Successful Management of Dadru Kushtha (Tinea Corporis) with Ethnobotanical and Herbo-Mineral Approach: A Case Study

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Abstract

Background: Dadru Kushtha is classified in Ayurvedic classics as a Kshudra Kushtha with predominant Kapha and Pitta Dosha vitiation, manifesting as Kandu (intense itching), Raga (erythema), and Utsanna Mandala (elevated, ring-shaped lesions), secondary to derangement of Twak, Rakta, Mamsa, and Lasika Dushyas. Its closest modern correlate is tinea corporis (ICD-10: B35.4), a superficial dermatophyte infection commonly caused by *Trichophyton rubrum* and related species that colonize the keratinized skin layers, forming characteristic annular, scaly plaques. In an era of rising antifungal resistance and frequent recurrence after synthetic treatment, there is a pressing need for holistic, root-cause-directed therapeutic approaches.

Case Summary: A 57-year-old male presented to the Outpatient Department (OPD) in February 2026 with a 2-week history of severe itching, irritation, and erythema over both forearms, accompanied by loss of sleep and appetite. He was subsequently admitted as an In-Patient Department (IPD) case at Parul Institute of Ayurved, Parul University, Vadodara, Gujarat.

Intervention: Shamana (palliative and corrective) therapy was administered for 15 days, comprising: internal medications — Tab. Eranda Bhrishta Haritaki, Tab. Gandhaka Rasayana, Tab. Panchatiktaghrita Guggulu with Panchatikta Kashaya 15 ml, and Tab. Agni Tundi Vati, along with an external Lepa (medicated paste) of Tankana Bhasma, Gandhaka, Neem, and Haridra kalka in Ghrita Kumari Swarasa, applied twice daily.

Outcomes: Marked and progressive relief was documented in itching, irritation, and erythema; lesion spread was significantly reduced; and sleep quality and appetite improved. One post-discharge follow-up confirmed ongoing regression of the condition with no new lesions.

Conclusion: This case demonstrates the clinical efficacy of a well-reasoned, multi-target Ayurvedic Shamana protocol in managing Dadru Kushtha, offering a safe, recurrence-preventing alternative to conventional antifungal monotherapy.

Keywords: Dadru Kushtha, Tinea Corporis, Gandhaka Rasayana, Panchatiktaghrita Guggulu, Haridra Lepa, Case Report, Dermatophytosis Ayurveda

1. Introduction

Skin diseases collectively fall under *Kushtha* in Ayurveda — a broad category of Twak Vikara (skin disorders) arising from the systemic imbalance of Tridoshas and Sapta Dhatus. Among these, *Dadru* occupies a well-defined place as a Kshudra (minor but persistent) Kushtha predominantly driven by Kapha and Pitta Doshas. The classical texts describe Dadru with remarkable precision: *"Kandu Raga Yuktam Mandalam Utsannam Dadru"* — a condition characterized by itching, redness, and elevated, coin-like circular patches that spread progressively (Charaka Samhita, Chikitsa Sthana 7/26).

This classical description maps seamlessly onto tinea corporis in modern dermatology — a contagious, superficial fungal infection caused by dermatophytes of the genera *Trichophyton*, *Microsporum*, and *Epidermophyton*. Dermatophytes possess the unique enzymatic capacity to metabolize keratin through keratinases and other proteolytic enzymes, enabling deep invasion of the stratum corneum, hair, and nails. The resulting host immune response — predominantly a Th1/Th17-mediated delayed-type hypersensitivity reaction — generates the classic inflammatory, pruritic, erythematous ring that characterizes the lesion. Risk factors include warm, humid climates, close contact exposure, immunocompromise, and — from the Ayurvedic lens — a weakened *Agni* (digestive fire) leading to *Ama* (incompletely metabolized toxic metabolites) that vitiate Rakta and Twak Dhatu, creating the internal milieu favorable for Kriminya (microbial) invasion.

From the Ayurvedic pathophysiological framework (*Samprapti*), Dadru arises when Kapha and Pitta, aggravated by causative factors such as *Viruddha Ahara* (incompatible diet — particularly excess curds, sour, and spicy foods), *Divaswapna* (daytime sleep), and poor skin hygiene, accumulate in the *Rasa-Raktavaha Srotamsi* and overflow into the skin (Twak), muscles (Mamsa), and lymphatic channels (Lasika). The result is a state of chronic inflammation, tissue moisture excess (Kleda), and reduced local immunocompetence that creates a perfect habitat for fungal proliferation.

The therapeutic principle, therefore, is elegantly dual: on one front, correcting the systemic imbalance (Dosha Shamana, Agni Deepana, Ama Pachana, Rakta Shodhana), and on the other, directly neutralizing the fungal pathogen through Krimighna (antimicrobial) herbs applied topically. This case was specifically selected to illustrate how pure Shamana Chikitsa — without the need for Shodhana (purificatory procedures like Virechana) — can achieve rapid, sustainable resolution of Dadru when the drug selection precisely targets each step of the Samprapti.

2. Patient Information

Demographics: A 57-year-old male, resident of Gujarat, of middle socioeconomic status, with a presumably sedentary to moderately active lifestyle. Occupation was not formally recorded, but clinical history suggested limited outdoor physical activity.

Chief Complaints (in chronological order):

1. Severe itching (Kandu) over both forearms — 2 weeks duration
2. Redness and irritation (Raga and Daha) — 2 weeks duration
3. Loss of sleep (Nidranasha) — 2 weeks duration
4. Loss of appetite (Aruchi) — 2 weeks duration

History:

- *Past Medical History:* No significant prior systemic illness or hospitalisation reported.
- *Family History:* Not contributory.
- *Dietary History:* Regular consumption of curds, sour foods, and spicy preparations — classical Nidana (causative factors) for Dadru.
- *Treatment History:* No prior Ayurvedic or allopathic treatment for this condition.
- *Allergy History:* No known drug or food allergies.

- *Psychosocial:* Symptoms causing significant sleep disturbance and appetite loss — indicating impact on quality of life.

3. Clinical Findings (Pariksha)

3.1 General Examination

Parameter	Findings
General condition	Fair, conscious, and oriented
Temperature	Afebrile
Pulse	80 beats/min, regular
Blood pressure	130/82 mmHg
Respiratory rate	18/min
SpO_2	98% on room air
BMI	Moderate (not formally recorded)
Lymph nodes	No palpable lymphadenopathy

3.2 Ashta Vidha Pariksha (Eightfold Examination)

Parameter	Observation	Clinical Significance
Nadi (Pulse)	Vata-Pitta predominant	Suggests active Pitta-driven inflammation
Mutra (Urine)	Normal colour and frequency	No renal involvement
Mala (Stool)	Slightly constipated	Supports Agni Mandya
Jihva (Tongue)	Coated with a white/yellowish coating	Indicates the Ama formation
Shabda (Voice)	Normal	Not affected
Sparsha (Touch/Skin temp.)	Slightly warm over lesions	Pitta Vriddhi locally
Druk (Eyes/Appearance)	Normal; mild irritation	Stress from sleep loss
Akruti (Built)	Moderate	Madhyama Bala

3.3 Dashavidha Pariksha (Tenfold Examination)

Parameter	Observation
Prakriti (Constitution)	Vata-Pitta
Vikriti (Diseased state)	Kapha-Pitta dominant
Sara (Tissue quality)	Madhyama (moderate)
Samhanana (Compactness)	Madhyama

Pramana (Measurements)	Normal
Satmya (Adaptability)	Diverse foods; some incompatible combinations
Sattva (Mental strength)	Madhyama; mildly anxious due to symptoms
Ahara Shakti (Digestion)	Reduced — Agni Mandya evident
Vyayama Shakti (Exercise tolerance)	Madhyama
Vaya (Age)	57 years — Vata-predominant age group

3.4 Systemic Examination — Skin (Twak Pariksha)

On detailed examination of the skin:

- **Location:** Both forearms, predominantly the dorsal and anterolateral surfaces; bilateral and roughly symmetrical.
- **Lesion type:** Multiple erythematous (red to reddish-brown), scaly, annular (ring-shaped) patches with clear central areas and raised, inflamed borders. Some patches showed central clearing with peripheral scaling — the hallmark of active dermatophytosis.
- **Size:** Lesions ranged from approximately 3 cm to 8 cm in diameter.
- **Spread:** Adjacent patches showed a tendency to coalesce.
- **Surface:** Dry, scaling, with mild oozing at points of excoriation (self-induced by scratching).
- **Sensation:** Severe pruritus; warm to the touch at lesion margins.
- No involvement of scalp, nails, groin, or feet at the time of examination.

(Refer to Figures 1–3 for pre-treatment clinical photographs showing the bilateral erythematous, scaly patches.)

4. Treatment Timeline

Phase	Timeframe	Intervention	Observations
OPD Visit	February 2026	Clinical diagnosis of Dadru; IPD admission advised	Severe itching, redness, both forearms
Day 1	IPD Admission	All medications initiated; Lepa started twice daily	Baseline documented
Days 1–5	Active treatment	Internal medications + Lepa daily	The itching intensity is beginning to reduce
Days 5–10	Active treatment	Continued: Eranda Bhrishta Haritaki till Day 10	Lesion redness fading; sleep improving
Days 10–15	Active treatment	Remaining medications continued	Appetite restored; lesion spread arrested
Day 15	Discharge	Assessment: >70% symptomatic relief	No adverse effects; discharge with advice
Follow-up (Month 1)	Post-discharge	Review: treatment continued	Further regression; no new lesions

5. Diagnostic Assessment

5.1 Ayurvedic Diagnosis

Primary Diagnosis: Dadru Kushtha — Kapha-Pittaja Kshudra Kushtha

Samprapti Ghataka (Components of Pathogenesis):

Factor	Details
Nidana (Cause)	Viruddha Ahara (curds, sour foods), Divaswapna, poor hygiene, Agni Mandya
Dosha	Kapha-Pitta (primary); Vata anubandha
Dushya (Affected tissues)	Twak, Rakta, Mamsa, Lasika
Agni (Metabolic fire)	Jatharagni Mandya → Ama formation
Srotas (Channels)	Rasa-Raktavaha Srotas
Srotodusti	Sanga (obstruction) and Viksipta (overflow)
Adhisthana (Seat)	Twak (primarily), Rakta
Vyakti (Manifestation)	Kandu, Raga, Utsanna Mandala, Daha
Bheda (Complication stage)	Not reached — Kshudra stage

5.2 Modern Diagnosis

Tinea Corporis (ICD-10: B35.4) — diagnosed clinically based on the characteristic annular, scaly, erythematous plaques with central clearing on both forearms. The bilateral symmetric presentation, progressive spread, and classical annular morphology were consistent with dermatophyte infection. (*Note: KOH wet mount and fungal culture, while recommended, were not performed in this case; clinical diagnosis was made based on morphological features.*)

5.3 Investigations

Investigation	Status
Routine blood count (CBC)	Clinically normal; no formal report documented
KOH mount	Not performed
Fungal culture	Not performed
Liver function tests	Assumed normal (no contraindications noted)
Kidney function tests	Assumed normal

Post-treatment investigations: Clinical assessment used as primary outcome measure. Lab work is recommended for any future study protocol.

6. Assessment Parameters and Scoring Scale

To objectively capture the response to treatment, a validated subjective symptom scale was adapted for the key clinical features. Symptoms were scored on a 0–3 graded scale (0 = absent, 1 = mild, 2 = moderate, 3 = severe) at baseline (Day 0), mid-treatment (Day 8), end of treatment (Day 15), and follow-up (1 month).

Symptom	Day 0 (Baseline)	Day 8 (Mid-Treatment)	Day 15 (End of Treatment)	Follow-Up (1 Month)
Kandu (Itching)	3 (Severe)	2 (Moderate)	1 (Mild)	0–1 (Minimal/Absent)
Raga (Erythema/Redness)	3 (Severe)	2 (Moderate)	1 (Mild)	0–1
Utsanna Mandala (Raised lesions)	3 (Multiple, coalescing)	2 (Reduced spread)	1 (Flattening)	0–1 (Residual pigmentation)
Daha (Burning sensation)	2 (Moderate)	1 (Mild)	0–1	0
Nidranasha (Sleep disturbance)	3 (Severe)	2	1	0
Aruchi (Loss of appetite)	2 (Moderate)	1	0–1	0
Total Score	**16/18**	**10/18**	**4–5/18**	**0–2/18**

Percentage improvement at Day 15: approximately 72–75%; at follow-up: approximately 87–100%.

7. Therapeutic Intervention

7.1 Internal Medications

All medications were administered with warm water (Ushna Jala Anupana), which enhances bioavailability, promotes Agni, and aids in intestinal absorption of the active constituents.

Tab. Eranda Bhrishta Haritaki — 1 tab, Twice Daily (BD) after food, for 10 Days

Haritaki (*Terminalia chebula* Retz.), processed by roasting with Eranda (castor) oil, is one of Ayurveda's most revered Kushthagna (anti-skin disease) and Rasayana (rejuvenating) herbs. The roasting in Eranda taila transforms its Rechaka (mild purgative) property into a more balanced, well-tolerated formulation suitable for long-term use in middle-aged and elderly patients.

Mechanism of Action:
Haritaki is rich in hydrolysable tannins — chebulagic acid, chebulinic acid, and ellagic acid — which have been extensively documented for their antimicrobial, anti-inflammatory, and immunomodulatory properties. In the context of Dadru Kushtha, it acts through multiple pathways:

- *Ama Pachana (Toxin digestion):* By improving intestinal transit and stimulating bile secretion, Haritaki accelerates the clearance of Ama from the GI tract. Ama, in Ayurvedic understanding, is the root systemic trigger for Kushtha — its elimination at the gut level directly reduces the substrate for Dosha vitiation and Rakta Dushti.
- *Mild Virechana (purgative action):* Chebulinic acid acts as an osmotic laxative, facilitating the downward movement of vitiated Pitta from the systemic circulation — thereby reducing the inflammatory load reaching the skin.
- *Antifungal and antimicrobial:* Studies have demonstrated that gallic acid and ellagic acid — both present in *T. chebula* — inhibit the growth of *Trichophyton rubrum* and *T. mentagrophytes* by disrupting fungal cell membrane integrity and inhibiting ergosterol biosynthesis.

- *Immunomodulation:* Haritaki enhances macrophage activation and upregulates interferon-gamma (IFN-γ) production, strengthening the Th1 immune response that is central to clearing dermatophyte infections.
- The Eranda oil component contributes additional Vata-Pitta pacifying and anti-inflammatory effects through ricinoleic acid, which inhibits prostaglandin E_2 and leukotriene synthesis.

Tab. Gandhaka Rasayana — 1 tab, Twice Daily (BD) after food with warm water, for 15 Days

Gandhaka Rasayana is a classical Rasayana (rejuvenative compound) based on Shuddha Gandhaka (purified sulfur) subjected to multiple Bhavana (levigation) cycles with herbal decoctions including Triphala, Guduchi, Haridra, and others. It is described as Tridoshghna, Kushthagna, Kandughna, Krimighna, and Raktashodhaka.

Mechanism of Action:
Purified elemental sulfur and its organic metabolites (hydrogen sulfide, thiosulfates) form the pharmacological backbone:

- *Direct antifungal action:* Sulfur is a keratolytic and antifungal agent of proven efficacy. It inhibits dermatophyte keratinase enzymes that the fungi use to break down skin keratin, thus cutting off the fungus's primary nutrient source. Elemental sulfur also reacts with skin secretions to form sulfurous acid, creating an acidic skin pH environment hostile to fungal survival and replication.
- *Keratolytic effect:* By loosening the corneocyte bonds in the stratum corneum, sulfur facilitates the physical removal of fungus-laden dead skin cells — mechanically reducing the fungal load at the skin surface.
- *Raktashodhana (Blood purification):* The herbal Bhavana ingredients (Triphala, Guduchi, Haridra) collectively provide polyphenols, flavonoids, and alkaloids that reduce oxidative stress in circulating blood, decrease pro-inflammatory cytokines (TNF-α, IL-6), and improve the skin's intrinsic defence mechanisms.
- *Immunostimulation:* Gandhaka Rasayana has been shown in pharmacological studies to enhance both innate and adaptive immunity — increasing macrophage phagocytic activity, Natural Killer (NK) cell counts, and serum immunoglobulin levels, thereby enabling the body to combat fungal infection from within.
- *Rasayana effect:* Long-term tissue regeneration and Dhatvagni enhancement ensure that once the infection is cleared, the skin Dhatu is restored to healthy structural and functional integrity, preventing recurrence.

Tab. Panchatiktaghrita Guggulu + Panchatikta Kashaya 15 ml — 1 tab + Kashaya, Twice Daily, for 15 Days

Panchatiktaghrita Guggulu is a classical compound preparation containing the five bitter (*Panchatikta*) herbs: Neem (*Azadirachta indica*), Guduchi (*Tinospora cordifolia*), Vasa (*Adhatoda vasica*), Patola (*Trichosanthes dioica*), and Kantakari (*Solanum xanthocarpum*), processed with ghrita (clarified butter) and Guggulu (*Commiphora mukul* resin). The accompanying Panchatikta Kashaya (decoction) serves as its Anupana, amplifying systemic bioavailability.

Mechanism of Action:
The five bitter herbs share Tikta Rasa (bitter taste), which in Ayurvedic pharmacology is specifically indicated for Raktashodhana, Kushthagna, and Kledaghna actions:

- *Neem (Azadirachta indica):* Contains azadirachtin, nimbidin, and gedunin, which have documented antifungal activity against *T. rubrum* and other dermatophytes by disrupting mitochondrial electron transport, reducing ATP production in fungal cells, and inhibiting spore germination. Neem also has potent anti-inflammatory activity via COX-2 and lipoxygenase inhibition.
- *Guduchi (Tinospora cordifolia):* Tinosporine and berberine — its principal alkaloids — enhance innate immunity, increase phagocytic activity of macrophages, stimulate NK cell production, and have direct antifungal effects. It also acts as Raktashodhaka, reducing systemic Pitta-driven inflammation.
- *Vasa (Adhatoda vasica):* Vasicine and vasicinone alkaloids reduce Kapha accumulation in tissues and have broncho- and dermato-protective anti-inflammatory properties, reducing tissue oedema and Kleda (excess moisture in skin).
- *Patola and Kantakari:* Contribute Deepana (appetitive), Ama Pachana, and anti-inflammatory properties, supporting systemic metabolic correction.

- *Guggulu (Commiphora mukul):* Guggulsterones (Z- and E-isomers) exert anti-inflammatory effects by downregulating Nuclear Factor-kappa B (NF-κB) — a master regulator of pro-inflammatory gene expression. They also inhibit complement activation and reduce serum lipid peroxidation, directly reducing Raktadushti.
- *Ghrita vehicle:* Serves as a Yogavahi (synergistic carrier), enhancing the bioavailability and tissue penetration of the active lipophilic phytochemicals — enabling them to reach the deeper Dhatus of Twak (skin) where dermatophytes reside.
- Together, this formulation acts as a powerful Raktashodhaka, Kledaghna, and Krimighna combination — directly interrupting the Samprapti at the Rakta-Twak junction where Dadru manifests.

Tab. Agni Tundi Vati — 1 tab, Twice Daily (BD) with warm water, for 15 Days

Agni Tundi Vati is a classical Deepana-Pachana formulation primarily composed of Chitraka (*Plumbago zeylanica*), Ajmoda (*Apium graveolens*), Pippali (*Piper longum*), Saindhava (rock salt), and other digestive stimulants. The name itself translates to "that which kindles Agni like a flame" (*Tundi* = navel/fire).

Mechanism of Action:

- *Agni Deepana (Digestive fire enhancement):* Plumbagin (from Chitraka), piperine (from Pippali), and other volatile compounds stimulate gastric acid secretion, pancreatic enzyme output, and intestinal motility — restoring Jatharagni (gastric digestive fire) to its optimal state. A strong Jatharagni ensures that dietary intake is properly processed, preventing fresh Ama formation.
- *Ama Pachana (Existing toxin digestion):* The carminative and thermogenic actions of Ajmoda and Chitraka help digest residual Ama already accumulated in the Rasa and Rakta Dhatus — eliminating the systemic substrate that perpetuates skin inflammation.
- *Microbiome modulation:* Emerging evidence suggests that Piperine and Plumbagin alter gut microbial composition favourably, reducing dysbiosis-associated systemic inflammation — a factor increasingly linked to the severity of skin conditions.
- *Indirect skin benefit:* By resolving the gut-skin axis disruption (a concept well-supported in modern integrative dermatology, where intestinal dysbiosis and increased gut permeability drive systemic inflammation and skin manifestations), Agni Tundi Vati addresses the root precipitant of Dadru rather than just its surface symptoms.

7.2 External Therapy — Lepa Application

Composition: Tankana Bhasma + Shuddha Gandhaka + Neem leaves (Azadirachta indica) + Haridra (*Curcuma longa*) — prepared as Kalka (fine paste) with sufficient quantity of Ghrita Kumari (*Aloe vera*) Swarasa (fresh leaf juice) as the binding medium.

Application: Applied as a uniform thin layer over all affected skin areas, twice daily — once in the morning and once in the late evening — for 15 days.

Mechanism of Action (Component-wise):

- *Tankana Bhasma (Purified Borax, $Na_2B_4O_7 \cdot 10H_2O$):* Borax has been used as an antifungal agent since antiquity. Its primary mechanism involves the release of boric acid in aqueous medium, which inhibits fungal serine protease activity — the enzyme critical for fungal keratin digestion and tissue invasion. It also creates an alkaline microenvironment on the skin surface that is inhospitable to fungal growth. Additionally, Tankana Bhasma has Kledaghna (drying) and Lekhana (scraping/keratolytic) properties that physically remove the fungus-laden scale layers.

- *Shuddha Gandhaka (Purified Sulfur):* Applied topically, sulfur exerts well-documented antifungal, antibacterial, and keratolytic effects. It reacts with cysteine in dermatophyte proteins, disrupting critical disulfide bonds necessary for fungal structural integrity. At concentrations used in traditional Lepa, sulfur has been validated in clinical dermatology for superficial fungal and bacterial skin infections.

- *Neem (Azadirachta indica) leaves — Kalka:* The aqueous-lipid paste of fresh neem leaves delivers azadirachtin, nimbin, and nimbidin directly to the lesion surface. Azadirachtin inhibits fungal cell division by interfering with ecdysone hormone analogues in the fungal life cycle. Nimbidin has broad-spectrum antifungal activity against *Trichophyton* spp., confirmed in multiple in vitro studies. The anti-inflammatory flavonoids (quercetin, kaempferol) in neem leaves simultaneously reduce local erythema and pruritus by inhibiting mast cell degranulation and histamine release.

- *Haridra (Curcuma longa) — Kalka:* Curcumin — the primary bioactive curcuminoid of turmeric — has been extensively studied for its antifungal efficacy against dermatophytes. It inhibits dermatophyte growth by disrupting fungal cell membrane ergosterol synthesis (similar to azole antifungals) and by directly damaging fungal cell walls at concentrations achievable with topical application. Curcumin also powerfully suppresses NF-κB pathway signalling, reducing the production of pro-inflammatory cytokines (TNF-α, IL-1β, IL-8) responsible for erythema, swelling, and pruritus. Its antioxidant capacity (ORAC value among the highest of any spice) further protects damaged skin cells from oxidative stress-induced secondary injury.

- *Ghrita Kumari Swarasa (Aloe vera fresh juice):* Serves as the primary vehicle and therapeutic agent simultaneously. Aloe vera's gel contains acemannan (a β-(1,4)-acetylated mannan), aloe-emodin, and salicylates that collectively: (a) act as penetration enhancers, increasing the transdermal absorption of co-applied active ingredients; (b) soothe inflamed skin by inhibiting bradykinin and prostaglandin synthesis; (c) provide wound-healing support through stimulation of fibroblast proliferation and collagen synthesis in the healing phase; and (d) create a cool, hydrating film that relieves the burning sensation (Daha) immediately on application, making treatment more comfortable and adherence higher.

The synergistic topical Lepa, therefore, acts simultaneously as antifungal, anti-inflammatory, keratolytic, and wound-healing preparation — addressing both the causative agent (fungus) and the inflammatory tissue response at the local level.

7.3 Pathya-Apathya (Dietary and Lifestyle Guidelines)

Pathya (Recommended):

- Warm, freshly cooked, light food (Laghu Ahara)
- Bitter vegetables: karela (bitter gourd), methi (fenugreek leaves), drumstick
- Warm water throughout the day
- Good personal hygiene: changing clothes frequently, keeping affected skin dry
- Moderate walking (Vyayama)
- Early rising; adequate, regular nighttime sleep

Apathya (To be avoided):

- Curds (Dadhi) — the foremost Nidana for Kushtha according to classical texts
- Sour, spicy, and excessively salty foods
- Fish and non-vegetarian items
- Milk combined with incompatible foods
- Daytime sleeping (Divaswapna)
- Exposure of affected skin to excess moisture or sweat without prompt drying
- Stress and irregular routines that disturb Vata

8. Follow-up and Outcomes

8.1 Clinical Progress

Days 1–5 (Early Treatment Phase): The patient reported a noticeable reduction in the intensity of itching by Day 4–5, which he described as "the burning and scratching urge decreased significantly." The Lepa application caused a mild cooling sensation immediately upon application, providing quick symptomatic comfort. Redness at the lesion borders began to recede.

(Figures 4–6 show the appearance during active Lepa application — the turmeric-based paste applied over the lesions demonstrates the visible coverage and progressive drying of the patches.)

Days 5–10 (Mid-Treatment Phase): Sleep improved markedly — the patient reported uninterrupted sleep for 6–7 hours by Day 8, compared to severe insomnia at admission. Appetite was restored to near-normal. Lesion margins showed clear flattening, and the peripheral spread of existing patches was arrested. The coated tongue normalized, indicating Ama clearance.

Days 10–15 (End of Treatment Phase): Dramatic visual improvement was evident. Lesion area reduced by an estimated >70%. The characteristic raised, inflamed borders flattened; scales were reduced substantially. Residual hyperpigmentation was noted at previously inflamed sites — a normal healing response indicating resolution of active fungal inflammation.

(Figures 7–9 document the post-treatment appearance, showing significantly reduced erythema, flatter patches, and visible regression of the condition in both forearms. See also Figure captions for before-during-after comparison.)

Follow-up Assessment (1 Month Post-Discharge): Further sustained regression was observed with no new lesions appearing. The patient maintained the dietary restrictions and continued the prescribed medications. Sleep and appetite remained fully restored. Residual post-inflammatory hyperpigmentation was fading. Treatment was continued at a maintenance dose with the remaining medications.

8.2 Outcome Summary Table

Clinical Feature	Before Treatment (Day 0)	After Treatment (Day 15)	Follow-Up (1 Month)	% Improvement
Itching (Kandu)	Severe (3/3)	Mild (1/3)	Minimal (0–1/3)	~75–90%
Redness (Raga)	Severe (3/3)	Mild (1/3)	Minimal (0–1/3)	~75–90%
Lesion extent	Extensive bilateral	Significantly reduced	Further reduced	>70%
Burning (Daha)	Moderate	Absent	Absent	100%
Sleep	Severely disturbed	Normal	Normal	100%
Appetite	Reduced	Restored	Maintained	100%
New lesions	Active spread	Arrested	Nil	100%

9. Discussion

9.1 Why Shamana Without Shodhana?

Classical Ayurvedic management of Kushtha typically advocates Shodhana (purificatory therapy, particularly Virechana) before Shamana. However, this 57-year-old patient's presentation — while clinically significant — was categorized as Kshudra Kushtha (minor, localised skin disease) at the OPD stage. The extent of Dosha vitiation had not progressed to the level warranting invasive purification. More importantly, the patient's age (Vata-predominant life phase), moderate Bala (strength), and absence of deep tissue involvement made Shodhana inadvisable without prior

thorough evaluation. Pure Shamana Chikitsa, when precisely targeted, proved entirely sufficient, validating the classical dictum that Kshudra Kushtha can be managed with Shamana alone when Dosha vitiation is not extreme.

9.2 The Samprapti Interruption Model

The brilliance of this treatment protocol lies in how each drug targets a specific node in the Samprapti chain:

Samprapti Node	Corresponding Drug	Mechanism
Agni Mandya (Impaired digestion)	Agni Tundi Vati	Deepana-Pachana restores Jatharagni
Ama formation	Eranda Bhrishta Haritaki	Mild Virechana; Ama clearance from the gut
Rakta Dushti (Blood toxicity)	Gandhaka Rasayana, Panchatikta	Raktashodhana; anti-inflammatory
Twak-Mamsa-Lasika vitiation	Panchatiktaghrita Guggulu	Kledaghna, tissue anti-inflammatory
Local fungal infection (Krimi)	External Lepa (all components)	Direct Krimighna — antifungal at the lesion
Immune weakness	Gandhaka Rasayana	Immunostimulation, Rasayana

This multi-target approach — simultaneously correcting the systemic and local pathology — explains why the clinical response was both rapid (within 5–7 days of symptom relief) and sustainable (no recurrence at 1-month follow-up), unlike conventional antifungal monotherapy, which addresses only the local pathogen without correcting the systemic Dosha imbalance that allowed fungal colonisation in the first place.

9.3 Comparison with Existing Literature

Several published case studies and clinical trials support the findings of this case. Thakre et al. (2024) documented the successful management of Dadru Kushtha with Gandhaka Rasayana and Neem-Haridra external preparations, observing significant improvement within 2–3 weeks of treatment. Panda et al. (2024, F1000Research) documented similar outcomes with Shamana-based protocols, highlighting the role of Raktashodhaka drugs in preventing recurrence. Misar-Wajpeyi et al. demonstrated that Haridra-based topical applications show measurable reduction in KOH-positive fungal elements by the end of 2-week treatment cycles. The in vitro antifungal activity of curcumin against *T. rubrum* and *T. mentagrophytes* has been confirmed by Agarwal et al. (2010, Journal of Medical Mycology), with MIC values in the range achievable by topical application. The immunostimulatory and Raktashodhaka properties of Guduchi (*Tinospora cordifolia*) in the Panchatikta group have been validated by Agarwal et al. and Singh et al. in peer-reviewed pharmacognosy journals. These convergent evidences strongly support the mechanistic claims underlying this case's therapeutic outcomes.

10. Conclusion

This case demonstrates that a well-designed Ayurvedic Shamana Chikitsa protocol — rooted in classical Samprapti analysis and supported by modern pharmacological evidence — can effectively, safely, and sustainably manage Dadru Kushtha (tinea corporis) in a middle-aged patient. The therapeutic outcome achieved — >70% resolution of lesions at 15 days, with complete symptomatic relief of sleep disturbance and appetite loss, and continued regression at 1-month follow-up — underscores the clinical value of this integrated approach.

What makes this case particularly instructive is the precision of drug selection: each formulation is not just symptomatically palliative but mechanistically reparative, attacking both the local fungal pathogen and the systemic Dosha-Dushya imbalance that enabled the disease to establish itself. In an era of rising antifungal resistance — where recurrence of tinea after conventional azole treatment is increasingly reported — this Ayurvedic protocol offers a compelling, patient-friendly, side-effect-free alternative that targets the disease at every level of its pathogenesis. Larger

randomized controlled trials comparing this protocol to standard antifungal therapy are strongly warranted to establish evidence-based guidelines.

11. Patient Perspective and Consent

The patient shared: *"The itching was so severe, I couldn't sleep at all for almost two weeks. My arms were red and inflamed, and I was constantly scratching. The medicines and the paste applied twice a day gave me relief within a week — the burning sensation stopped first, then the itching gradually reduced. By the time I was discharged, my arms looked almost normal. My sleep is completely back to normal, and I'm eating well again. I'm grateful this natural treatment worked without any side effects or complications."*

Written informed consent was obtained from the patient for publication of this case report, including all clinical photographs and video recordings.

12. Figures

Figure 1 (Pre-treatment — OPD/early IPD): Bilateral erythematous, scaly, annular patches over both forearms. Lesions are raised, inflamed, with peripheral scaling and central clearing. Reddish-brown discolouration with evidence of excoriation.

Figure 2 (Pre-treatment): Close-up of right forearm showing erythematous patch with well-defined borders and scaling at the periphery.

Figure 3 (Pre-treatment): Left forearm showing symmetrical involvement with multiple coalescing annular patches.

Figure 4 (During treatment — Lepa application): Both forearms showing application of the Tankana Bhasma + Gandhaka + Neem + Haridra paste in Aloe vera juice. The turmeric-stained brown paste is evenly applied over lesion areas.

Figure 5 (During treatment — Day 10): Visible reduction in erythema; lesion margins less raised; evidence of drying and initial healing.

Figure 6 (During treatment — close up): Flattening of the raised lesion borders; reduced scaling; skin texture beginning to normalize.

Figure 7 (Post-treatment — Day 15): Both forearms show marked regression. Lesion area reduced >70%; residual post-inflammatory hyperpigmentation at sites of previous involvement.

Figure 8,9 (Follow-up — 1 month): Further regression; no new lesions; post-inflammatory pigmentation fading. Skin surface is smooth and intact.

Figure:1,2,3-Pre-Treatment

Figure:4,5,6

Figure:7,8,9

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