

AYURVEDIC MANAGEMENT OF DUSHTA VRANA ASSOCIATED WITH BILATERAL
LOWER LIMB EDEMA IN A GERIATRIC PATIENT: A CASE REPORTDr. Gaurav U. Sachdev*¹, Dr. Naimish K. Saraf², Dr. Suhas S. Awasthi³, Dr. Supriya A. Lende⁴¹PG Scholar, ²Professor and HOD, ³Associate Professor, ⁴PG Scholar,
Shalyatantra Department, Siddhakala Ayurved Mahavidyalaya, Tal - Sangamner, Dist – Ahilyanagar.***Corresponding Author: Dr. Gaurav U. Sachdev**PG Scholar, Shalyatantra Department, Siddhakala Ayurved Mahavidyalaya, Tal - Sangamner, Dist – Ahilyanagar. DOI: <https://doi.org/10.5281/zenodo.21067420>**How to cite this Article:** Dr. Gaurav U. Sachdev*¹, Dr. Naimish K. Saraf², Dr. Suhas S. Awasthi³, Dr. Supriya A. Lende⁴ (2026). Ayurvedic Management Of Dushta Vrana Associated With Bilateral Lower Limb Edema In A Geriatric Patient: A Case Report. European Journal of Pharmaceutical and Medical Research, 13(7), 290–293.

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ABSTRACT

Introduction: *Dushta Vrana* (chronic non-healing wound) is a commonly encountered clinical condition that significantly affects the quality of life, particularly in geriatric patients. Advanced age, oedema, anaemia, malnutrition, and impaired tissue repair mechanisms are important factors responsible for delayed wound healing. Acharya Sushruta has described various principles of *Vrana Chikitsa*, including *Vrana Shodhana* (wound purification) and *Vrana Ropana* (wound healing), for effective wound management. **Case Presentation:** The present case report describes a 74-year-old female patient who presented with bilateral lower limb edema and a chronic non-healing ulcer over the right calf region of 2–3 months duration. On admission, the ulcer measured about 12 cm × 4 cm with a depth of 4 mm, presenting unhealthy granulation tissue, slough, and eschar. Laboratory investigations revealed severe anemia (Hb: 7.2 g/dL) and hypoproteinemia. The patient was treated with *Nisha Amalaki*, *Gandhak Rasayana*, *Punarnava Guggulu*, and *Raktapachaka Vati* internally, combined with a daily dressing of *Vrana Shodhaka Taila*, *Pichu* application of *Vrana Ropaka Taila*, and limb elevation.

KEYWORDS: Dushta Vrana, Chronic Non-Healing Ulcer, Bilateral Lower Limb Oedema, Geriatric Patient, Vrana Shodhana, Vrana Ropana, Ayurveda.

INTRODUCTION

Vrana (wound) is among the oldest documented clinical challenges faced by humanity, remaining a major hurdle in modern surgical practice. Healing of Dushta Vrana (chronic non-healing wounds) is delayed because the natural course of tissue repair is often disrupted by systemic factors or microbial invasion. In India, recent epidemiological data estimates the prevalence rate of chronic wounds at 4.5 per 1000 population. The underlying etiologies include systemic conditions such as diabetes mellitus, atherosclerosis, tuberculosis, leprosy, venous insufficiency, pressure ulcers, and trauma.^[1] Clinically, an ulcer is defined as a breach in the continuity of the surface epithelium.^[2] Acharya Sushruta stated that holistic health is not merely a disease-free state, but an equilibrium of mind, body, and soul.^[3] While *Charaka Samhita* outlines 32 therapeutic measures, *Sushruta Samhita* details 60 precise therapeutic modalities (*Shashti Upakramas*) for

comprehensive wound management.^[4] As the pioneer surgeon of antiquity, Sushruta designated *Vrana Vinishchayartham* as a core pillar of *Shalya Tantra* (surgery). He observed that the *Vranavastu* (scar tissue) of a completely healed Vrana leaves a lifelong imprint on the body.^[5]

Sushruta classified Vrana systematically based on morphology (*Aakruti* e.g., *Aayata*, *Chatusara*, *Vritta*, *Triputaka*), clinical sounds (*Shabda*), involved *Doshas*, pigmentation (*Varna*), and prognosis (*Suchikitsya* vs. *Durchikitsya*).^[6]

- **Dushta Vrana Lakshana (Features of chronic wounds):** Characterized by foul odour (*Durgandhita*), purulent exudate (*Pooyayukta*), excessive discharge (*Atipooyasrava*), sloughing (*Utsangi*), chronicity (*Chirakali*), severe pain (*Vedanayukta*), and devitalized tissues.^[7]

- **Shuddha Vrana Lakshana (Features of healthy/healing wounds):** Clean, pinkish-red resembling the color of a tongue (*Jivhatala samana*), smooth (*Shlaksana*), unctuous (*Snigdha*), minimally painful (*Alpavedana yukta*), and devoid of discharge.^[7]

From a modern medical standpoint, a wound represents a disruption of the continuity of soft tissue structures,^[8] whereas an ulcer refers to a localised defect or excavation of a surface organ or tissue produced by the sloughing of inflammatory necrotic tissue.^[9,10]

MATERIALS AND METHODS

CASE REPORT

A single-case clinical study was conducted in the Department of Shalya Tantra, Siddhakala Hospital, Sangamner, Maharashtra, India.

Patient History and Examination

A 74-year-old female patient presented on February 17, 2026, with complaints of bilateral lower limb oedema and a chronic non-healing ulcer over her right calf region

Internal Medications (Days 1–11)

DRUG	DOSAGE	TIME
<i>Nisha Amalak</i>	250 mg orally	Twice daily (bd)
<i>Gandhak Rasayana</i>	250 mg orally	Twice daily (bd)
<i>Punarnava Guggulu</i>	250 mg orally	Twice daily (bd)
<i>Raktapachaka Vati</i>	250 mg orally	Twice daily (bd)

Local and Supportive Interventions

1. Vrana Shodhana: Daily wound debridement and cleansing followed by dressing with *Vrana Shodhaka Taila*.
2. Vrana Ropana: Localized *Pichu* (medicated gauze padding) application using *Vrana Ropaka Taila*.
3. Limb Elevation: Continuous physical elevation of bilateral lower limbs to facilitate venous return and reduce oedema.

RESULTS

The patient demonstrated progressive clinical improvement over the course of treatment. The initial co-morbidities of severe anaemia (7.2 g/dL) and

persisting for the past 2–3 months. Local examination of the right calf ulcer revealed a wound measuring 12 cm in length, 4 cm in width, and 4 mm in depth.

The wound bed was covered with unhealthy granulation tissue, slough, and focal eschar.

DIAGNOSTIC ASSESSMENT

Baseline haematological and biochemical profiles revealed severe microcytic hypochromic anaemia and hypoproteinemia:

- **Haemoglobin (Hb):** 7.2 g/dL
- **Total Protein:** 5.04 g/dL
- **Albumin:** 3.11 g/dL
- **Viral Markers (HIV, HBsAg):** Non-reactive / Negative.

Treatment Protocol

The patient was managed as an inpatient for 11 days using a combined internal and external Ayurvedic regimen alongside supportive interventions:

hypoproteinemia (5.04 g/dL) posed high risks for delayed healing. However, by the time of discharge on February 28, 2026 (Day 11), the wound surface area reduced from 48 cm² (12 × 4 cm) to 21 cm² (7 × 3 cm), representing a 56.25% reduction in wound area. Healthy pink granulation tissue replaced slough and eschar, wound discharge ceased, and bilateral lower limb edema was markedly reduced. During the subsequent two-month outpatient follow-up period, progressive epithelialization and complete wound contraction were achieved, leaving behind a stable scar with minimal residual edema and no sign of ulcer recurrence.

Table 1: Clinical Outcome Timeline Assessment.

PARAMETER	BASELINE (BEFORE TREATMENT)	AT DISCHARGE (DAY 11)	POST-TREATMENT FOLLOW-UP (2 MONTHS)
Wound Size	12 × 4 cm	7 × 3 cm	Completely Healed
Wound Depth	4 mm	2 mm	Nil
Granulation Tissue	Unhealthy (Slough/Eschar)	Healthy (Pink/Clean)	Complete Epithelialization
Discharge	Present (Purulent)	Absent	Absent
Bilateral Edema	Severe / Present	Markedly Reduced	Minimal
Healing Status	Chronic Non-Healing	Improving	Complete Remediation



Figure 1: A–B. Baseline clinical presentation before treatment showing Dushta Vrana over the right lower limb with unhealthy granulation tissue, slough, eschar, and associated bilateral lower limb oedema.



Figure 3: Clinical photograph at discharge (Day 11) showing significant reduction in wound size, healthy granulation tissue, and marked improvement in bilateral lower limb edema.



Figure 2: Clinical photograph during treatment demonstrating wound debridement, reduction of slough, appearance of healthy granulation tissue, and progressive wound contraction.



Figure 4: A–D. Follow-up photographs after 2 months showing complete wound healing with healthy epithelialization, scar formation, and resolution of edema without recurrence.



DISCUSSION

Managing chronic wounds in geriatric patients is uniquely challenging due to age-related biological declines, such as reduced angiogenesis, impaired collagen synthesis, slower cellular proliferation, and blunted immune responses. These physiological deficits were further exacerbated in this patient by severe anaemia and hypoproteinemia, which heavily compromise oxygen delivery and structural tissue regeneration. Similar observations have been reported in previous Ayurvedic studies where *Vrana Shodhana* and *Vrana Ropana* therapies promoted rapid granulation tissue formation, reduction of wound discharge, and accelerated epithelialization in chronic ulcers. The present case further demonstrates effectiveness even in a geriatric patient with severe anemia and hypoproteinemia, conditions generally associated with poor healing outcomes.

The therapeutic regimen was mapped out using the classic dual steps of *Vrana Shodhana* (purification/cleansing) and *Vrana Ropana* (healing). Topically, *Vrana Shodhaka Taila* successfully debrided necrotic tissue and eliminated slough, transforming a *Dushta Vrana* into a clean *Shuddha Vrana*. Following debridement, *application of Pichu with Vrana Ropaka Taila* provided the optimal microenvironment for cellular migration, tissue remodelling, and epithelialization.

Systemically, *Punarnava Guggulu* acted as a potent *Shothahara* (anti-edematous) agent, restoring fluid balance in the lower extremities. *Gandhak Rasayana* functioned as a metabolic and cellular rejuvenator (*Rasayana*), defending the tissue substrate from microbial infection. *Nisha Amalaki* and *Raktapachaka Vati* optimized metabolic pathways and blood purification (*Rakta Prasadana*). Mechanically, strict limb elevation minimized hydrostatic pressure, boosting venous and lymphatic return to reverse localized hypoxia. Despite severe nutritional deficiencies, this multimodal care strategy triggered rapid healing.

Limitations: As this is a single-case report, the findings cannot be generalized. Hematological parameters were not reassessed during follow-up, and long-term recurrence beyond two months was not evaluated. Larger controlled clinical studies are required to validate these observations.

CONCLUSION

This case highlights that a structured Ayurvedic treatment protocol integrating internal medications, tailored topical care (*Vrana Shodhaka* and *Vrana Ropaka Taila*), and mechanical limb elevation demonstrated significant clinical improvement and complete healing of *Dushta Vrana* complicated by bilateral lower limb edema in elderly patients. Complete wound closure was safely achieved even in the presence of severe systemic barriers like severe anemia and hypoproteinemia, presenting an

effective clinical pathway for geriatric wound management.

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