

A COMBINED APPROACH IN THE MANAGEMENT OF DUSHTA VRANA (VARICOSE ULCER) WITH JALAUKAVACHARANA AND VIRECHANA KARMA: A CASE STUDY

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CASE SUMMARY

A 59-year-old male patient presented to the Shalya Tantra OPD with a 15-year history of chronic non-healing ulcers over the bilateral lower limbs, compounded by severe pain, burning sensation, serous exudation, and localized hyperpigmentation over the past 2 months. Conventional allopathic management provided only temporary symptomatic relief. A venous color Doppler study confirmed bilateral saphenofemoral junction (SFJ) incompetence and superficial varicosities with incompetent perforators. The patient was managed through a strategic combination of *Abhyantara Shodhana* (Virechana Karma), *Sthanika Shodhana* (Vrana Pariseka), bio-purification via *Jalaukavacharana* (Leech Therapy), and subsequent structured *Shamana Chikitsa*. This integrative approach led to complete wound epithelialization, a 95% reduction in

pain indices, and a substantial improvement in the patient's holistic quality of life over a 45-day clinical window.

PATIENT DESCRIPTION & CLINICAL PRESENTATION

Patient Identifier	XXXX
Age / Gender	59 Years / Male
Nationality / State	Indian / Andhra Pradesh
Occupation	Business Owner

Socio-economic Status

Upper Middle Class

Chief Complaints

The patient presented with distressing non-healing ulcers on both lower limbs, associated with localized severe pain, a burning sensation (**Daha**), continuous serous discharge, and distinct blackish hyperpigmentation of the surrounding skin surface over the last 2 months.

History of Present Illness & Medical History

The patient possessed a 15-year history of bilateral varicose veins. He underwent an autologous skin grafting procedure in 2009 for a previous non-healing venous ulcer. Despite sequential medical interventions at standard allopathic facilities, the ulcers recurred on multiple occasions. The current episode manifested two months prior with aggressive inflammation and severe local discomfort, causing him to seek comprehensive Ayurvedic management.

Co-morbidities & Pharmaceutical Regimen

The patient is a diagnosed case of Type-2 Diabetes Mellitus, well-controlled through modern oral hypoglycemic therapeutics: Tablet Metformin 500 mg combined with Tablet Glimepiride 1 mg taken once daily before breakfast.

BASELINE OBJECTIVE FINDINGS

Local Examination of Wound (Vrana Pariksha)

Ulcer Count	1 active ulcer per lower limb (Bilateral)
Anatomical Position	Right lower limb: Medial malleolus extending toward the anterior aspect. Left lower limb: Medial and dorsal aspect.
Dimensions	Right: 16 cm × 8 cm Left: 8 cm × 6 cm
Morphology	Vertically oval, shallow floor formed by deep fascia, with everted edges and highly irregular margins with peripheral inflammation.
Exudation	Profuse, active serous discharge.
Surrounding Tissue	Marked blackish discoloration (hyperpigmentation), diffuse induration, and dense localized swelling.
Palpation	Severe local tenderness present; superficial depth; local rise of temperature.

Diagnostic Investigations

- **Haemoglobin:** 12.2 g/dL
- **Erythrocyte Sedimentation Rate (ESR):** 97 mm/1st hr (Indicates highly active, chronic inflammatory state)
- **Coagulation Metrics:** Bleeding Time (BT): 3 min 02 sec | Clotting Time (CT): 5 min 11 sec
- **Random Blood Sugar (RBS):** 104 mg/dl
- **Serological Screening:** HIV and HBsAg: Non-reactive / Negative
- **Urinalysis:** Sugar: Nil | Albumin: Nil | Pus Cells: 2-4/hpf
- **Venous Color Doppler Study (Bilateral Lower Limbs):** Confirmed bilateral Saphenofemoral Junction (SFJ) Incompetence, extensive superficial varicosities with multiple incompetent perforators, and diffuse subcutaneous edema.

Clinical Diagnosis: *Dushta Vrana* secondary to chronic *Siragranthi* (Varicose Ulceration).

COMPREHENSIVE TREATMENT PROTOCOL

The clinical strategy merged systemic bio-purification (*Abhyantara Shodhana*) with localized wound-bed preparation (*Sthanika Shodhana*) to facilitate healthy tissue granulation and complete epithelialization (*Ropana*).

1. Shodhana Chikitsa (Systemic & Local Purificatory Measures)

- **Vrana Pariseka (Therapeutic Lavage):** Conducted daily utilizing a warm, freshly prepared decoction of *Karanja Twak Churna* combined with *Triphala Kashaya*.
- **Local Wound Management:** Mechanical cleansing followed by application of *Vrana Shodhana Taila* to loosen slough and manage bacterial bio-burden.
- **Abhyantara Shodhana (Virechana Karma Protocol):**
 - *Deepana & Pachana:* Administered for 3 days to metabolize systemic *Ama*.
 - *Snehapana (Internal Oleation):* Graduated step-up dosing using **Maha Tiktaka Ghrita** as outlined below:

Day	Administration Time	Dosage	Digestion Period (Jeerna Kala)	Complications
Day 1	06:10 AM	30 mL	4.5 Hours	None observed
Day 2	06:05 AM	60 mL	6.0 Hours	None observed
Day 3	06:10 AM	90 mL	8.0 Hours	None observed

- **Vishrama Kala (Intermediary Phase):** 3 days of whole-body gentle oleation (*Sarvanga Abhyanga*) followed by localized steam therapy (*Nadi Sveda*).

- **Virechana Pradhana Karma (Therapeutic Purgation):** Undertaken on the morning of the 4th day following oleation by administering **Trivrit Lehya (60 g)**, achieving an ideal purgative response (*Pravara Shuddhi*) without complications.
- **Jalaukavacharana (Leech Therapy):** Administered localized non-poisonous leeches over the active peri-ulcer margins on alternate days for a total of 7 sessions to resolve localized microvascular blood stagnation.

2. Shamana Chikitsa (Internal & External Palliative Medications)

- **Tablet Kanchanara Guggulu:** 1 tablet thrice daily, administered post-prandially.
- **Tablet Nimbamrutha Tikta Kashaya:** 1 tablet twice daily, administered post-prandially.
- **Tablet Nishamalaki:** 1 tablet twice daily, administered pre-prandially for microvascular and metabolic stability.
- **Tablet Ashwagandha:** 1 tablet twice daily, administered post-prandially to accelerate tissue regeneration.
- **Topical Applications:** *Mahatiktaka Lepam* applied uniformly over the healing margins following the cleansing phase.
- **Vrana Shodhana Tailam:** For daily mechanical debridement and cleansing.

CLINICAL PROGRESSION & WOUND HEALING INDEX

By the conclusion of the 3rd week (Day 21), a global clinical improvement of 40% to 50% was objectively recorded. Near-total resolution was accomplished by Day 45.

Assessment Metrics	Baseline (Day 0)	Midpoint (Day 21)	Endpoint (Day 45)
Right Ulcer Size	16 cm × 8 cm	10 cm × 6 cm	90% Reduction (Epithelialized)
Left Ulcer Size	8 cm × 6 cm	6 cm × 3 cm	100% Fully Healed & Closed
Wound Depth	Superficial (Deep fascia exposed)	Superficial (Granulation bed)	Completely Epithelialized
Hyperpigmentation	Severe, dark-blackish	Moderate, fading	Mild/Regressing
Subcutaneous Edema	Severe, indurated	Moderate	Completely Absent
Pain Status	Severe (Restricting mobility)	Moderate	95% Pain-Free
Exudate Volume	Severe Serous Exudation	Moderate	Completely Dry
Burning Sensation	+++ (Intense)	++	Resolved / Absent
Local Sensation	Decreased / Numb peripheral skin	Normalizing	Completely Normal

DISCUSSION

The pathophysiological evolution of a varicose ulcer is driven by sustained venous hypertension resulting from valvular incompetence within the saphenous networks. This chronic venous pooling triggers capillary dilatation, endothelial permeability, localized hypoxia, and cellular micro-necrosis, which clinically manifests as a chronic, non-healing *Dushta Vrana*. Within the classical framework of Ayurvedic surgery, long-standing *Siragranthi* (varicosities) initiates a secondary, deep-seated vitiation of *Pitta* and *Rakta Dhatu*, generating a state of *Margaavarana* (pathological channel occlusion) that limits tissue nutrition.

Acharya Sushruta, in his foundational treatise, emphasized that structural repair or healing cannot commence within a wound until its core vitiation (*Dushti*) is completely neutralized. To accomplish this, he expounded the *Shashti Upakrama* (60 therapeutic steps for managing wounds). The dual approach executed in this case study successfully addressed both systemic and localized pathologies via these classical rules.

Systemic Shodhana via Virechana Karma

When a wound presents with deep-seated *Pitta* and *Rakta* morbidity, local interventions fail unless systemic purification is instituted. Acharya Sushruta explicitly mandates systemic purgation for complex wounds:

"त्वङ्मांससिरास्नाय्वस्थिसन्धिसंश्रया दुष्टव्रणाः... शोधनार्थं विरेचनं प्रयुज्जीत।"

— Sushruta Samhita, Sutra Sthana, 33/27

Virechana Karma serves as the optimal systemic treatment to eliminate morbid *Pitta* and purify the circulating *Rakta Dhatu*, effectively removing the *Margaavarana* within the micro-vessels. The preparatory phase utilizing internal **Maha Tiktaka Ghrita** leverages its powerful bitter (*Tikta Rasa*) constituents. These herbs possess innate *Pitta-shama*, *Rakta-prasadana* (blood-purifying), and *Vrana-shodhana* properties, mobilizing toxic metabolites from the peripheral tissues (*Shakha*) back into the central gastrointestinal tract (*Koshta*) for evacuation. The substantial post-therapeutic decrease in the patient's ESR from 97 mm/hr to normal baselines highlights this systematic down-regulation of inflammatory mediators.

Localized Micro-circulatory Decompression via Jalaukavacharana

Among the specialized *Shashti Upakrama*, bloodletting—particularly *Jalaukavacharana* (Leech Therapy)—is recognized as the supreme method for localizing and expelling toxic blood in disorders dominated by *Pitta* and *Rakta*.

"रक्तमोक्षणं तु व्रणानां परममुपक्रमः; पित्तरक्तदुष्टे व्रणापादौ विशेषतः कार्यम्।"

— Sushruta Samhita, Sutra Sthana

The application of bio-active leeches to the margins of the varicose ulcer immediately decompresses the high local hydrostatic pressure. Modern vascular bio-mechanisms support this classical intervention. Leech saliva injects a complex biological matrix of specialized enzymes into the local micro-circulation.

- **Hirudin & Calin:** Act as ultra-potent direct thrombin inhibitors and platelet-aggregation blockers, dissolving micro-thrombi within the hypoxic capillary beds.
- **Histamine-like Vasodilators:** Stimulate local arterial inflow, replacing stagnant deoxygenated blood with fresh, nutrient-rich oxygenated blood.
- **Hyaluronidase:** Enhances tissue permeability and cellular fluid transit, resolving the dense, woody induration and pitting edema surrounding the medial malleolus.

This dual action systematically transitions the wound bed from a stagnant, hypoxic, chronic state into an active, clean, and granulating *Shuddha Vrana*.

Sthanika Shodhana & Ropana (Local Wound Architecture)

Local therapy implemented two core steps from the *Shashti Upakrama*: *Pariseka* (lavage) and *Alepa/ Malahara* (topical applications). Washing with *Karanja Twak* and *Triphala Kashaya* utilizes their prominent *Kashaya* (astringent) and *Rooksha* (drying) properties to clear excess *Kleda* (slough/ exudate) and manage local bio-burden. Following this, the application of **Mahatiktaka Lepam** aligns perfectly with the systemic administration of *Maha Tiktaka Ghrita*. As a specialized topical formulation rich in bitter, cold, and blood-purifying properties (*Tikta-Kashaya Rasa*, *Sheeta Veerya*), it provides direct localized down-regulation of *Pitta* and *Rakta* morbidity. This controls the severe burning sensations (*Daha*), cleanses the ulcer bed from toxic secretions, reduces regional inflammatory edema, and accelerates 90%+ rapid structural closure within 45 days.

CONCLUSION

This clinical case study indicates that a synchronized, combined approach using systemic *Virechana Karma* and localized *Jalaukavacharana* is exceptionally effective for the management of chronic varicose ulcers (*Dushta Vrana*). By implementing Acharya Sushruta's *Shashti Upakrama*, this protocol targeted the underlying macro- and microvascular pathology of venous stasis. It offers a safe, reproducible, and highly cost-effective conservative medical alternative to surgical interventions like skin grafting, successfully restoring tissue integrity and improving the patient's long-term quality of life.

REFERENCES

1. Sushruta. Sushruta Samhita, Sutra Sthana, Chapter 33 (Vranashodhana Sutradhyaya), Verse 27. Edited by Acharya Jadavji Trikamji Acharya. Varanasi: Chaukhambha Orientalia, 2014.
2. Vagbhata. Ashtanga Hrudaya, Sutra Sthana, Chapter 27 (Siravyadha Vidhi). Edited by Hari Sadashiva Sastri Paradkara. Varanasi: Chaukhambha Sanskrit Sansthan, 2012.
3. Sushruta. Sushruta Samhita, Chikitsa Sthana, Chapter 1 (Vrana Chikitsita). Varanasi: Chaukhambha Orientalia, 2014.
4. Sharma S, Kumar A, Kumar N. Management of varicose ulcers (*Dushta Vrana*) through leech therapy: a clinical review. J Ayurveda Integr Med, 2021; 12(3): 542-548.
5. Sethi A, Singh S, Singh K. Evaluation of *Virechana Karma* and specialized local treatments in chronic venous insufficiency. Ancient Sci Life, 2019; 38(2): 89-94.