	5 gm
<i>Brihat Saindava Taila</i>	120 ml
<i>Yashtimadhu Choorna</i>	5 gm
<i>Shatapushpa Choorna</i>	5 gm
<i>Manjishta Choorna</i>	20 gm
<i>Triphala Choorna</i>	30 gm
<i>Guduchi Choorna</i>	10 gm

<i>Vacha Choorna</i>	10 gm
<i>Nimba Choorna</i>	5 gm
<i>Amritha Sara</i>	50 ml

In Ayurveda, *Manjistha* (*Rubia cordifolia*) is a renowned *Rakta Prasadaka*, *Tridosahara* and *Srotosodhaka*. So, use of *Manjisthadi Kwatha* and *Manjishta churna* purifies the *Rakta*, pacifies the *Vata* and makes *Srotosodhaka*. It has *Vilayana* property which helps in improving the circulation. *Kshara Basti* has the fast-spreading activity which helps to clean the peripheral vascular channels. Hence, the combination *Basti* is very effective on Peripheral Vascular Disease.

#### MODE OF ACTION OF *JALOUKAVACHARANA*<sup>[8]</sup>

*Jaloukaavacharana* helps in improving the circulation as well as to reduce the inflammation. If circulation improves it helps for the proper wound healing and reduction of hyper pigmentation. Phytochemicals like kallikrein, and tryptase are present in leech saliva which helps in improving the circulation by reducing the blood viscosity.

#### MODE OF ACTION OF INTERNAL MEDICINE

The formulation *Triphala Guggulu*<sup>[9]</sup> was first mentioned in Sharangadhara samhitha. *Triphala Guggulu* constituents contains *Tikta*, *Kashaya*, *Madhura Rasa*, *Ushna Virya*, *KatuVipaka*, *Laghu*, *Ruksha*, *Ushna*, *Tikshna Gunas*, and *Shothahara karma*. *Guggulu's Ushna Virya* relieves vitiated *Vata* and prevents *Kleda* from lingering at the site of pathogenesis and causing *Srotorodha* (obstruction) and aids in wound healing. It has anti-microbial and anti-inflammatory property. *Kaishora guggulu*<sup>[10]</sup> prescribed in this case is to reduce *Pitta* (anti-inflammatory), anti-microbial and immuno-modulation in nature. Recent studies have proved that *kaishora guggulu* has a good action in chronic ulcers. It also has anti-inflammatory and anti-microbial action.

*Punarnava Mandoora*<sup>[11]</sup> mainly acts on *Kapha- pitta* predominant conditions. It helps for the purification of blood and reduces hyperpigmentation of skin. *Manjishtadi Kashaya* also has *Raktha prasadakara* property and helps in improving circulation and inflammation.

#### CONCLUSION

Varicose ulcer, a common cause of leg ulcer, known for its recurrence. The conventional treatment options available are not satisfactory and very expensive. The varicose ulceration can be effectively managed and venous insufficiency can be prevented through Ayurveda



without any adverse effect. This observation endorses a step toward the validating practice of Ayurvedic intervention in the varicose ulcer. Moreover, study with adequate sample size is required to generate evidence.

## REFERENCES

1. Trikamji Acharya Yadavji, Ram Acharya Narayan., editors. *Susrutasamhita of Sushruta*. Chaukham Sanskrit Sansthan; Varanasi: 2008. Chikitsasthana, [chapter 1], verses 6, p- 396.
2. Trikamji Acharya Yadavji, Ram Acharya Narayan., editors. *Susrutasamhita of Sushruta*. Chaukham Sanskrit Sansthan; Varanasi: 2008, Sutrasthana, [chapter 22], ver 7, p- 108. [Google Scholar].
3. P. Ronan O Connell, Andrew W, Robert D Sayers. 2023. Bailey and Love Short Practice of Surgery, 28<sup>th</sup> ed.
4. Das S. Concise Textbook of Surgery, 8th ed. Kolkata: S Das Publication, 2014; 268-269.
5. Rastogi S, Chaudhari P. Pigment reduction in nevus of OTA following leech therapy. J Ayurveda Integrated Med, 2014 Apr; 5(2): 125-128.
6. Ratha KK, Barik L, Panda AK, Hazra J. A single case study of treating hypertrophic lichen planus with Ayurvedic medicine. Ayu, 2016 Jan-Mar; 37(1): 56-61.
7. Acharya Sharangadhara, Sharangadhara Samhita Sanskrit text with English Translation by Dr G Prabhakar Rao. Madhyama Khanda, first edition, 2013; Ch 02, verse 136: pg no- 100.
8. Samarnayake GVP, Pushpakumr AAJ, Waliwita WALC. Case study of leech application in varicose ulcer. International Journal of Scientific and Technology Research, 2016; 5(5): 260- 262.
9. Mishra S. Sharangdhara Samhita, Varanasi, Madhyam Khanda, Chaukhambha Orientalia, 2021; p.205.
10. Lather A, Gupta V, Bansal P, Sahu M, Sachdeva K, Ghaiye P. An Ayurvedic polyherbal formulation Kaishora Guggulu: A Review. International Journal of pharmaceutical and Biological Archives, 2011; 2(1): 497-503.
11. Vaidya Jadavji Tirkamji Acharya., editor. 2nd ed. Varanasi: Chaukhamba Surbharati Prakashana; 2005. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Chikitsa Sthana, Pandurogachikitsa Adhyaya, 16/93-96. 530. [Google Scholar]