



Case Report

Multimodal Ayurvedic approach in the management of *Sirajanya Dushtavrana* (Chronic venous Ulcer): A Case Report

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ABSTRACT:

Background: Chronic venous ulcers are caused by valvular incompetence and are considered as serious complication of chronic venous insufficiency (CVI) which can lead to cellulitis, infections, osteomyelitis and eventually require amputation. Ulcer (*Vrana*) in Ayurveda has been explained in detail by Acharya Susruta. In this case, it denotes chronicity, painful, discharge, and is associated with venous system, etc. were suggestive of *sirajanya dushtavrana* (chronic venous ulcer). Ayurvedic interventions focused on *shodhana* and *ropana* therapies. **Clinical findings:** A 61-year-old non diabetic female presented with chief complaints of a non-healing ulcer of size 15X8X0.5 cm with pain and discharge above the medial malleolus of the right lower limb, and was diagnosed as *sirajanya dushtavrana*. She had the same history two years back and had taken treatment, but the condition persisted with delayed healing. **Intervention:** Treatment initiated with *rookshana karma* (dry inducing therapy) and *Deepana* (Digestion stimulating) medicines, *snehapana* (internal oil therapy) *virechana* (purgation therapy) followed by *basti* (medicated enema) and *Vrana Basti* were adopted along with proper wound care and internal medications. **Outcomes:** Wound healed completely with tissue epithelialization, scar formation and significant reduction in pain was achieved without any complications, in duration of 30 days of treatment, and 5 months of follow-ups. Follow-up was uneventful. **Conclusion:** This case demonstrates successful management of chronic venous ulcer of size 15x8x0.5 cm is completely healed and change of VAS from 6 to 0. using a multimodal ayurvedic approach, including classical *snehapana*, *virechana*, *basti*, *Vrana Basti* and internal medications. Treatment duration was approximately 30 days and 5 follow-ups were done in every month, with no adverse effects and recurrence. Complete healing was achieved in 6 months. This case suggests the efficacy of holistic ayurvedic therapies and proper wound care in the management of long-standing venous ulcers.

KEYWORDS: *Basti*, Case report, Chronic venous ulcer, *Sirajanya dushtavrana*, *Vrana basti*.

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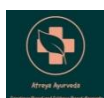
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1. INTRODUCTION

Chronic venous insufficiency is a complex condition marked by sustained venous hypertension affecting the deep or superficial systems, resulting in pain, edema, skin changes, and ulceration affect about 1% of the global adult population. The incidence rises significantly with age, reaching up to 3% to 4% in individuals over 65. [1] They constitute 70% of all chronic leg ulcers and have a significant psychosocial impact, reducing quality of life. [2] This involves several other complications like oedema, skin pigmentation, eczema, and lipodermatosclerosis. If left untreated, they can lead to severe infections, cellulitis, gangrene, and, lastly, limb amputation. [3] In modern practices, wounds are managed by antibiotics, debridement, antiseptic solutions, compressions and skin grafting. Among that compression therapy is the most important one, which has shown significant results in treatment compared with no compression. [4] However, these approaches are not very effective in chronic cases.

In ayurvedic perspective this can be considered as *dushtavrana*. Acharya Sushruta gives detailed description of *dushtavrana* which is due to *tridosha* and *raktha vridhhi* along with the vitiation of *twak* and *mamsa dhathus* [5] and its management through *Shashti upakrama* (60 therapies). [6] As it is affecting the *sira* (venous system) in chronic condition, it can be named *Sira Janya dushtavrana*. Ayurvedic treatment highlights cleansing and recovery with healing via internal and external therapies, providing a comprehensive and effective alternative to contemporary medicine.

The present case is a complete healing of large, chronic venous ulcer of two-year duration that persisted after many conventional treatments. The case is special due to its prolonged duration and recurrence, persisting even after conventional therapy. The chronic nature of disease significantly affected both physical and mental health of patient

2. CASE REPORT

Patient information: A 61-year-old, non-diabetic, non-hypertensive female, approached the outpatient department with complaints of a non-healing ulcer just above the medial malleolus of the right lower limb, associated with pain, burning sensation, edema, hyperpigmentation of the surrounding area, and serous discharge for 2 years. Patient felt difficulty very much in attending the functions because of foul smell and discharge, so she tries to skip as much as possible.

Clinical Findings: On general examination, the patient was conscious and well oriented to time and place with a moderately nourished build. Vital signs were stable with BP- 110/70 mmHg, PR-78 beats/min, RR-18/min, and temperature- 97.4°F (Afebrile). On inspection, an oval-shaped ulcer measuring about 15X8X0.5 cm was present on the lower medial aspect of the right leg, just above the medial malleolus. It has sloping edges, and the floor was covered with whitish slough. Seropurulent discharge with a foul odor was noted. Surrounding skin showed blackish discoloration with mild edema. All peripheral pulsed were palpable in right leg. A few dilated veins were present above the ulcer. On palpation, local temperature was raised, tenderness was present. Upon Ayurveda *roga pareeksha*, the condition revealed pigmented, inflamed, foul smelling, ugly looking wound on the lower medial aspect of the right leg.

Investigations carried out: Hb - 9.6 gm%. Total leukocyte count was 8000 cells/mm³, with differential count showing neutrophils 57%, lymphocytes 36%, monocytes 1%, and eosinophils 6%. ESR was significantly elevated at 90 mm/1st hour, suggesting ongoing inflammation or chronic infection. RBS -107.0 mg/dl, and HbA1C was 6.2%, indicating fairly controlled blood glucose levels. Serum creatinine- 0.7 mg/dl. Urine routine was normal. Lipid profile revealed elevated total cholesterol with 243 mg/dl and triglycerides at 189 mg/dl.

Diagnostic assessment: The diagnosis was made on above history taking and clinical findings

Diagnostic challenges: Recurrence of the ulcer made the case clinically challenging, bringing the concerns such as possible underlying malignancy, DVT related pathology, and

osteomyelitis changes. Careful evaluation was required to rule out these conditions and plan appropriate management.

Table no 1: Timeline of important events

Sl no	Date	Events /complaints	Treatment
1	10/5/2023	Patient had pain and mild swelling in the right lower limb	Symptomatic treatment was taken
2.	16/5/2023	Pain and swelling reduced	Stopped the internal medicines
3.	20/6/2023	Swelling and pain reappeared along with itching on right medial malleolus with blisters	Local treatment was taken, blisters debrided, oral antibiotics started.
4.	15/7/2023	Pain reduced, but size of the wound increased with foul smell, consulted a surgeon	Underwent venous stripping and laser ablation with wound debridement.
5.	8/10/2023	Wound size increased and not shown any signs of healing	Dressing was done from hospital, limb elevation and advised for grafting
6	13/5/2024	Patient visited our hospital for the same complaints	Baseline investigations and local examination was done, advised admission. Started Deepana pachana medicines, planning for snehapana and virechana
7.	29/5/2024	Wound size reduced, pain, itching, foul smell and discharge got reduced	Planned kalabasti, local treatment which includes Vrana basti and wound dressing were advised.
8	13/6/2024	Complete absence of pain, discharge, itching and swelling. Marked reduction in wound size	Advised internal medicine. Follow up advised
6	13/7/2024	First follow up, decrease in wound size and improvement in healing was observed	Internal medicines and dressing continued
7	13/8/2024	Second follow up decrease in wound size and improvement in healing was observed	Internal medicines and dressing continued
8	13/9/2024	Third follow up, wound healed completely	Good compliance
9	13/10/2024	Fourth follow up	No recurrence
10	13/11/2024	Fifth follow up	No recurrence

Table 2: Differential Diagnosis

Differential Diagnosis	Key features /Inclusion	Exclusion/Remarks
Diabetic foot ulcer	Non healing ulcer with slough, foul smell and discharge in lower limb.	The patient did not have a history of DM, and peripheral neuropathy was absent
Tropical ulcer	Non healing ulcer commonly seen in extremities.	Absence of undermined edge, necrotizing dead tissue were absent
Venous ulcer	Swelling and pain around the wound along with long standing non healing ulcer. Oval shape ulcer with specific site at or above the level of medial malleolus	Included because of appearance and similarity with classical features so final diagnosis was established
Arterial ulcer	Non healing ulcer with slough.	Diminished peripheral pulse, cold extremities, and intermittent claudication were absent. The common site of ulcer is below the level of medial malleolus



Figure 1: During Discharge



Figure 2: A – First follow-up, Wound size reduced to 8*3*0.5 cm; B- Second follow-up, 5X1.5X0.3cm; C- Healed wound with scar

Prognosis: This being a chronic condition involving *Rakha* and *sira* with long standing pathology is considered as difficult to treat. However, with appropriate Ayurvedic interventions, proper follow-up with lifestyle modification like limb elevation and compression stockings, can improve the healing and prevent recurrence.

Therapeutic intervention: The holistic ayurveda treatment protocol which includes *snehapana* followed by *virechana*, *basti*, *vrana basti*, complemented by *Vrana Prakshalana* and dressing, along with internal medicinal administration was adopted. (Table 3)

3. FOLLOW UP AND OUTCOME

Total treatment duration of 30 days in IPD showed marked reduction in the wound size. Objective assessment of the wound was performed with bates Jensen assessment scale after each treatment procedure and in every follow-up visit. Complete healing was achieved in 5 months. Supportive measures like foot end elevation, calf muscle exercise to improve the venous return and dietary modifications were advised. Detailed follow up and outcomes are given in [table no 4](#).

Table no 3: Therapeutic interventions.

Date	Clinical event/ Intervention	Drug given and dose	Anupana	Course	Remarks
13/5/2024	Visited OPD. admitted. Baseline investigations carried out	-	-	-	Diagnosed as <i>Sirjanya dushta vrana</i>
14/5/2024	<i>Sarvanga Udwarthana</i> and <i>Parisheka</i>	<i>Kolakulathadi churna</i> for <i>udwarthana</i> (Vaiyaratnam , batch no:17A3292)	-	4 days	Initial <i>Rookshana</i> , <i>Deepana pachana</i>
	<i>Vrana prakshalana</i>	<i>Manjishtadi Kashaya</i> for <i>parisheka</i> (Kerala ayurveda, batch no: KQ1JKN)	15ml warm -water	(continued till <i>vrana basti</i>)	Wound cleansing action
		<i>Panchavalkala kwatha</i> (KLE Pharmacy, Batch no:1)	-		
		<i>Punarnavadi Kashaya</i> (45ml before food) (KLE Pharmacy, Batch no:01)	-		
		<i>Arogyavardhini vati</i> (KLE Pharmacy, Batch No: I KLE 22-23) (1-0-1) after food	-		

18/5/2024	<i>Snehapana</i>	<i>Mahatiktaka gritha</i> (KLE Pharmacy, batch no:01) Started with 20 ml (1 st day), 50 ml (2 nd day), 70 ml (3 rd day), 100 ml (4 th day) and 130 ml (5 th day)		5 days	<i>Sodhana</i> <i>poorvakarma</i> (preparatory stage for detoxification therapy) Anti-inflammatory action <i>Vrana ropana</i> (tissue healing)
23/5/2024	<i>Sarvanga Abhyanga, nadisweda</i> (sudation therapy)	<i>Manjishtadi Taila</i> followed by Nadi Sweda	-	3 days	<i>Visrama kala</i>
25/5/2024 (8 th day of <i>snehapana</i>)	<i>Virechana</i>	<i>Avipatti churna</i> (KLE Pharmacy, batch no: I-KLE20-21) 50 grams at 9 AM in empty stomach.	Warm water	1 day	<i>Sodhana</i> (detoxification) <i>karma</i> The patient had 13 <i>virechana Vegas</i> .
26/5/2024 to 28/5/2024	<i>Samsarjana krama</i>			3 days	<i>Peyadi krama</i> followed
29/5/2024 to 6/6/2024	<i>Kala basti</i> 2- <i>Kashaya basti</i> 2- <i>ksheera basti</i> And alternate 4 days <i>Anuvasana basti</i>	<i>Yashtimadhu Kashaya</i> and <i>ksheera niruha basti</i> <i>Anuvasana basti – Dadimadi gritha</i> (Kerala Ayurveda, batch no: KIA 57)		8 days	
29/5/2024 to 12/6/2024	<i>Vrana Vasti</i>	<i>Jatyadi ghritha</i>		14 days	Healing of wound
13/6/2024 to 12/09/2024	Internal medicines	<i>Sonithamritham kashayam</i> 15 ml Kashaya Grab capsule – 1 capsule 3 times daily Daily dressing with <i>jatyadi ghritha</i>	45ml warm water	3 months	

Table no 4: Follow-up and outcomes

Follow-up	Local wound assessment (Bates-Jensen wound assessment scale)	Symptom assessment	Treatment compliance	Adverse effects
14/5/2024	<ul style="list-style-type: none"> • Size – 4 • Exudate -5 • Peri wound skin colour -3 • Depth – full thickness ulcer with grade 3 • Edges – 3 • Necrotic tissue -2 	Pain VAS 6/10 Moderate Discharge Present, localized edema present, Tenderness present. Itching present.	Patient cooperated for the procedure	None
17/5/2024	<ul style="list-style-type: none"> • Size – 4 • Exudate -4 • Peri wound skin color -3 • Depth – full-thickness ulcer with grade 3 • Edges – 3 • Necrotic tissue -2 	slightly reduced, Discharge and foul smell reduced	Patient compliant with <i>snehapana</i>	None

23/5/2024 (5 th day of snehapana)	<ul style="list-style-type: none"> Reduction in the slough with healthy granulation tissue noted. Size -4 Exudate-2 	Foul odour and discharge moderately reduced. Pain- absent	Patient is compliant with treatment	None
26/5/2024	<ul style="list-style-type: none"> Size -4 Exudate-1 reddish granulation tissue with sloping edges.	Odour not present Discharge not present	<i>Samsarjana</i> krama followed properly- diet compliance	None good
29/5/2024	Significant improvement in granulation	No pain, no discharge, no localized tenderness	Good compliance	None
12/6/2024	Marked wound healing with healthy granulation <ul style="list-style-type: none"> Size – 2 Peri wound skin colour -1 Depth – 2 Edges – 2 	No pain, no discharge, no localized tenderness	<i>Kala basti, vrana basti</i> completed, the patient was cooperative	None
13/6/2024	Discharged	No symptoms	Good compliance	None
13/7/2024 (first follow-up)	Marked wound contraction	No symptoms	Patient compliant with follow up advise	None
13/8/2024 (2 nd follow-up)	Wound size reduced, 75% epithelialization, granulation tissue -healthy	No recurrence of symptoms	Patient compliant with follow-up advice	None
13/9/2024 (3 rd follow up)	complete epithelialization, healed wound	No recurrence of symptoms	Follow-up visit attended	None
13/10/2024 (4 th follow up)	No recurrence of wound, healed stage of wound	No recurrence of symptoms	Good compliance	None
13/11/2024 (5 th follow-up)	Wound completely closed	No recurrence of symptoms	Good compliance	None

Adherence- The patient was monitored after each treatment and at each follow-up, with tablet counts and observation for local or systemic reactions. Medication adherence was clinician-assessed during every visit. Patient adhered well to the prescribed medications without any interruption.

Tolerance- The advised ayurvedic treatment protocol in the present case was well tolerated by the patient without any adverse drug reactions and was compatible when administered in appropriate doses under clinical supervision.

Adverse effects- There were no episodes of secondary infections, pus discharge or delayed wound healing, and no adverse reactions were noted throughout the treatment.

4. DISCUSSION

The present case is difficult to manage because of the recurrence and long-standing nature. This is the most debilitating complication of chronic venous insufficiency. These ulcers are best understood within the spectrum of *dushtavrana*, in which prolonged *kapha-pitta* vitiation, along with *raktha dushti* and *Medo dushti*, contributes to their chronicity and non-healing.

The case was presented to the hospital as a 15X8X0.5 cm ulcer ([figure 1a](#)) and after the treatment, the size was almost reduced to grade 2 as per the Bates-Jensen assessment tool ([figure 1c](#)). After *snehapana*, signs of non-healing ulcer were changing to healing stage ([figure 1b](#)). The key interventions were *basti* and *Vrana Basti* in which duration was 30 days. 5 follow-ups were advised to monitor the ulcer healing. During first follow up there was marked wound contraction ([figure 2](#)). In the 3rd follow up complete healing was achieved ([figure 2](#)). In the present case, ayurvedic drugs possessing *vrana ropaka*, *vrana sodhaka*, *raktha sodhaka* and *rakthaprasadaja* were taken. *Punarnavadi kashayam* acts as *kapha vatahara*, thereby possessing anti-inflammatory action. *Manjishtadi Kashaya* was used for *parisheka*, helps in tissue repair, and promotes healing by reducing inflammation and improving blood circulation. [7] *Snehapana* with *mahatiktaka ghritha* followed by *virechana* is applicable in diseases in which blood vessels are involved and also indicated in *deerghakalanubandhini vrana* (chronic wound). *Mahatiktaka ghritha* is beneficial in *kushta* (skin disorders) *rakthavahini gata roga* (diseases of blood vessels, and *mahavikara* (diseases with great intensity) due to its anti-inflammatory and antioxidant action. [8] Previous case reports have shown complete healing of chronic venous ulcers with the help of *vrana basti*. [9] To maintain ulcer hygiene and to prevent bacterial colonization, *vrana prakshalana* (wound cleaning) with *panchavalkala kwatha* was followed. Studies have reported the efficacy of *panchavalkala* drugs; they clinically reduce infections, speed up the wound debridement, and can be used as a *vrana ropaka* agent. [10] *Sarvanga abhyanga* significantly helps in blood and lymphatic circulation, reduces stagnation, and enhances the healing tendency of tissues. *Basti*, being the prime treatment for *vata*, and described as *ardha chikitsa* it plays important role in regulating the circulation and in removing the obstruction (*srothorodha*). Here modified *kalabasti* pattern was adopted which is a

combined schedule of both *niruha* and *anuvasana*, so its action in relieving *srothorodha* helps in correcting vata, may improve tissue perfusion and microcirculation, [11,12] thereby reducing venous stasis, which in turn helps to reduce the treatment duration. *Yashtimadhu* was used as *Kashaya emulsion* which contain and *triphala* as *prakshepa churna* and *dadimadi ghritha* as *Sneha Dravya*. Glycyrrhizin in *Yashi* promotes the formation of healthy granulation tissue. Amar Prakash et al. concluded that *Yashtimadhu* has shown a high success rate in reducing odour, inflammation, and exudates. [13] *Jatyadi ghritha Vrana basti* will act as both *Sodha Artha* and *ropanartha*. Beyond its healing effect, the procedure provides sustained contact of medicated ghee with the ulcer surface, facilitating better drug absorption and promoting healthy granulation tissue. *Triphala jalapana* was advised to take daily, as it speeds up the process of healing and tissue repair due to its *rasayana* effect. Also, *Amalaki* contains Vitamin C, which has antioxidant properties and induces collagen synthesis. Strength: The case which was having recurrence even after conventional treatments, after adopting the *Shashti upakrama* procedures demonstrated complete wound healing in 6 months and given a valuable insight into the management of *dushtavrana* to ancient science.

Limitations: findings are based on a single case, limiting generalizability any change in lifestyle can trigger the condition. Overall message: This case highlights the multimodal approach of ayurvedic interventions and integrative wound care that may serve as a complementary strategy in the management of non-healing venous ulcer.

5. CONCLUSION

The present case demonstrates successful management of chronic venous ulcer (*Sirajanya Dushtavrana*) through a multimodal approach. The condition had a chronicity of two years. Here, *snehapana*, followed by *virechana*, *kala basti*, and *vrana basti*, was adopted along with internal medications, were also followed. Treatment duration was

approximately 30 days, and 5 follow-ups were done in every month, with no infections or adverse effects. Complete healing was achieved in 6 months. Reduction in pain from VAS 6 to 0 was achieved. Adopting the Structural Ayurveda protocol strengthens the outcome of chronic non-healing ulcer with promising results.

Key findings – holistic ayurvedic treatment protocol successfully heal chronic, non-healing venous ulcer by targeting its local pathology and systemic venous insufficiency
Key message: Ayurvedic multimodal therapies are a very effective alternative to contemporary techniques for a non-healing chronic venous ulcer. Following standard principles of wound care, detoxification therapies (*sodhana*) along with *vrana basti* play a significant role in healing long-standing ulcers.

Declaration of Patient Consent – The authors confirm that they have acquired a patient consent form, in which the patient or caregiver has granted permission for the publication of the case, including accompanying images and other clinical details, in the journal. The patient or caregiver acknowledges that their name and initials will not be disclosed, and sincere attempts will be undertaken to safeguard their identity. However, complete anonymity cannot be assured.

Patient's Perspective: I had been suffering from a non-healing ulcer, which was creating difficulty in doing my daily activities. The condition was distressing. After I started ayurvedic treatment, I noticed some reduction in my pain and discharge. The doctor gave me confidence. Later on, with different procedures, wound size starts reducing. Even if it was taking time, there was a significant reduction over the months. I am satisfied with the treatment and care provided. Now the wound has completely healed, and I can resume my normal routine.

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