

A Comprehensive Review on Ayurvedic Management of Dadru with Special Reference to Tinea Corporis

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Abstract: Dadru is a common Kshudra Kushtha described in Ayurveda, predominantly involving the vitiation of Kapha and Pitta Dosha. It is characterized by Kandu (itching), Raga (erythema), Pidaka (papules), and Mandala (circular lesions), closely resembling the clinical features of Tinea corporis, a superficial dermatophytic infection caused mainly by species of *Trichophyton*, *Microsporum*, and *Epidermophyton*. Although topical and systemic antifungal agents are widely used, recurrent infections, emerging antifungal resistance, adverse effects, and poor patient adherence remain important therapeutic challenges.

The present review critically analyzes the Ayurvedic concept of Dadru and correlates it with Tinea corporis by integrating classical Ayurvedic principles with contemporary scientific evidence. Classical Ayurvedic texts, including Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Madhava Nidana, and Bhaishajya Ratnavali, were reviewed along with relevant literature from PubMed, Scopus, Google Scholar, and other peer-reviewed databases. Information on etiology, pathogenesis, clinical features, diagnosis, pharmacological activities of medicinal plants, and therapeutic interventions was critically synthesized.

The review demonstrates a close correlation between the clinical presentation and pathophysiology of Dadru and Tinea corporis. Ayurvedic management emphasizes Nidana Parivarjana, Shodhana Chikitsa, Shamana Chikitsa, Bahirparimarjana Chikitsa, and appropriate Pathya-Apathya to restore Dosha balance, eliminate disease, and prevent recurrence. Numerous Ayurvedic formulations and medicinal plants possess documented antifungal, anti-inflammatory, antipruritic, antioxidant, and wound-healing properties, with several clinical studies reporting promising outcomes and minimal adverse effects. Ayurveda therefore offers a safe, holistic, and individualized approach to the management of Dadru. However, further well-designed multicenter randomized controlled trials with standardized treatment protocols are required to strengthen the evidence and support the integration of Ayurvedic interventions into evidence-based management of Tinea corporis.

Keywords: Dadru, Tinea corporis, Kshudra Kushtha, Dermatophytosis, Ayurveda, Shodhana, Shamana, Herbal Medicine.

I. INTRODUCTION

Skin disorders are among the most common health problems worldwide, affecting individuals of all age groups and significantly impairing physical comfort, psychosocial well-being, and quality of life. Among superficial fungal infections, **Tinea corporis** is a common dermatophytosis involving the glabrous skin of the trunk and extremities. It is caused predominantly by dermatophytes of the genera *Trichophyton*, *Microsporum*, and *Epidermophyton*. Clinically, it



presents with annular, erythematous, scaly lesions with central clearing and intense pruritus. Warm and humid climatic conditions, poor personal hygiene, overcrowding, immunosuppression, diabetes mellitus, prolonged corticosteroid use, and close contact with infected individuals or animals are recognized risk factors for its occurrence and recurrence.¹⁻³

The global burden of dermatophytosis has increased considerably over the past decade, particularly in tropical and subtropical countries such as India. The emergence of recurrent and chronic dermatophytosis, irrational use of topical steroid combinations, increasing antifungal resistance, and frequent relapse after conventional therapy have created significant therapeutic challenges. Although modern antifungal agents provide symptomatic relief, recurrence remains common due to persistent fungal reservoirs, inadequate treatment duration, poor compliance, and host-related predisposing factors.⁴⁻⁶ Consequently, interest has grown in complementary and traditional systems of medicine that provide holistic and sustainable management approaches.

In Ayurveda, superficial fungal skin disorders presenting with circular erythematous lesions and severe itching are correlated with Dadru, a subtype of Kshudra Kushtha. Classical texts describe Dadru as a Kapha-Pitta predominant disorder characterized by Kandu (itching), Raga (erythema), Pidaka (papules), Utsanna Mandala (elevated circular lesions), and Twak Vaivarnya (discoloration). Its etiopathogenesis involves vitiation of Doshas due to incompatible diet (Viruddha Ahara), excessive intake of heavy, unctuous, sour, and sweet foods, improper lifestyle practices, suppression of natural urges, and poor hygiene. The vitiated Doshas localize in Twak, Rakta, Mamsa, and Lasika, producing the characteristic cutaneous manifestations.⁷⁻¹¹

Ayurvedic management of Dadru emphasizes correction of the underlying Dosha imbalance through Nidana Parivarjana, Shodhana Chikitsa, Shamana Chikitsa, Bahirparimarjana Chikitsa, and appropriate Pathya-Apathya. Several medicinal plants, including *Azadirachta indica* (Nimba), *Wrightia tinctoria*, *Cassia tora* (Chakramarda), *Curcuma longa* (Haridra), and *Pongamia pinnata* (Karanja), possess documented antifungal, anti-inflammatory, antipruritic, and wound-healing properties, supporting their traditional use in dermatological disorders.¹²⁻¹⁵

Although previous reviews have discussed either the Ayurvedic concept of Dadru or the modern aspects of dermatophytosis separately, comprehensive integration of classical Ayurvedic principles with contemporary scientific evidence remains limited. Therefore, the present review aims to critically examine the Ayurvedic understanding of Dadru, correlate it with Tinea corporis, evaluate classical and contemporary therapeutic approaches, and summarize the available evidence regarding the efficacy and safety of Ayurvedic interventions. Such an integrated review may contribute to evidence-informed, patient-centered management strategies for this increasingly prevalent dermatological condition.

II. TINEA CORPORIS: MODERN PERSPECTIVE

Definition

Tinea corporis, commonly known as ringworm of the body, is a superficial fungal infection involving the glabrous (non-hairy) skin of the trunk, neck, face, and extremities. It is caused by keratinophilic fungi known as dermatophytes, primarily belonging to the genera *Trichophyton*, *Microsporum*, and *Epidermophyton*. The infection is characterized by annular erythematous plaques with an active scaly border, central clearing, and variable degrees of pruritus.¹⁶⁻¹⁸

Epidemiology

Dermatophytosis is among the most prevalent infectious skin diseases worldwide, affecting approximately 20–25% of the global population at any given time. The incidence is particularly high in tropical and subtropical countries because warm temperatures, increased humidity, excessive sweating, and overcrowded living conditions facilitate fungal growth and transmission. India has witnessed a substantial rise in chronic and recurrent dermatophytosis over the last decade, making it an important public health concern. Increasing antifungal resistance and irrational use of topical corticosteroid–antifungal combinations have further complicated disease management.¹⁷⁻²⁰



Etiology and Risk Factors

The causative organisms of Tinea corporis include *Trichophyton rubrum*, *Trichophyton mentagrophytes* complex, *Microsporum canis*, and *Epidermophyton floccosum*, with *T. rubrum* being the predominant pathogen worldwide. Infection is transmitted through direct contact with infected individuals, animals, contaminated fomites, or soil. Predisposing factors include poor personal hygiene, excessive perspiration, occlusive clothing, diabetes mellitus, obesity, malnutrition, immunosuppression, prolonged corticosteroid therapy, and humid environmental conditions. Family clustering and shared personal articles also contribute significantly to disease transmission.^{16–19}

Pathogenesis

Dermatophytes invade the keratinized layers of the epidermis by producing keratinases and other proteolytic enzymes that facilitate fungal adherence and penetration. Following colonization of the stratum corneum, fungal metabolites trigger both innate and adaptive immune responses, resulting in inflammation, erythema, scaling, and pruritus. Host immunity largely determines disease severity; therefore, immunocompromised individuals frequently develop extensive, persistent, or recurrent infections.^{16, 18}

Clinical Features

The incubation period usually ranges from one to three weeks. Patients typically present with one or more circular or polycyclic erythematous plaques exhibiting peripheral scaling, raised active margins, central clearing, and intense itching. Lesions gradually enlarge centrifugally and may coalesce to form extensive plaques. In chronic cases, topical corticosteroid misuse may produce atypical presentations (tinea incognito), masking classical clinical features and delaying diagnosis. Secondary bacterial infection, post-inflammatory hyperpigmentation, and recurrent disease may occur if treatment is inadequate.^{16–18}

Diagnosis

Diagnosis is primarily clinical and is supported by laboratory investigations when necessary. Direct microscopic examination of skin scrapings using 10–20% potassium hydroxide (KOH) preparation demonstrates septate branching hyphae and remains the most commonly employed diagnostic test. Fungal culture on Sabouraud dextrose agar serves as the gold standard for species identification, while dermoscopy, histopathological examination, and polymerase chain reaction (PCR)-based techniques are reserved for atypical, recurrent, or treatment-resistant cases.^{16–18}

Conventional Management and Its Limitations

Localized Tinea corporis is generally treated with topical antifungal agents such as azoles or allylamines, whereas extensive, recurrent, or refractory infections require systemic therapy with terbinafine, itraconazole, fluconazole, or griseofulvin. Although these agents are effective in many patients, increasing reports of antifungal resistance, particularly among *Trichophyton* species, prolonged treatment duration, adverse drug reactions, drug interactions, and frequent recurrence have emerged as significant therapeutic concerns. Inappropriate use of fixed-dose corticosteroid combinations further modifies lesion morphology, promotes fungal persistence, and contributes to chronic dermatophytosis. These challenges have stimulated interest in complementary therapeutic approaches, including Ayurveda, which emphasizes disease prevention, restoration of physiological balance, and individualized management.^{17–20}

III. AYURVEDIC CONCEPT OF DADRU**Definition and Nirukti**

The term Dadru is derived from the Sanskrit root "*Dadr*" meaning "to spread or extend over the skin." The disease is characterized by circular, elevated, erythematous lesions associated with severe itching, making it one of the commonly encountered dermatological disorders described in Ayurveda. Dadru is included under Kṣudra Kuṣṭha by Charaka,



whereas Suśruta has described it among Mahākuṣṭha, reflecting slight differences in classical classification.¹⁻⁵ Despite this variation, both authorities agree regarding its predominant involvement of Kapha and Pitta Doṣa, with participation of Twak, Rakta, Māmsa, and Lasikā.

Classical Description

Kuṣṭha comprises a broad group of dermatological disorders resulting from the simultaneous vitiation of Tridoṣa, although individual diseases demonstrate predominance of specific Doṣas. Dadru is specifically described as Kapha-Pitta-pradhāna Kuṣṭha, presenting with characteristic circular lesions, erythema, papules, scaling, and intense itching. According to **Charaka Samhita**, the cardinal features of Dadru include:

- **Kandu** (intense itching)
- **Rāga** (redness)
- **Pidakā** (papular eruptions)
- **Utsanna Maṇḍala** (elevated circular lesions)

These clinical manifestations closely resemble the characteristic lesions observed in Tinea corporis.¹

Nidana (Etiological Factors)

The etiological factors responsible for Kuṣṭha are also considered applicable to Dadru. Continuous indulgence in incompatible diet and unhealthy lifestyle leads to vitiation of Doṣas, which subsequently localize in susceptible tissues and produce cutaneous manifestations.

The important Nidana include:

Aharaja Nidana

- Excessive intake of Guru, Snigdha, Madhura, Amla, and Lavana Ahara
- Viruddha Ahara (incompatible food combinations)
- Adhyashana (overeating)
- Consumption of contaminated or improperly processed food
- Excessive intake of curd, fish, jaggery, milk preparations, and newly harvested grains

Viharaja Nidana

- Poor personal hygiene
- Excessive sweating
- Wearing damp or unclean clothes
- Daytime sleep (Divaswapna)
- Sedentary lifestyle
- Suppression of natural urges
- Excessive exposure to heat and humidity

Other Factors

- Genetic susceptibility (Beeja Dosha)
- Impaired digestive and metabolic function (Agnimandya)
- Improper seasonal regimen
- Psychological stress, which may impair immune function and predispose to recurrent infections.¹⁻⁶

Samprapti (Pathogenesis)

The pathogenesis of Dadru begins with prolonged exposure to Nidana, leading to impairment of Jatharagni and formation of Ama. The accumulated Ama vitiates predominantly Kapha and Pitta Doṣa, while Vata facilitates the



dissemination of the morbid Doṣas throughout the body. These vitiated Doṣas circulate through the Rasavaha and Raktavaha Srotas and localize in Twak (skin), Rakta (blood), Māmsa (muscle tissue), and Lasikā (lymphatic/interstitial tissue). Their interaction produces inflammation, discoloration, papule formation, itching, scaling, and progressive expansion of lesions.

From a modern perspective, this pathological sequence may be correlated with fungal colonization of the keratinized epidermis, inflammatory mediator release, epidermal hyperproliferation, and host immune response. The Ayurvedic concept emphasizes that recurrence occurs when the underlying Doṣic imbalance and causative factors remain uncorrected, highlighting the importance of comprehensive management rather than symptomatic treatment alone.¹⁻⁵

Lakshana (Clinical Features)

Classical texts consistently describe the following manifestations of Dadru:

- **Kandu** – severe itching
- **Rāga** – erythema
- **Pidakā** – papular eruptions
- **Utsanna Maṇḍala** – elevated circular plaques
- **Twak Vaivarnya** – discoloration
- **Rukshata** – dryness
- **Scaling** due to involvement of superficial skin layers
- Gradual peripheral spread of lesions

These features show remarkable similarity with the clinical presentation of dermatophytosis, particularly Tinea corporis.

Samprapti Ghataka

Component	Description
Dosha	Kapha-Pitta predominance with Vata Anubandha
Dushya	Twak, Rakta, Mamsa, Lasika
Agni	Jatharagni and Dhatvagni Mandya
Ama	Present
Srotas	Rasavaha, Raktavaha, Mamsavaha
Srotodushti	Sanga and Vimarga Gamana
Udbhava Sthana	Amashaya
Sanchara	Rasavaha and Raktavaha Srotas
Adhisthana	Twak
Vyakta Sthana	Skin of trunk and extremities
Roga Marga	Bahya Roga Marga
Nature of Disease	Kapha-Pitta dominant Kshudra Kushtha

Differential Diagnosis

Dadru should be differentiated from other Kuṣṭha and dermatological conditions such as:

- **Kitibha Kuṣṭha** (psoriasiform lesions)
- **Charmadala** (eczematous disorders)
- **Pāma** (scabies-like lesions)
- **Vipādikā** (fissured dermatoses)
- **Sidhma Kuṣṭha** (pityriasis versicolor-like condition)

Unlike these disorders, Dadru is characterized by annular erythematous lesions with intense itching and centrifugal expansion, making its correlation with Tinea corporis more appropriate.



Clinical Correlation

The predominance of Kandu, Rāga, Utsanna Maṇḍala, and Pidakā, together with the chronic relapsing nature of the disease, strongly supports the clinical correlation of Dadru with Tinea corporis. Furthermore, the Kapha-Pitta predominance described in Ayurveda corresponds well with the inflammatory and infective pathology observed in dermatophytosis. This correlation forms the basis for applying classical Ayurvedic therapeutic principles in the management of Tinea corporis.

IV. CORRELATION OF DADRU WITH TINEA CORPORIS

Correlation of diseases described in Ayurveda with modern clinical entities is based on a comprehensive assessment of etiological factors, pathogenesis, clinical manifestations, disease progression, and therapeutic principles rather than on a single symptom. Although Tinea corporis is not explicitly described in modern microbiological terms in the classical Ayurvedic texts, the clinical presentation of Dadru closely resembles superficial dermatophytosis. The characteristic features of Dadru, namely Kandu (intense itching), Raga (erythema), Pidaka (papules), Utsanna Mandala (raised circular lesions), and gradual peripheral spread of lesions, correspond well with the annular erythematous plaques with active scaly margins and central clearing observed in Tinea corporis.¹⁻⁵

From an Ayurvedic perspective, Dadru is primarily a Kapha-Pitta Pradhana Kshudra Kushtha. Kapha Dosha contributes to itching, heaviness, moistness, and chronicity of the lesions, whereas Pitta Dosha is responsible for erythema, burning sensation, inflammation, and discoloration. Vata Dosha plays a subsidiary role by facilitating the spread of vitiated Doshas throughout the body. Similarly, in Tinea corporis, fungal invasion of the stratum corneum initiates an inflammatory response that manifests clinically as erythema, scaling, pruritus, and centrifugal expansion of lesions. The inflammatory response generated by the host against dermatophytes can therefore be interpreted as a functional counterpart of Kapha-Pitta vitiation described in Ayurveda.

The pathogenesis described in Ayurveda also demonstrates remarkable similarity with the modern understanding of dermatophytosis. Indulgence in incompatible dietary habits (Viruddha Ahara), excessive intake of Kapha- and Pitta-provoking foods, poor hygiene, excessive sweating, and impaired digestive function lead to Agnimandya and Ama formation. The vitiated Doshas subsequently localize in **Twak, Rakta, Mamsa, and Lasika**, producing characteristic cutaneous lesions. In modern medicine, dermatophytes colonize the keratinized layers of the epidermis using keratinolytic enzymes, resulting in localized inflammation, epidermal hyperproliferation, scaling, and pruritus. Although the explanatory models differ, both systems recognize the importance of host susceptibility and local tissue involvement in disease development and recurrence.

Recurrence is a major challenge in the management of Tinea corporis. Persistent fungal reservoirs, incomplete treatment, poor adherence, immunological factors, and environmental exposure contribute to repeated infections. Ayurveda attributes recurrence to continued exposure to Nidana, incomplete elimination of vitiated Doshas, persistence of Ama, and inadequate restoration of physiological balance. This holistic interpretation supports therapeutic strategies that combine removal of causative factors, purification therapies, internal medications, external applications, dietary regulation, and lifestyle modification to prevent relapse.

Table 1. Correlation between Dadru and Tinea Corporis

Ayurvedic Description (Dadru)	Modern Description (Tinea Corporis)
Kshudra Kushtha	Superficial dermatophytosis
Kapha-Pitta predominance	Fungal infection with inflammatory response
Kandu	Intense pruritus
Raga	Erythematous lesions
Pidaka	Papular eruptions
Utsanna Mandala	Raised annular plaques
Twak Vaivarnya	Pigmentation or discoloration
Twak, Rakta, Mamsa, Lasika involvement	Epidermis and superficial keratinized tissues



Nidana including poor hygiene, sweating, incompatible diet	Humidity, perspiration, poor hygiene, close contact, immunosuppression
Chronicity due to persistent Dosha vitiation	Chronic or recurrent dermatophytosis due to persistent fungal infection and host factors
Nidana Parivarjana	Elimination of predisposing factors
Shodhana and Shamana Chikitsa	Antifungal therapy with supportive measures
Pathya-Apathya	Hygiene, nutrition, and preventive lifestyle practices

Although the microbiological basis of *Tinea corporis* was unknown during the classical Ayurvedic period, the detailed clinical description of Dadru demonstrates substantial similarity with the disease. However, the correlation should not be considered absolute, as the Ayurvedic classification is based on Dosha-Dushya involvement and the holistic understanding of disease rather than identification of a specific microorganism. Therefore, *Tinea corporis* may be regarded as the closest modern clinical correlate of Dadru based on similarity in symptomatology, disease course, and therapeutic objectives.

The Ayurvedic approach extends beyond eradication of the causative organism and aims to restore Dosha equilibrium, improve tissue health, enhance host resistance, and prevent recurrence. This broader therapeutic perspective provides a rationale for integrating classical Ayurvedic principles with contemporary evidence-based management of *Tinea corporis*.

V. AYURVEDIC MANAGEMENT OF DADRU

Ayurveda advocates a comprehensive approach to the management of Dadru by addressing the underlying Doṣa imbalance, eliminating causative factors, purifying the body when indicated, administering appropriate internal and external medications, and promoting healthy dietary and lifestyle practices. Since Dadru is predominantly a Kapha–Pitta Pradhāna Kṣudra Kuṣṭha, treatment is directed towards pacifying Kapha and Pitta, improving Agni, eliminating Āma, purifying the affected tissues, and preventing recurrence. Classical Ayurvedic texts emphasize that successful management depends not only on medicinal therapy but also on strict adherence to Nidāna Parivarjana and Pathya.^{1–5}

5.1 Nidāna Parivarjana

Nidāna Parivarjana (avoidance of causative factors) is regarded as the first and most important principle in the treatment of all diseases. Patients should be advised to avoid incompatible dietary habits (Viruddha Āhāra), excessive consumption of sweet, sour, salty, oily, and heavy foods, curd, fermented foods, and excessive intake of milk with fish or other incompatible food combinations. Maintenance of personal hygiene, keeping the skin dry, avoiding sharing towels or clothing, regular washing of clothes, and minimizing excessive sweating are equally important in preventing recurrence.

Lifestyle modifications such as regular exercise, adequate sleep, stress reduction, and maintaining normal body weight improve immune competence and may reduce susceptibility to recurrent dermatophytosis.

5.2 Śodhana Chikitsā

Śodhana therapy is recommended in suitable patients, particularly in chronic, recurrent, or extensive Dadru where Doṣa accumulation is significant. Biopurification aims to eliminate vitiated Doṣas from the body, thereby reducing disease recurrence and enhancing the efficacy of subsequent Śamana therapy.

Vamana

Since Kapha is the predominant Doṣa in Dadru, Vamana Karma is considered the principal purification therapy. It expels accumulated Kapha from its primary site and helps relieve itching, heaviness, and chronicity. Classical texts recommend Vamana in Kapha-dominant Kuṣṭha after appropriate Snehana and Svedana.



Virechana

Because Pitta contributes to erythema, inflammation, and burning sensation, Virechana is indicated to eliminate vitiated Pitta. It purifies Rakta and Pitta, improves skin health, and may reduce inflammatory manifestations.

Raktamokṣaṇa

Where indicated, Raktamokṣaṇa (bloodletting) has been described for Kuṣṭha with predominant Rakta involvement. By eliminating vitiated blood, it is believed to reduce inflammation, discoloration, and recurrent skin lesions. However, its use should be individualized according to patient suitability and institutional practice.

5.3 Śamana Chikitsā

Following Śodhana, or as primary treatment in mild cases, Śamana Chikitsā is employed to pacify residual Doṣas and restore physiological balance. Numerous herbal and herbo-mineral formulations have been described in classical texts for the management of Kuṣṭha and Dadru.

Commonly used internal medicines include:

- **Khadirāriṣṭa**
- **Mahāmañjiṣṭhādī Kaṣāya**
- **Ārogyavardhinī Vaṭī**
- **Gandhaka Rasāyana**
- **Nimbādi Kvātha**
- **Pañcatikta Ghṛta**
- **Mahātiktaka Ghṛta**
- **Kaiśora Guggulu**
- **Nimbādi Cūrṇa**
- **Triphala Cūrṇa** (as adjuvant therapy)

Many of these formulations possess Tikta and Kaṣāya Rasa, Laghu and Rūkṣa Guṇa, and exhibit Kapha-Pitta Śāmaka, Kandughna, Kuṣṭhaghna, Krimighna, Raktaprasādana, and Rasāyana properties.

Experimental studies have demonstrated that several ingredients commonly used in these formulations possess antifungal, anti-inflammatory, antioxidant, immunomodulatory, antimicrobial, and wound-healing activities. These pharmacological effects provide scientific support for their traditional therapeutic applications.

5.4 Bahirparimarjana Chikitsā

External therapies play a crucial role in reducing fungal load, relieving itching, minimizing inflammation, and promoting healing of skin lesions.

Commonly recommended topical preparations include:

- **Chakramarda Lepa**
- **Nimba Lepa**
- **Karanja Taila**
- **Jatyadi Taila**
- **Gandhaka-based ointments**
- **Aragwadhadī preparations**
- **Wrightia tinctoria oil preparations**
- **Herbal pastes prepared using Haridra, Daruharidra, and Triphala**

Many medicinal plants used externally possess broad-spectrum antifungal activity against dermatophytes. Their phytoconstituents—including flavonoids, tannins, alkaloids, terpenoids, phenolic compounds, and essential oils—have been shown to inhibit fungal growth, reduce inflammation, suppress oxidative stress, and accelerate epidermal repair.



Table 2. Important Ayurvedic Drugs Used in Dadru

Drug	Major Ayurvedic Properties	Probable Modern Pharmacological Actions
Nimba (<i>Azadirachta indica</i>)	Kuṣṭhaghna, Kandughna, Krimighna	Antifungal, antibacterial, anti-inflammatory
Karanja (<i>Pongamia pinnata</i>)	Kapha-Vāta Sāmaka, Kuṣṭhaghna	Antifungal, antipruritic
Chakramarda (<i>Cassia tora</i>)	Kuṣṭhaghna, Kandughna	Antifungal, keratolytic
Haridrā (<i>Curcuma longa</i>)	Viṣaghna, Varnya	Anti-inflammatory, antioxidant, antimicrobial
Dāruharidrā (<i>Berberis aristata</i>)	Raktashodhaka	Antimicrobial, antifungal
Mañjiṣṭhā (<i>Rubia cordifolia</i>)	Raktaprasādana	Anti-inflammatory, antioxidant
Khadira (<i>Acacia catechu</i>)	Kuṣṭhaghna	Antimicrobial, wound healing
Gandhaka Rasāyana	Rasāyana, Kandughna	Antimicrobial, immunomodulatory

5.5 Pathya–Apathya

Dietary regulation is an essential component of Ayurvedic management.

Recommended (Pathya):

- Light and easily digestible diet
- Green leafy vegetables
- Bitter vegetables
- Old barley and wheat
- Mudga (green gram)
- Triphala
- Warm water
- Seasonal fruits
- Regular physical activity
- Daily bathing and proper skin hygiene

To Be Avoided (Apathya):

- Curd, especially at night
- Excess sweets
- Fried and oily foods
- Fermented foods
- Excessively sour and salty foods
- Heavy meat preparations
- Daytime sleep
- Excessive sweating without hygiene
- Sharing towels, clothing, or bedding
- Tight synthetic garments

5.6 Probable Mechanism of Action of Ayurvedic Management

The therapeutic effect of Ayurveda in Dadru can be explained through both classical and modern perspectives.

According to Ayurveda, treatment restores Agni, digests Āma, pacifies Kapha and Pitta Doṣa, purifies Rakta, nourishes Twak, and prevents recurrence through correction of the underlying pathological process.

From a biomedical perspective, Ayurvedic interventions may exert their effects through multiple mechanisms:

- Direct inhibition of dermatophyte growth
- Reduction of cutaneous inflammation
- Relief from itching



- Improvement of epidermal barrier function
- Antioxidant activity
- Immunomodulation
- Promotion of wound healing
- Reduction of recurrence by improving host defense mechanisms

The multimodal nature of Ayurvedic treatment distinguishes it from conventional antifungal therapy, which primarily targets fungal eradication. By combining purification procedures, herbal medicines, dietary regulation, and lifestyle modification, Ayurveda aims to achieve both symptomatic relief and long-term disease control.

VI. RECENT CLINICAL EVIDENCE

In recent years, increasing attention has been directed toward evaluating Ayurvedic interventions for the management of Dadru (Tinea corporis), particularly because of the rising prevalence of chronic and recurrent dermatophytosis, antifungal resistance, and frequent relapse following conventional therapy. Most of the available evidence consists of case reports, case series, observational studies, and a limited number of pilot and controlled clinical trials. Although these studies generally report favorable clinical outcomes, the overall quality of evidence remains moderate to low due to small sample sizes, heterogeneity of interventions, and limited long-term follow-up.¹⁶⁻²⁴

Several published case reports have demonstrated significant improvement in itching, erythema, scaling, lesion size, and recurrence following Ayurvedic treatment. A case reported by Singh et al. described successful management of recurrent Tinea corporis using a combination of internal Ayurvedic medicines, dietary regulation, and external therapy. Marked clinical improvement was observed within six weeks, and no recurrence was reported during one month of follow-up. The authors suggested that the combined effects of Dosha pacification, enhancement of digestive and metabolic function, and local antifungal activity contributed to the favorable outcome.

Similarly, Thakre et al. reported successful treatment of Dadru Kushtha using Gandhaka Rasayana, Panchatikta Ghrita, topical herbal preparations, and appropriate Pathya-Apathya. The patient experienced substantial relief in itching, erythema, and lesion size within 15 days of therapy, highlighting the potential role of Shamana Chikitsa in uncomplicated cases. However, the findings were limited by the single-patient design and lack of mycological confirmation.

Recent literature has also emphasized the usefulness of combining Shodhana and Shamana therapies in chronic or recurrent dermatophytosis. Case reports employing procedures such as Virechana, along with internal herbal formulations and topical applications, have demonstrated symptomatic improvement and reduced recurrence during follow-up. These reports support the classical Ayurvedic principle that elimination of vitiated Doshas may enhance long-term disease control, although robust comparative clinical trials are still required.

Experimental and pharmacological investigations further support the traditional use of several medicinal plants commonly prescribed in Dadru. Herbs such as Nimba (*Azadirachta indica*), Karanja (*Pongamia pinnata*), Chakramarda (*Cassia tora*), Haridra (*Curcuma longa*), Daruharidra (*Berberis aristata*), and Khadira (*Acacia catechu*) have demonstrated antifungal, anti-inflammatory, antioxidant, antimicrobial, antipruritic, and wound-healing activities in laboratory studies. These findings provide biological plausibility for their clinical use as components of multidrug Ayurvedic formulations.

Table 3. Selected Clinical Studies on Ayurvedic Management of Dadru (Tinea Corporis)

Author/Year	Study Design	Intervention	Major Findings	Limitations
Singh et al., 2021	Case report	Internal Ayurvedic medicines with external therapy	Marked improvement after 42 days; no recurrence during short follow-up	Single patient, no control group
Thakre et al., 2024	Case report	Gandhaka Rasayana, Panchatikta Ghrita, topical	Significant reduction in itching, erythema, and	Single patient; limited follow-up



		herbal pSreparations	lesions within 15 days	
2024 published case report	Case report	Classical Ayurvedic management of Dadru	Clinical recovery with improvement in symptoms and lesion characteristics	Lack of comparative evaluation
Published pilot/clinical studies	Small clinical studies	Herbal formulations, topical therapies, and Panchakarma	Improvement in symptom scores and reduced recurrence in many participants	Small sample sizes, methodological heterogeneity

Overall, the available literature suggests that Ayurvedic interventions may provide symptomatic relief, improve quality of life, and reduce recurrence in patients with Dadru/Tinea corporis. Nevertheless, the current evidence base is limited by methodological weaknesses, including inadequate randomization, lack of blinding, insufficient mycological outcome measures, and short follow-up periods. Future research should prioritize adequately powered randomized controlled trials using standardized Ayurvedic treatment protocols, validated clinical outcome measures, fungal microscopy and culture, quality-of-life assessments, and long-term follow-up to establish the efficacy and safety of Ayurvedic management more conclusively.

VII. DISCUSSION

Dadru is one of the most frequently encountered dermatological disorders described in Ayurveda and is clinically characterized by Kandu (itching), Raga (erythema), Pidaka (papules), Utsanna Mandala (raised circular lesions), and progressive spread of lesions. These classical features closely resemble the clinical presentation of Tinea corporis, a superficial dermatophyte infection of keratinized tissues. Although Ayurveda and modern medicine explain disease pathogenesis using different conceptual frameworks, both recognize the interaction between causative factors, host susceptibility, and local tissue changes in disease development.

From the Ayurvedic perspective, Dadru is predominantly a Kapha–Pitta Pradhana Kshudra Kushtha involving Twak, Rakta, Mamsa, and Lasika. Continuous exposure to incompatible diet, unhealthy lifestyle, impaired digestion (Agnimandya), and poor hygiene leads to Doṣa vitiation and Ama formation, culminating in cutaneous manifestations. In contrast, modern medicine attributes Tinea corporis to infection by dermatophytes such as *Trichophyton rubrum*, *Trichophyton mentagrophytes*, *Microsporum* species, and *Epidermophyton floccosum*. These fungi invade the stratum corneum using keratinolytic enzymes and induce inflammatory responses that manifest as erythema, scaling, pruritus, and annular lesions. Despite differences in explanatory models, both systems acknowledge the importance of environmental factors, hygiene, host immunity, and recurrence in disease progression.

One of the notable strengths of the Ayurvedic approach is its emphasis on Nidana Parivarjana, which addresses modifiable risk factors before pharmacological intervention. Recommendations such as maintaining personal hygiene, avoiding excessive sweating, wearing clean and breathable clothing, and consuming an appropriate diet parallel modern preventive strategies aimed at minimizing fungal transmission and reinfection. This convergence highlights the continuing relevance of classical preventive principles in contemporary dermatological practice.

Ayurvedic management is multimodal and individualized. Shodhana Chikitsa, particularly Vamana and Virechana, is advocated in appropriately selected patients to eliminate vitiated Doṣas, whereas Shamana Chikitsa employs herbal formulations with Kushthaghna, Kandughna, Krimighna, and Raktaprasadana properties. External therapies such as herbal pastes and medicated oils further complement systemic treatment by relieving itching, reducing inflammation, and supporting skin healing. Unlike conventional antifungal therapy, which primarily targets fungal eradication, Ayurveda aims to restore systemic balance, improve digestive and metabolic function, and enhance host resistance, thereby addressing factors that may contribute to recurrence.

Contemporary pharmacological studies provide biological plausibility for many classical Ayurvedic drugs used in Dadru. Medicinal plants such as Nimba (*Azadirachta indica*), Karanja (*Pongamia pinnata*), Chakramarda (*Cassia tora*),



Haridra (*Curcuma longa*), Daruharidra (*Berberis aristata*), and Khadira (*Acacia catechu*) have demonstrated antifungal, anti-inflammatory, antioxidant, antimicrobial, and wound-healing activities in experimental studies. These pharmacological properties support their traditional use in managing superficial fungal infections. However, it is important to recognize that laboratory efficacy does not automatically translate into clinical effectiveness, underscoring the need for rigorous clinical evaluation.

The available clinical evidence indicates encouraging outcomes with Ayurvedic management, including improvement in itching, erythema, scaling, lesion size, and recurrence. Nevertheless, the current evidence base is limited. Most published studies are case reports, case series, or small observational studies, while high-quality randomized controlled trials remain scarce. Common methodological limitations include inadequate sample size, lack of standardized treatment protocols, absence of blinding, limited use of mycological confirmation, and short follow-up durations. Consequently, although the findings are promising, they should be interpreted with appropriate scientific caution.

Future research should focus on multicenter randomized controlled trials with robust methodology, standardized diagnostic criteria, validated clinical outcome measures, fungal microscopy and culture, dermoscopic assessment where appropriate, quality-of-life evaluation, and long-term follow-up to assess recurrence. Standardization of Ayurvedic formulations, quality control of herbal medicines, pharmacovigilance, and mechanistic studies exploring immunomodulatory and antifungal effects will further strengthen the evidence base. Collaborative research integrating Ayurvedic principles with modern dermatological science may facilitate the development of comprehensive, patient-centered strategies for the management of *Tinea corporis*.

Overall, Ayurveda offers a holistic framework that combines preventive measures, purification therapies, internal medicines, external applications, dietary regulation, and lifestyle modification. Such an integrated approach has the potential to complement conventional management, particularly in recurrent or chronic dermatophytosis, while emphasizing long-term restoration of health rather than symptom suppression alone.

VIII. CONCLUSION

Dadru is a common Kapha–Pitta Pradhana Kshudra Kushtha described in Ayurveda that closely resembles *Tinea corporis* in terms of its etiology, clinical manifestations, disease progression, and therapeutic objectives. While modern medicine primarily focuses on fungal eradication using topical and systemic antifungal agents, Ayurveda adopts a holistic approach encompassing Nidana Parivarjana, Shodhana Chikitsa, Shamana Chikitsa, Bahirparimarjana Chikitsa, and appropriate Pathya–Apathya to restore Dosha equilibrium, improve tissue health, and prevent recurrence. Contemporary pharmacological studies have demonstrated that several Ayurvedic medicinal plants possess antifungal, anti-inflammatory, antioxidant, immunomodulatory, and wound-healing properties, providing scientific support for their traditional use. Available clinical evidence suggests that Ayurvedic interventions may effectively reduce itching, erythema, scaling, lesion size, and recurrence while exhibiting a favorable safety profile. However, the current evidence is predominantly based on case reports and small clinical studies, limiting the strength of recommendations. Future multicenter randomized controlled trials employing standardized Ayurvedic treatment protocols, objective mycological assessments, validated clinical outcome measures, and long-term follow-up are essential to establish robust evidence. Integrating classical Ayurvedic principles with contemporary biomedical research may facilitate the development of safe, effective, and evidence-based strategies for the comprehensive management of Dadru (*Tinea corporis*).

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