

DURVADI TAILA IN THE MANAGEMENT OF DUSHTA VRANA: A NARRATIVE REVIEW OF AYURVEDIC RATIONALE, PHARMACOLOGICAL POTENTIAL AND CLINICAL EVIDENCE

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ABSTRACT

Background: Wounds that are contaminated or infected, or that show persistent inflammation, represent a longstanding challenge in surgical practice. Ayurveda describes such pathological wounds under the concept of Dushta Vrana, for which systematic wound cleansing (Vrana Shodhana) followed by promotion of tissue restoration (Vrana Ropana) is traditionally advocated. Classical Ayurvedic wound management includes several local therapeutic procedures, among which medicinally processed oils (Taila) occupy an important place. **Objective:** This review examines the Ayurvedic rationale, pharmaceutical composition, pharmacological basis and available clinical evidence for Durvadi Taila in the management of Dushta Vrana, with particular reference to wound healing and microbial load. **Materials and Methods:** Classical Ayurvedic literature and contemporary biomedical literature relating to Vrana, chronic

wounds, wound healing, Cynodon dactylon, Berberis aristata, Mallotus philippensis and Sesamum indicum were reviewed following a structured search strategy (Section 2). Clinical observations from a prospective, open-label, single-arm interventional study of 30 patients, conducted by the corresponding author as part of an M.S. thesis, were incorporated as primary clinical evidence. The study formulation, Durvadi Taila, was prepared from Durva Swarasa (Cynodon dactylon), Daruharida Kalka (Berberis aristata) and Kampillaka Kalka

(*Mallotus philippensis*) in a Tila Taila (*Sesamum indicum*) base, processed to Khara Paka avastha, and applied locally once daily for 28 days. **Results:** The principal Ayurvedic rationale rests on Durva (*Cynodon dactylon*), traditionally credited with Vrana Ropana, Krimighna, Raktastambhaka and Pitta-shamaka properties. Contemporary experimental studies report wound-healing activity of *C. dactylon*, including increased wound contraction, tensile strength and hydroxyproline-related markers of repair. *Berberis aristata* (*Daruharidra*) contains pharmacologically active isoquinoline alkaloids, particularly berberine, with reported antibacterial and anti-inflammatory effects, while *Mallotus philippensis* (*Kampillaka*), the formulation's second Kalka dravya, contributes rottlerin-related phloroglucinol derivatives with reported antimicrobial and antioxidant activity. Tila Taila is the lipid vehicle and is traditionally regarded as an important external Sneha in wound care. In the clinical study, 90% (27 of 30) of wounds were culture-positive before therapy, and several clinical wound parameters showed substantial improvement. Because the trial was single-arm and open-label, however, the observed improvement cannot be used to infer superiority over standard wound care. **Conclusion:** The multi-dimensional rationale for Durvadi Taila is coherent with traditional Shodhana-Ropana principles and with the experimentally documented antibacterial, antioxidant and wound-healing actions of its constituent drugs. The preliminary clinical observations are encouraging, but controlled, adequately powered and microbiologically standardised trials are required before definitive therapeutic claims can be made.

KEYWORDS: Dushta Vrana, Durvadi Taila, *Cynodon dactylon*, *Daruharidra*, *Berberis aristata*, *Kampillaka*, *Mallotus philippensis*, Tila Taila, wound healing, antimicrobial, Vrana Shodhana, Vrana Ropana.

1. INTRODUCTION

Wound management remains central to surgical practice, since optimal healing requires the coordinated control of contamination, inflammation, tissue regeneration and restoration of epithelial integrity. Contemporary wound biology recognises four overlapping phases of repair — haemostasis, inflammation, proliferation and remodelling.^[1,2] Infection, poor perfusion, hypoxia, metabolic disease, nutritional inadequacy and other local or systemic factors can disrupt this sequence and predispose a wound to chronicity.^[1,2]

Classical Ayurvedic surgical literature describes Vrana and its management in considerable detail. Sushruta devotes a dedicated section of the Sutrasthana to the definition, classification

and discharge-pattern of wounds^[3], and describes a comprehensive sixty-fold therapeutic scheme — Shashti Upakrama — for wound management in the Chikitsasthana.^[4] Dushta Vrana is one of the principal pathological wound states recognised in this literature, characterised by persistent discharge, altered wound appearance, malodour, impaired granulation and delayed healing.^[3] Management is directed first at creating a favourable wound bed through Shodhana (cleansing), and subsequently at promoting tissue restoration through Ropana (healing).^[3,4]

As used in the author's clinical study, Durvadi Taila is a traditional medicated oil prepared according to the Sahasrayoga Taila Prakarana.^[5] It consists of Durva (*Cynodon dactylon*), Daruharida (*Berberis aristata*) and Kampillaka (*Mallotus philippensis*) as Kalka/Swarasa (paste/liquid) dravyas incorporated into a base of Tila Taila (*Sesamum indicum*), processed to Khara Paka avastha — a correction to earlier drafts of this review, which had described the formulation as containing only three herbal constituents. The pharmacy preparation record of the parent thesis confirms that Daruharida and Kampillaka are the two Kalka dravyas, each used in equal proportion, with Durva employed as Swarasa.

This review consolidates the Ayurvedic rationale, the pharmacological evidence for the individual constituents, and the preliminary clinical findings for Durvadi Taila in Dushta Vrana, and identifies the gaps that should be addressed before its therapeutic value can be considered established.

2. MATERIALS AND METHODS

This article is a narrative review that also incorporates primary clinical observations from a prospective, single-arm interventional study conducted by the corresponding author. The methodological steps followed for the literature component of the review are described below.

2.1 Search Strategy / Literature Search

The electronic databases PubMed/MEDLINE, Scopus, DOAJ and Google Scholar were searched for records addressing the review question, using combinations of the following keywords and their Boolean variants: “Dushta Vrana”, “Vrana Shodhana”, “Vrana Ropana”, “Durvadi Taila”, “*Cynodon dactylon*” OR “Durva”, “*Berberis aristata*” OR “Daruharidra”, “*Mallotus philippensis*” OR “Kampillaka”, “*Sesamum indicum*” OR “Tila Taila”, “chronic wound”, “wound healing”, and “antimicrobial activity”. No lower date limit was applied; the

search was last updated in August 2026. Reference lists of retrieved articles were hand-searched for additional relevant studies not captured by the electronic search.

Classical Ayurvedic sources were consulted directly rather than through secondary paraphrase, and comprised the Brihatrayi (Charaka Samhita, Sushruta Samhita)^[3,4,6], the Sharangadhara Samhita from the Laghutrayi tradition^[9], the Nighantu literature (Bhavaprakasha Nighantu)^[8], the Sahasrayogam Taila Prakarana^[5], and the Ayurvedic Pharmacopoeia of India.^[10]

2.2 Inclusion and Exclusion Criteria

Peer-reviewed original research articles, systematic reviews, and authoritative classical or pharmacopoeial texts addressing Dushta Vrana, wound healing, or the pharmacology of Durva, Daruharidra, Kampillaka, or Tila Taila were included. Conference abstracts without accessible full text, non-peer-reviewed web sources (other than recognised Ayurvedic reference portals used only for cross-checking classical nomenclature and Varga classification), and articles not available in English were excluded. As this is a narrative rather than a systematic review, no formal risk-of-bias or quality-appraisal instrument was applied; this is acknowledged as a limitation in Section 13.

2.3 Clinical Data Source

The clinical observations summarised in Section 9 are drawn from the author's prospective, open-label, single-arm study of 30 patients with clinically diagnosed Dushta Vrana, conducted in the Department of Shalya Tantra, PGIA, DSRRAU, Jodhpur, as part of the M.S. thesis. Full methodological detail — eligibility criteria, outcome measures (including the Bates-Jensen Wound Assessment Tool, BWAT), and statistical methods — is reported in the thesis and is summarised here only to the extent required to interpret this review's conclusions.

3. CONCEPT OF DUSHTA VRANA

Dushta Vrana is an Ayurvedic term for a wound in which the natural process of healing is interrupted by persisting pathogenic factors.^[3] Classical descriptions emphasise irregularities of discharge, odour, tissue quality, pain, inflammation and delayed granulation.^[3]

Several features of a chronic, infected wound can be drawn as conceptual correlates from a contemporary perspective, including prolonged inflammation, microbial colonisation or

infection, profuse exudate, defective granulation and delayed Epithelialisation.^[1,2] This correlation should be regarded as interpretive rather than as a statement of equivalence between the two nosological systems.

Table 1: Correlation between classical Ayurvedic descriptors of Dushta Vrana and contemporary wound-care concepts.

Ayurvedic concept	Clinical interpretation	Contemporary wound-care correlate
Dushta Vrana	Pathologically altered, poorly healing wound	Chronic or complicated wound
Puti-gandha	Offensive odour	Possible bacterial burden / infection
Srava	Persistent wound discharge	Exudate
Vedana	Pain / discomfort	Local inflammatory or tissue-related pain
Impaired granulation	Delayed healthy tissue formation	Delayed proliferative phase
Krimi involvement	Presence of harmful organisms	Microbial colonisation / infection
Shodhana	Cleansing / purification	Debridement, cleansing and infection control
Ropana	Promotion of healing	Granulation and epithelialisation

4. AYURVEDIC APPROACH TO WOUND MANAGEMENT

Ayurveda does not prescribe a single universal intervention for all wounds; treatment is determined by the wound's features, stage and associated pathological factors. Sushruta's approach comprises cleansing, drainage when indicated, appropriate local measures, dressing, and procedures directed at healing^[4] — a scheme elaborated as the Shashti Upakrama.^[4,7]

Shodhana creates a favourable wound environment, while Ropana stimulates tissue repair.^[3,4] This sequence of principles is particularly relevant to wounds with exudate, slough, infection or unhealthy granulation.

Table 2: Core Ayurvedic therapeutic principles applied in Vrana management, with their probable contemporary correlates.

Therapeutic principle	Primary objective	Possible contemporary interpretation
Vrana Shodhana	Remove pathological material and improve wound condition	Cleansing, debris removal and infection control
Vrana Ropana	Promote tissue repair	Granulation, contraction and epithelialisation
Krimighna action	Control harmful organisms	Antimicrobial activity
Raktastambhana	Control excessive bleeding /	Haemostatic / astringent effect

	exudation	
Daha-Kandu Shamana	Reduce burning and itching	Reduction of inflammatory discomfort
Bandhana	Protect the wound	Appropriate dressing and wound protection

5. DURVADI TAILA: CLASSICAL BASIS AND COMPOSITION

5.1 Classical Basis

In the parent thesis, Durvadi Taila is characterised as a traditional Vrana Ropana Sneha prepared according to the Sahasrayoga Taila Prakarana.^[5] In the clinical study, Tila Taila served as the Sneha (lipid) medium, while Durva, Daruharida and Kampillaka together constituted the herbal (Kalka/Swarasa) components.

The trial formulation was intended for external application: it was applied to the wound on sterile gauze once daily for 28 days, with clinical assessments on Days 0, 7, 14, 21 and 28.

5.2 Composition

Table 3: Composition of Durvadi Taila as used in the clinical study, prepared to Khara Paka avastha.

S. No.	Ingredient	Botanical identity	Form	Proportion	Principal role
1	Durva Swarasa	Cynodon dactylon (L.) Pers.	Swarasa (fresh juice)	16 parts	Principal herbal liquid; Vrana Ropana
2	Daruharida Kalka	Berberis aristata DC.	Kalka (paste)	1 part	Herbal paste; Krimighna
3	Kampillaka Kalka	Mallotus philippensis (Lam.) Müll.Arg.	Kalka (paste)	1 part	Herbal paste; Krimighna, Vrana Shodhana
4	Tila Taila	Sesamum indicum L.	Sneha (vehicle)	4 parts	Sneha / vehicle; Vrana Ropana

Note: the formulation is confirmed, against the pharmacy preparation record of the parent thesis, as a four-dravya Durvadi Taila — Durva (Cynodon dactylon, used as Swarasa), Kampillaka (Mallotus philippensis, fruit), Daruharida (Berberis aristata, stem), and Tila Taila as the Sneha base. Both Kalka dravyas (Daruharida and Kampillaka) were processed as Yavakut churna, soaked in water, and combined with warmed Tila Taila (following Murchana) and Durva Swarasa per Shastriya Vidhana, with the Taila heated over Mandagni until Khara Paka avastha was reached, then sieved and packed in sterile airtight containers.^[9,10] This resolves a wording ambiguity present in earlier drafts of this review regarding which dravya constituted the one-part Kalka; readers intending to reproduce the

formulation should nonetheless cross-verify proportions and the Paka endpoint against the cited primary source and their own institutional pharmacy protocol before use.

6. REVIEW OF INDIVIDUAL INGREDIENTS

6.1 Durva (*Cynodon dactylon*)

Durva, botanically *Cynodon dactylon* (L.) Pers., family Poaceae, is classified under the Guduchyadi Varga of the Bhavaprakasha Nighantu^[8] and is described in Dravyaguna literature for its Raktastambhaka, Krimighna, Pitta-shamaka and Vrana Ropana properties.^[8,9] Reported phytochemical classes include flavonoids, phenolic compounds, tannins, alkaloids, glycosides, saponins, triterpenoids and phytosterols, along with ascorbic acid and carotenoids.^[12]

Experimental studies on *C. dactylon* indicate wound-healing activity, including increased wound contraction, tensile strength, and hydroxyproline-related biochemical markers of tissue repair.^[13] Phenolic and flavonoid content has been associated with antioxidant and collagen-related actions.^[12,13] Antibacterial activity of *C. dactylon* extracts has been reported against *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Bacillus subtilis* and *Candida albicans*.^[12]

Table 4: Reported phytochemical groups in *Cynodon dactylon* and their probable biological relevance.

Phytochemical group	Potential biological relevance
Flavonoids	Antioxidant and anti-inflammatory activity
Phenolic compounds	Antioxidant and antimicrobial potential
Tannins	Astringent and tissue-protective effects
Saponins	Potential antimicrobial and tissue-repair relevance
Triterpenoids	Potential anti-inflammatory and reparative activity
Phytosterols	Potential membrane and inflammatory-modulatory activity
Vitamin C / ascorbic acid	Relevance to collagen synthesis and antioxidant defence

6.2 Daruharida (*Berberis aristata*)

Daruharida, botanically *Berberis aristata* DC., family Berberidaceae, is classified under the Haritakyadi Varga of the Bhavaprakasha Nighantu^[8] and is well established in Ayurvedic materia medica. Contemporary phytochemical work identifies isoquinoline alkaloids — principally berberine — as the major bioactive constituents, with reported antibacterial, antioxidant and anti-inflammatory activity.^[14] Aqueous and ethyl-acetate extracts of the root bark show broad-spectrum antimicrobial activity in vitro against a range of test organisms.^[16]

Experimental work using ethanolic root-bark extract has demonstrated wound-healing activity in incision and excision models, supported by molecular-docking analysis of the principal phytoconstituents against wound-relevant protein targets.^[15] Daruharida may therefore contribute antibacterial and anti-inflammatory activity to Durvadi Taila; evidence for the isolated herb cannot, however, be extrapolated directly to the compound formulation.

6.3 Kampillaka (*Mallotus philippensis*)

Kampillaka, botanically *Mallotus philippensis* (Lam.) Müll.Arg., family Euphorbiaceae, is traditionally described as Katu (pungent) in Rasa and Ushna in Virya, with actions described as Krimighna, Kushtaghna and Vranahara.^[17] The glandular trichomes covering its fruit — the source of the reddish “Kamala” powder — have traditionally been combined with sesame oil for application to wounds and eczematous skin, which is directly congruent with its inclusion as a Kalka dravya in Durvadi Taila.^[17]

Reported phytoconstituents of *M. philippensis* include rottlerin and related phloroglucinol derivatives (isorottlerin, the kamalins), kamalachalcones, and tannins, which have been associated with antioxidant, antifungal and antimicrobial activity in contemporary phytochemical and pharmacological studies.^[17] An *in silico* multitarget docking study of fruit-derived constituents against several proteins relevant to wound healing and inflammation — including interleukin-6, interleukin-1 β , NF- κ B and matrix metalloproteinase-9 — has suggested plausible mechanistic contributions to tissue repair, although this evidence remains computational rather than experimental or clinical.^[19]

Within Durvadi Taila, Kampillaka is used as one of the two Kalka dravyas together with Daruharida, and its inclusion is consistent with the formulation's overall Krimighna and Vrana Shodhana intent. Direct experimental or clinical evidence for Kampillaka in a wound-healing model specific to this compound formulation is, however, still lacking, and is identified as a research gap in Section 11.

6.4 Tila Taila (*Sesamum indicum*)

The lipid medium of the formulation is Tila Taila. The thesis explains the Ayurvedic rationale for its suitability in external wound application in terms of its Sukshma, Vyavayi and Vrana Ropana properties, and its established role as a Sneha base in Taila Kalpana.^[9,10]

Topical sesame oil has also been evaluated in the contemporary clinical literature. A GRADE-assessed systematic review and meta-analysis of randomised controlled trials reported a possible benefit of topical sesame oil as an adjunct to standard treatment for pain from minor limb trauma, though the authors noted limitations in the certainty of the underlying evidence.^[20] Tila Taila may therefore be viewed both as a pharmaceutical vehicle and as a potentially bioactive component, although formulation-specific investigation is still required.

7. PHARMACOLOGICAL RATIONALE OF DURVADI TAILA

The therapeutic hypothesis for Durvadi Taila can be considered in the light of several interacting, and probably complementary, mechanisms: reduction of microbial load; control of excessive inflammatory activity and exudation; support of granulation and wound contraction; promotion of epithelialisation; and maintenance of an appropriate local wound environment.

Table 5: Proposed correlation between Ayurvedic properties/actions of the constituent dravyas and their possible contemporary pharmacological interpretation.

Ayurvedic property / action	Relevant constituent(s)	Possible contemporary interpretation
Vrana Shodhana	Durva, Daruharida, Kampillaka	Reduction of microbial burden and unhealthy exudate
Krimighna	Daruharida, Kampillaka	Antimicrobial activity
Vrana Ropana	Durva, Tila Taila	Support of granulation, contraction and epithelial repair
Raktastambhaka	Durva	Astringent / haemostatic contribution
Pitta-shamana	Durva	Possible reduction of inflammatory discomfort
Yogavahi / Sneha role	Tila Taila	Lipid vehicle and prolonged local contact
Antioxidant activity	Durva, Kampillaka phytochemicals	Reduction of oxidative stress during tissue repair

This hypothesised mechanism should be read as a pharmacological interpretation of classical features in light of current experimental evidence, rather than as a conclusively demonstrated molecular pathway for the compound formulation.

8. DURVADI TAILA AND MICROBIAL BURDEN

Delayed wound healing is frequently attributable to microbial contamination and infection. In contemporary wound-care literature, bacterial colonisation, biofilm formation and overt infection are recognised as potential barriers to tissue repair.

This makes Culture and Sensitivity testing an objectively relevant outcome measure for a formulation intended for Dushta Vrana. In the absence of a standardised Krimighna nomenclature, microbiological testing may serve as an objective means of assessing change in wound microbial status, rather than assuming antimicrobial efficacy from clinical impression alone.

In the clinical study underlying this review, wound swab culture was positive in 27 of 30 patients (90%) at baseline, with *Staphylococcus aureus* as the predominant organism. The thesis accordingly attempted to correlate the classical concept of Krimighna activity with contemporary microbiological assessment.

Resolution of clinical indicators such as malodour or discharge should not, however, be automatically construed as microbiological eradication. Future studies should ideally employ standardised pre- and post-treatment cultures, quantitative or semi-quantitative microbiological assessment where feasible, and a complete antibiogram.

9. CLINICAL EVIDENCE

The clinical trial underlying this review was an open-label, prospective, single-arm interventional study conducted by the author in the Department of Shalya Tantra, PGIA, DSRRAU, Jodhpur.^[21] Thirty participants with clinically diagnosed Dushta Vrana were enrolled. Treatment continued for 28 days, with follow-up examinations on Days 0, 7, 14, 21 and 28.

The study captured subjective parameters — wound-related pain, discharge, granulation, wound margin and odour — alongside objective parameters including the Bates-Jensen Wound Assessment Tool (BWAT) score, wound size, ESR, total leucocyte count (TLC) and haemoglobin.

Table 6: Summary of the clinical study design and principal outcomes.

Parameter	Observation
Study design	Prospective, open-label, single-arm
Number of patients	30
Treatment duration	28 days
Follow-up	Days 0, 7, 14, 21 and 28
Age range	21–65 years in the enrolled series
Culture-positive wounds at baseline	27/30 (90%)
Predominant organism	Staphylococcus aureus
Treatment-related adverse reactions	None reported
Overall clinical response	Moderate-to-marked improvement in 96.67% of patients
Mean total wound-score improvement	67.94 ± 10.53%

During treatment image: Figure 1. Representative clinical progression of Dushta Vrana before and after treatment with Durvadi Taila. (A) Day 1; (B) Day 28.



Fig: (A) Day 1st Dushta Varna. Fig: (B) Day 28th Clinical progression of Dushta Varna.

The thesis reports statistically significant improvement in most paired wound metrics, with the largest improvements observed for odour, wound size, discharge and pain.

These findings are clinically encouraging but must be regarded as preliminary, since all patients received the intervention and there was no untreated, placebo, or routine-care comparator group.

10. DISCUSSION

The available evidence forms a consistent, though partial, line of support for Durvadi Taila. At the classical level, the formulation is congruent with the Ayurvedic approach of first cleansing an unhealthy wound (Shodhana) and then encouraging tissue restoration (Ropana).^[3,4] The thesis particularly emphasises the cleansing, microbial-control and tissue-restorative features attributed to Durva, while Tila Taila provides the Sneha medium.

Cynodon dactylon has shown wound-healing activity at the phytopharmacological level in experimental studies, and its phytochemical composition offers plausible pathways for its antioxidant and antibacterial properties.^[12,13] The pharmacological properties of *Berberis aristata* and its principal alkaloid berberine have similarly been characterised for infection and inflammation.^[14,15,16] *Mallotus philippensis*, newly reviewed here as the formulation's second *Kalka dravya*, contributes a distinct phytochemical profile centred on rottlerin and related compounds, with antimicrobial, antioxidant and (in silico) wound-relevant activity.^[17,19]

Clinically, the author's analysis of 30 patients demonstrated improvement in several wound parameters alongside a high proportion of wounds that were culture-positive at baseline.^[21] However, the evidence should not be overstated. In a single-arm study, the benefit of the intervention cannot be separated from spontaneous healing, concurrent wound care, dressing effects, nutritional improvement, or other components of routine management. The thesis itself acknowledges that its results indicate improvement in the treated group but not superiority over an alternative treatment.

11. RESEARCH GAPS

Table 7: Current limitations of the evidence base and corresponding recommendations for future research.

Current limitation	Recommended future research
Single-arm design	Randomised controlled clinical trial
Small sample size	Multicentre study with formal sample-size calculation
Open-label assessment	Blinded outcome assessment
Short follow-up	Longer follow-up for complete closure and recurrence
Limited microbiological endpoints	Standardised serial culture and sensitivity testing
Formulation variability	Pharmacopoeial and phytochemical standardisation
Limited mechanistic evidence, particularly for <i>Kampillaka</i> within the compound formulation	In vitro and molecular studies of the complete <i>Durvadi Taila</i> , not only its isolated constituents
No comparator	Comparison with standard wound care
Limited generalisability	Inclusion of diverse wound categories after appropriate safety evaluation

The thesis also recommends randomised comparison, a larger sample size, longer follow-up, serial microbiological assessment, and standardisation of the finished *Taila*.^[21]

12. SAFETY CONSIDERATIONS

In the clinical study, no treatment-related hypersensitivity reactions, adverse events, or withdrawals were reported during the 28-day treatment period.

However, the absence of adverse events in 30 participants does not establish safety for all patients. Larger studies should incorporate systematic monitoring of adverse events, assessment of local irritation, surveillance for allergic reactions, and quality-control testing of the finished product.

For infected wounds, topical herbal treatment is not a substitute for clinically indicated surgical drainage, debridement, systemic antibiotic therapy, or other standard procedures when these are required.

13. LIMITATIONS OF AVAILABLE EVIDENCE

This review has several limitations. First, there is no direct clinical evidence evaluating Durvadi Taila as a compound formulation; much of the pharmacological justification rests on research into its individual constituents rather than the finished product.

Second, the clinical evidence presented is drawn from a single-arm analysis of 30 subjects. Important limitations acknowledged in the thesis itself include the absence of a comparator, the open-label design, the limited sample size, the short follow-up period, and the restricted range of wound types studied.

Third, the exact contribution of each constituent — particularly Kampillaka, which has not previously been reviewed in this context — has not been experimentally isolated within the final formulation. The hypothesised synergistic mechanisms therefore remain hypotheses that await experimental confirmation.

14. CONCLUSION

Durvadi Taila is a rationally constructed Ayurvedic formulation warranting consideration in the local management of Dushta Vrana, since its traditional therapeutic framework integrates both Vrana Shodhana and Vrana Ropana.^[3,4] Durva is the principal herbal ingredient with wound-directed properties, Daruharida and Kampillaka together provide a pharmacological basis for antibacterial and anti-inflammatory effects, and Tila Taila serves as the Sneha medium.^[8,9,10,14,17]

Experimental evidence for the wound-healing action of *Cynodon dactylon* and the pharmacological activity of *Berberis aristata* and *Mallotus philippensis* has been documented in contemporary studies.^[12,13,14,15,17,18,19] The author's thesis additionally presents a clinical investigation demonstrating encouraging improvement in wound-related parameters, together with a preliminary attempt to correlate Ayurvedic wound therapy with Culture and Sensitivity findings.

However, the existing evidence is insufficient to claim that Durvadi Taila is superior to standard wound-care methods. Its therapeutic potential should be assessed in well-designed randomised controlled trials with a standardised pharmaceutical preparation, objective wound assessment, serial microbiological evaluation, an appropriate comparator group, and adequate follow-up.

Durvadi Taila can therefore be regarded as a plausible candidate for evidence-based study in chronic and infected wound management, and not, on current evidence, as an established treatment.

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