

CLINICAL EFFICACY OF AGADYOGAS IN MANAGEMENT OF KITIBHA KUSTHA: A NARRATIVE REVIEW

Dr. Mamata P. Adhao (Ganorkar)¹

¹Ph.D. (Scholar), YMT Ayurvedic Medical College, Navi Mumbai and Professor, PG Guide Department of Agadtantra evam Vidhi Vaidyak, Bhausaheb Mulak Ayurved Mahavidyalay, Nandanvan Nagpur.

*Corresponding author: Dr. Mamata P. Adhao (Ganorkar), Ph.D. (Scholar), YMT Ayurvedic Medical College, Navi Mumbai and Professor, PG Guide Department of Agadtantra evam Vidhi Vaidyak, Bhausaheb Mulak Ayurved Mahavidyalay, Nandanvan Nagpur.

Email: Not provided

Received: 15th April, 2026; Revised: 28th April, 2026; Accepted: 5th May, 2026; Available Online: 11th June, 2026

ABSTRACT

Introduction

Kitibha Kustha is a Vata-Kapha predominant Kshudra Kustha described in classical Ayurvedic texts, clinically correlated with psoriasis in contemporary dermatological practice. Psoriasis is a chronic, immune-mediated, hyper-proliferative skin disorder affecting approximately 0.44 to 2.8 per cent of the Indian population, characterised by erythematous scaly plaques, itching, and significant psychosocial morbidity. Charaka identifies Kitibha among Dooshivishajanya Vyadhis (diseases arising from cumulative toxicity), thereby establishing a direct therapeutic rationale for employing Agadyogas (anti-toxic formulations from Agada Tantra) in its management.

Methods

A narrative review was conducted by systematically searching classical Ayurvedic texts (Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Ashtanga Sangraha, Bhaishajya Ratnavali, Sharangadhara Samhita) alongside electronic databases (PubMed, Google Scholar, AYUSH Research Portal, DHARA) for published clinical, pre-clinical, and analytical studies evaluating Agadyogas in Kustha, with particular reference to Kitibha Kustha and psoriasis, up to May 2026.

Results

Six major Agadyogas—Dooshivishari Agada, Bilvadi Agada, Dasanga Agada, Sanjivani Agada, and Gandhahasthi Agada—were identified with established Vishaghna, Kushthaghna, and Raktashodhaka properties. Clinical evidence, predominantly from single-group studies and case reports, demonstrated significant reductions in Psoriasis Area and Severity Index (PASI) scores, with Dooshivishari Agada combined with Karanjabeeja Taila showing up to 84 per cent reduction in scaling and 57 per cent reduction in plaque thickness. Pre-clinical studies confirmed antimicrobial, antioxidant, and hepatoprotective activities of these formulations.

Conclusion

Agadyogas offer a pharmacologically rational and textually validated therapeutic approach for Kitibha Kustha through multi-target Dooshivisha neutralisation. Rigorously designed randomised controlled trials with adequate sample sizes and standardised PASI-based outcome measures are warranted.

Keywords: Agada Tantra; Agadyoga; Bilvadi Agada; Dooshivisha; Dooshivishari Agada; Kitibha Kustha; Kshudra Kustha; Kustha; Narrative review; PASI score; Psoriasis; Raktashodhaka; Samprapti Vighatana; Vishaghna.

How to cite this article: Adhao (Ganorkar) MP. Clinical Efficacy of Agadyogas in Management of Kitibha Kustha: A Narrative Review. *Int J Drug Deliv Technol.* 2026;16(58s):1703-1710. DOI: 10.25258/ijddt.16.58s.181

Source of support: Nil.

Conflict of interest: None

1. INTRODUCTION

Kustha (skin disease) occupies a prominent position in Ayurvedic nosology as one of the Ashtamahagada (eight formidable diseases), underscoring the severity, chronicity, and therapeutic recalcitrance that characterise dermatological disorders in the classical framework. The Ayurvedic texts classify Kustha into Mahakustha (seven major types) and Kshudra Kustha (eleven minor types), with all varieties recognised as fundamentally Tridoshaja in origin, differentiated by the relative predominance of individual Doshas in their respective pathogenesis.

Kitibha Kustha, enumerated among the Kshudra Kusthas by Charaka, Sushruta, and Vagbhata, is characterised by Shyava Varna (blackish-brown discolouration), Kina-Khara Sparsha (rough texture resembling scar tissue), Parusha (hardness), Ghana

(thickness), and Kandu (itching). These clinical features bear a striking resemblance to psoriasis, a chronic immune-mediated inflammatory dermatosis affecting approximately 0.44 to 2.8 per cent of the Indian population, characterised by well-demarcated, erythematous, silvery-scaly plaques predominantly on extensor surfaces, scalp, and nails.

A distinctive pathogenetic insight offered by Charaka is the classification of Kitibha among Dooshivishajanya Vyadhis—diseases arising from Dooshivisha (cumulative, low-potency toxicity). Dooshivisha, as conceptualised in Agada Tantra, refers to a transformed, attenuated form of Sthavara (plant-origin) or Jangama (animal-origin) Visha that fails to be eliminated from the body and lodges within Dhatus (tissue elements), particularly Rasa and Rakta, manifesting as chronic disease when favourable

conditions arise. This conceptual linkage between Dooshivisha and Kitibha Kustha provides a compelling therapeutic rationale for deploying Agadyogas—polyherbal or herbo-mineral formulations described in Agada Tantra—in the management of this condition.

Agadyogas such as Dooshivishari Agada, Bilvadi Agada (Vilvadi Gulika), Dasanga Agada, Sanjivani Agada, and Gandhahasthi Agada possess established Vishaghna (anti-toxic), Kushthaghna (anti-dermatosis), Raktashodhaka (blood-purifying), and Krimighna (antimicrobial) properties. Despite this classical rationale, clinical evidence for their use in Kitibha Kustha remains fragmented across case reports, small single-group studies, and pre-clinical investigations. The present narrative review aims to consolidate the available classical and clinical evidence for the efficacy of Agadyogas in the management of Kitibha Kustha, evaluate the pharmacological mechanisms underlying their therapeutic actions, and identify critical gaps warranting future investigation.

2. DISEASE REVIEW: KITIBHA KUSTHA AND ITS CORRELATION WITH PSORIASIS

2.1 Nidana (Aetiology)

The aetiology of Kustha in general, and Kitibha in particular, is rooted in Ahara (dietary) and Vihara (lifestyle) related transgressions. The principal Nidana factors include Viruddha Ahara (incompatible food combinations such as fish with milk, or fresh grains with curd), Guru-Snigdha-Abhishyandi Ahara (heavy, unctuous, channel-blocking foods), excessive consumption of Amla (sour), Lavana (salty), and Katu (pungent) Rasa, as well as Mithya Ahara and Vihara. Psychological Nidana including Atichinta (excessive worry), Krodha (anger), and Shoka (grief) also play contributory roles, particularly relevant given the well-documented stress-psoriasis axis in contemporary psychodermatology.

2.2 Samprapti (Pathogenesis)

The Samprapti of Kitibha Kustha involves the vitiation of all three Doshas (with Vata-Kapha predominance) consequent to Nidana Sevana, leading to Agni Vyapara Vikruti (impaired digestive-metabolic fire). The resultant Ama (undigested metabolic waste) combines with vitiated Doshas to produce Dushta Rasa Dhatu, which subsequently vitiates Rakta, Mamsa, and Kleda (Ambu). These vitiated Dushyas undergo Margavarodha (channel obstruction) at the level of Twacha (skin), producing the characteristic Kitibha lesions. Charaka's additional insight is that Dooshivisha—accumulated through environmental exposure via air, water, and food—acts as a co-pathogenetic factor, residing in Dhatus in an attenuated form and triggering Kustha manifestation when favourable conditions (Kala, Desha, seasonal, and immunological vulnerability) arise.

2.3 Modern Correlation

Psoriasis, the closest modern correlate of Kitibha Kustha, is a T-cell mediated autoimmune disorder

characterised by dysregulated keratinocyte proliferation (epidermal turnover reduced from 28 days to 3–4 days), angiogenesis, and a self-sustaining inflammatory loop involving TNF-alpha, IL-17, IL-23, and other pro-inflammatory cytokines. The global prevalence ranges from 0.1 to 3 per cent, with a significant disease burden measured in disability-adjusted life years (DALYs). The Dooshivisha concept parallels the modern understanding of cumulative environmental toxin exposure (xenobiotics, heavy metals, pesticide residues) as triggers for autoimmune dermatoses in genetically predisposed individuals.

Table 1: Comparative Description of Kitibha Kustha across Classical Texts

Feature	Charaka Samhita	Sushruta Samhita	Ashtanga Hridaya
Classification	Kshudra Kustha (11th type)	Kshudra Kustha	Kshudra Kustha
Dosha Predominance	Vata-Kapha Pradhana	Vata-Kapha Pradhana	Vata-Kapha Pradhana
Lakshana (Symptoms)	Shyava (blackish-brown), Kina-Khara Sparsha (rough like scar tissue), Parusha (hard)	Shyava Varna, Khara, Parusha, Kinakhara Sparsha, Kandu (itching)	Shyava, Khara Sparsha, Parusha, Ghana (thick), Ugra Kandu
Dushya Involved	Rasa, Rakta, Mamsa, Ambu (Kleda)	Rasa, Rakta, Mamsa, Lasika	Rasa, Rakta, Mamsa, Ambu
Dooshivisha Connection	Mentioned as Dooshivishajanya Vyadhi (Chi. 23)	Not directly mentioned	Implied through Agada Tantra principles (Ut. 35)

A.Hr. = *Ashtanga Hridaya*; *Su.Sa.* = *Sushruta Samhita*; *Chi.* = *Chikitsa Sthana*; *Ut.* = *Uttara Tantra*

3. AGADYOGAS: CONCEPTUAL FRAMEWORK AND FORMULATIONS

3.1 The Agada Tantra–Kustha Nexus

Agada Tantra, one of the Ashtanga (eight branches) of Ayurveda, primarily addresses Visha Chikitsa (toxicology and detoxification). The term 'Agada' is derived from 'Gada' (disease/poison), with the prefix 'A' denoting negation—thus, Agada signifies that which renders the body free from disease or poison. While traditionally deployed against Sthavara Visha (plant poisons), Jangama Visha

(animal venoms), and Kritrima Visha (artificial poisons), Agadyogas have been prescribed for a broad spectrum of systemic diseases, particularly those with a Dooshivisha component in their Samprapti.

The classical mandate for employing Agadyogas in Kustha derives from multiple textual sources. Charaka explicitly lists Kitibha among Dooshivishajanya Vyadhis in Chikitsa Sthana, Chapter 23. Vagbhata in Ashtanga Hridaya, Uttara Tantra, describes Dooshivishari Agada as effective not only in Sthavara and Jangama Visha but also in Garavisha and associated systemic manifestations including skin disorders. The pharmacological properties common to most Agadyogas—Vishaghna, Kushthaghna, Raktashodhaka, Deepana-Pachana—directly address the key Samprapti Ghataka of Kitibha Kustha.

3.2 Major Agadyogas Relevant to Kitibha Kustha

Five principal Agadyogas with established relevance to Kustha management were identified from classical texts and contemporary literature. Their compositions, classical sources, dosage forms, and pharmacological profiles are summarised in Table 2.

Table 2: Major Agadyogas and Their Composition Relevant to Kitibha Kustha

Agadyoga	Key Ingredients	Classical Source	Dosage Form	Rasa-Guna Profile
Dooshivishari Agada	Pippali, Jatamansi, Lodhra, Gokshura, Shankha, Shunthi, Maricha, Haridra, Daruharidra, Katuki, among others	A.Hr. Ut. 35/39-40	Gutika (Tablet)	Tikta-Katu Rasa, Laghu-Ruksha Guna, Ushna Virya
Bilvadi Agada (Vilwadi Gulika)	Bilva, Tulasi, Karanja, Haritaki, Surasa, Shigru, Nimba, Shunthi, Pippali, Maricha, Vidanga,	A.Hr. Ut. 36	Gutika (Tablet)	Katu-Tikta Rasa, Laghu-Teekshna Guna, Ushna Virya

	Devadaru			
Dasanga Agada	Shirisha, Haridra, Prishniparni, Tagara, Nalada, Chandana, Kushtha, Ela, Jatamansi, Arkamula	Su.Sa. Ka. 5; A.S. Ut. 43	Churna / Lepa	Tikta-Kashaya Rasa, Laghu Guna, Sheeta-Ushna Virya
Sanjivani Agada	Pippali, Pippali Mula, Chavya, Chitraka, Shunthi, Maricha, Hingu, Vacha, Vidanga, Gajapipali	Su.Sa. Ka. 5; Ch.Ch i. 23	Gutika / Vati	Katu-Ushna Pradhan, Deepana Pachana, Tridosahara
Gandhasthi Agada	Chandana, Tagara, Kushtha, Nalada, Priyangu, Shirisha, Twak, Yashti, Haridra	A.S. Ut. 42; A.Hr. Ut. 36	Churna / Kalka	Tikta-Madhura Rasa, Laghu Guna, Sheeta Virya

A.Hr. = Ashtanga Hridaya; Su.Sa. = Sushruta Samhita; A.S. = Ashtanga Sangraha; Ch.Chi. = Charaka Chikitsa Sthana; Ut. = Uttara Tantra; Ka. = Kalpa Sthana

3.3 Dooshivishari Agada: The Prototype

Among all Agadyogas, Dooshivishari Agada (also known as Dooshivishari Gulika) has received the most clinical and pre-clinical attention in the context of Kustha. Described in Ashtanga Hridaya Uttara Tantra 35/39-40, this herbo-mineral formulation is a polyherbal compound containing ingredients predominantly characterised by Tikta (bitter), Katu (pungent), and Kashaya (astringent) Rasa; Laghu (light) and Ruksha (dry) Guna; and Ushna Virya (hot potency). These pharmacological attributes are inherently Kapha-Vatahara, directly opposing the dominant Dosha vitiation in Kitibha Kustha. Its Vishaghna Prabhava (special anti-toxic action) further

neutralises the Dooshivisha component of the pathogenesis.

4. CLINICAL EVIDENCE

4.1 Clinical Studies with Dooshivishari Agada

The most substantive clinical evidence for Agadyogas in Kustha comes from the study by Ancheril et al. (2015), conducted at SDM College of Ayurveda, Hassan, Karnataka. In this single-group, pre-post intervention study (N=30), diagnosed cases of psoriasis were administered Karanjabeeja Taila (seed oil of *Pongamia pinnata*) for external application along with Dooshivishari Agada tablets for internal administration over a 14-day treatment period, with assessments on days 7 and 14. The primary outcome measure was the Psoriasis Area and Severity Index (PASI) score. The combination demonstrated highly significant results: 84 per cent reduction in scaling, 57 per cent reduction in plaque thickness, 20 per cent reduction in erythema, and 30 per cent reduction in the degree of involvement of lesions, with a corresponding overall reduction in total PASI score. The authors concluded that Agadyogas can be effectively employed in Kustha and other complications of Dooshivisha.

4.2 Case Reports and Case Series

Multiple case studies have documented the use of Dooshivishari Gulika as a Shamana (palliative) agent following Shodhana (purificatory) therapy in Kitibha Kustha. Dharmannavar et al. (2023) reported a 63-year-old patient with generalised Kitibha Kustha lesions treated with Vamana and Virechana followed by Dooshivishari Gulika, with marked improvement in PASI score and subjective symptoms. Berbi et al. (2022) documented successful management of Kitibha Kustha using Sneha Virechana followed by Shamana Chikitsa including Gandhaka Rasayana and Dooshivishari Gulika for Shesha Dosha Harana (elimination of residual Dosha), with significant reduction in scaling, lesion count, and pruritus over 45 days. A case study from the Ayurvedic Teaching Hospital, Borella, Sri Lanka, documented a 14-year-old female patient with two years' history of Kitibha Kustha treated with combined Shodhana-Shamana protocol, achieving marked improvement in Syava (discolouration), Kandu (itching), and Parusha (roughness) parameters.

4.3 Pre-Clinical Evidence

Pre-clinical studies have provided mechanistic support for the clinical observations. Binorkar et al. (2018) demonstrated significant in vitro antimicrobial and antifungal activity of Dooshivishari Agada using the agar-well method, with zones of inhibition ranging from 17 to 33 mm against *Escherichia coli*, *Bacillus subtilis*, *Staphylococcus aureus*, *Salmonella typhi*, *Shigella*, *Aspergillus niger*, and *Candida albicans*. Antioxidant activity, measured as ascorbic acid equivalents, was observed at 10.91 mg/g. Sreejith et al. (2015) demonstrated significant hepatoprotective activity of Dooshivishari Agada against paracetamol-induced hepatotoxicity in Wistar rats, supporting the

Raktashodhaka (blood-purifying) and hepatoprotective dimension of these formulations—a property directly relevant to psoriasis, given the established association between hepatic dysfunction and psoriatic disease severity. Bilvadi Agada has similarly demonstrated antimicrobial and antifungal activity in in vitro evaluations. Flow cytometry analysis has shown Dooshivishari Agada-induced cell cycle arrest in human T-cell acute lymphocytic leukaemia (Jurkat) cell lines, suggesting immunomodulatory potential.

Table 3: Summary of Published Clinical and Pre-Clinical Evidence for Agadyogas in Kustha

Author (Year)	Intervention	N	Duration	Assessment Tool	Key Outcome	Study Design
Ancheril et al. (2015)	Karanjabeeja Taila (ext.) + Dooshivishari Agada (int.)	30	14 days	PASI Score	Scaling: 84% reduction; Thickness: 57% reduction	Single group, pre-post
Dharmannavar et al. (2023)	Vamana + Virechana + Dooshivishari Gulika (Shamana)	1	60 days	PASI Score + Subjective criteria	Marked improvement in lesion size, itching	Single case study
Berbi et al. (2022)	Sneha Virechana + Shamana with Gandhaka Rasayana + Dooshivishari Gulika	1	45 days	PASI Score + Photographic evidence	Significant reduction in scaling, lesion count	Single case study

Sreejith et al. (2015)	Dooshivishari Agada (pre-clinical, hepatoprotective)	Animal	21 days	Liver enzymes (AST, ALT)	Significant hepatoprotection vs paracetamol toxicity	Experimental (Wistar rats)
Bino et al. (2018)	Dooshivishari Agada (in vitro antimicrobial)	In vitro	N/A	Zone of inhibition (mm)	17-33 mm ZOI; confirmed antimicrobial and antioxidant	In vitro laboratory study
Hassan et al. (2022)	Dooshivishari Agada (HPLC phytochemical profiling)	Analytical	N/A	HPLC chromatography	Identification of bioactive phytoconstituents	Analytical / Phytomic

N = sample size; *PASI* = Psoriasis Area and Severity Index; *ZOI* = Zone of Inhibition; *ext.* = external; *int.* = internal; *HPLC* = High Performance Liquid Chromatography

5. PROBABLE MECHANISM OF ACTION OF AGADYOGAS IN KITIBHA KUSTHA

The therapeutic efficacy of Agadyogas in Kitibha Kustha can be understood through both Ayurvedic pharmacological (Dravyaguna) and contemporary pharmacological frameworks. The multi-component nature of these polyherbal formulations enables simultaneous action on multiple pathogenetic targets, a concept aligning with the modern network pharmacology paradigm. The principal mechanisms are delineated in Table 4.

From the Ayurvedic standpoint, Agadyogas achieve Samprapti Vighatana (disruption of pathogenesis) at multiple levels. Their Tikta-Katu Rasa Pradhana nature counteracts the Madhura-Guru-Snigdha attributes of Kapha, while the Ushna Virya opposes the Sheeta Guna of both Kapha and Vata. The Vishaghna Prabhava specifically targets the Dooshivisha component, while Deepana-Pachana properties address the foundational Agni Mandya.

Raktashodhaka action purifies Rakta Dhatu, the primary Dushya in all Kustha variants.

From the modern pharmacological perspective, the constituent herbs of Agadyogas contain bioactive phytochemicals with demonstrated anti-inflammatory (curcumin from Haridra, piperine from Pippali and Maricha), immunomodulatory (nimbin from Nimba, karanjin from Karanja), antimicrobial, antioxidant (gallic acid, ellagic acid from Haritaki and Bilva), and hepatoprotective activities. These multi-target actions collectively address the oxidative stress, immune dysregulation, inflammatory cascade, and secondary infections that characterise the psoriatic disease process.

Table 4: Probable Mechanisms of Action of Agadyogas in Kitibha Kustha

Ayurvedic Action (Karma)	Probable Modern Mechanism	Relevance to Kitibha Kustha	Key Agadyoga(s) Exhibiting This Action
Vishaghna (Anti-toxic)	Free radical scavenging, antioxidant activity, neutralisation of cumulative toxins	Counteracts Dooshivisha lodged in Rasa-Rakta Dhatu; reduces oxidative stress in psoriatic plaques	Dooshivishari Agada, Bilvadi Agada, Dasanga Agada
Kushthaghna (Anti-dermatosis)	Anti-proliferative effect on keratinocytes, immunomodulation, TNF-alpha / IL-17 suppression	Directly targets hyper-proliferative epidermal turnover and inflammatory cascade in psoriatic skin	Dooshivishari Agada, Bilvadi Agada, Gandhasthi Agada
Raktashodhaka (Blood purification)	Hepatoprotective activity, improved hepatic clearance, reduction in circulating inflammatory mediators	Corrects Rakta Dushti and Bhrajaka Pitta imbalance; reduces	Dooshivishari Agada, Dasanga Agada

		erythema and vascular dilatation	
Krimighna / Jantughna (Antimicrobial)	Antibacterial, antifungal activity (zone of inhibition 17-33 mm); biofilm disruption	Prevents secondary infections in fissured, excoriated psoriatic lesions; addresses Krimi involvement in Kustha Samprapti	Bilvadi Agada, Dooshivishari Agada
Deepana-Pachana (Digestive - metabolic correction)	Enhancement of gut barrier integrity, correction of intestinal permeability, improved nutrient assimilation	Addresses Agni Mandya and Ama formation, the root of Kustha Samprapti per Charaka	Sanjivani Agada, Dooshivishari Agada
Tridoshahara / Kapha-Vatahara (Dosha balancing)	Multi-target pharmacological activity via synergistic phytoconstituents	Corrects the dominant Kapha-Vata vitiation underlying Kitibha Kustha pathogenesis	Dooshivishari Agada, Bilvadi Agada, Sanjivani Agada

TNF = Tumour Necrosis Factor; IL = Interleukin

6. DISCUSSION

The present narrative review establishes that Agadyogas represent a pharmacologically rational and textually grounded therapeutic approach for Kitibha Kustha. The Dooshivisha–Kitibha nexus, explicitly articulated by Charaka, provides a unique Samprapti-based justification for the use of anti-toxic formulations in a chronic dermatological condition—a therapeutic logic that has no direct parallel in conventional pharmacotherapy.

Several critical observations emerge from this review. First, Dooshivishari Agada has accumulated the most evidence, both clinical and pre-clinical, among all Agadyogas for Kustha management. The

study by Ancheril et al. (2015) demonstrated clinically meaningful PASI reductions within a short 14-day treatment window, suggesting potent initial response. However, the absence of a control arm, the small sample size (N=30), and the combined use with Karanjabeeja Taila (which itself possesses Kushthaghna properties) make it impossible to attribute efficacy solely to the Agadyoga.

Second, the predominant evidence base consists of single case reports and small case series without randomisation or blinding. While these provide valuable proof-of-concept and generate hypotheses, they do not meet the evidentiary threshold for establishing clinical efficacy. The heterogeneity in treatment protocols—variations in Shodhana procedures (Vamana versus Virechana versus both), Shamana combinations, treatment duration, and outcome measures—further complicates evidence synthesis.

Third, the pre-clinical evidence, though limited, is mechanistically encouraging. The broad-spectrum antimicrobial activity (17–33 mm zones of inhibition), antioxidant potential, hepatoprotective effects, and immunomodulatory activities of Dooshivishari Agada provide a plausible pharmacological basis for its clinical effects. The HPLC-based phytochemical profiling by Hassan et al. (2022) represents a commendable step toward standardisation.

Fourth, the therapeutic approach of combining Shodhana (particularly Virechana, which is the primary Shodhana for Kustha) with Agadyoga-based Shamana appears to be the dominant clinical paradigm. This aligns with the classical dictum that Kustha management requires repeated Shodhana for Bahudoshha Nirharana (elimination of accumulated Doshas) followed by targeted Shamana for Shesha Doshha management. The Agadyogas serve an effective role in this post-Shodhana phase by addressing the residual Dooshivisha component that Shodhana alone may not fully eliminate.

Fifth, the concept of Dooshivisha as a cumulative, environmentally-acquired, low-potency toxin that triggers chronic disease in predisposed individuals has remarkable parallels with emerging evidence on the role of xenobiotics, endocrine disruptors, heavy metals, and pesticide residues in the pathogenesis of autoimmune dermatoses including psoriasis. This conceptual convergence strengthens the translational relevance of the Agadyoga approach.

7. LIMITATIONS AND FUTURE DIRECTIONS

This review has several limitations. As a narrative review, the search strategy was not pre-registered, and the evidence synthesis is qualitative rather than quantitative. The clinical evidence base is heavily skewed toward Dooshivishari Agada, with minimal clinical data on Bilvadi Agada, Dasanga Agada, Sanjivani Agada, and Gandhahasthi Agada in the specific context of Kitibha Kustha. Publication bias, with a predominance of positive case reports, cannot be excluded.

Future research should prioritise multi-arm randomised controlled trials comparing individual Agadyogas against active controls (standard Shodhana-Shamana protocols) and conventional treatments (topical corticosteroids, methotrexate) using PASI 50, PASI 75, and PASI 90 as primary endpoints, along with Dermatology Life Quality Index (DLQI) for patient-reported outcomes. Standardisation of Agadyoga formulations through Good Manufacturing Practice (GMP) compliance, pharmacopoeial monograph development, and biomarker-based pharmacodynamic studies (serum TNF-alpha, IL-17A, IL-23, oxidative stress markers) will be essential for regulatory acceptance and mainstream integration. Network pharmacology and molecular docking studies could further elucidate the multi-target mechanisms underlying the observed clinical effects.

8. CONCLUSION

Agadyogas, particularly Dooshivishari Agada, offer a textually validated and pharmacologically rational therapeutic modality for Kitibha Kustha (psoriasis), grounded in the classical Dooshivisha-Kustha pathogenetic framework articulated by Charaka. The available clinical evidence, though limited in methodological rigour, demonstrates clinically meaningful reductions in PASI scores and subjective symptoms. Pre-clinical studies support the antimicrobial, antioxidant, hepatoprotective, and immunomodulatory mechanisms of these formulations. The integration of Agadyogas into Shodhana-Shamana treatment protocols represents a promising therapeutic strategy that merits rigorous clinical validation through adequately powered randomised controlled trials.

REFERENCES

- Acharya YT, editor. Charaka Samhita of Agnivesha with Ayurveda Dipika Commentary by Chakrapanidatta. Varanasi: Chaukhambha Surbharati Prakashan; 2011. Chikitsa Sthana, Chapter 7.
- Acharya YT, editor. Sushruta Samhita with Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukhambha Surbharati Prakashan; 2012. Nidana Sthana, Chapter 5.
- Srikanthamurthy KR, translator. Ashtanga Hridaya of Vagbhata. Vol. 3. Varanasi: Chaukhambha Krishnadas Academy; 2006. Uttara Tantra, Chapter 35, Verse 39-40.
- Srikanthamurthy KR, translator. Ashtanga Sangraha of Vagbhata. Vol. 3. Varanasi: Chaukhambha Orientalia; 2005. Uttara Tantra, Chapters 42-43 (Sarpa Visha and Keeta Visha Pratishedha).
- Shastri AD. Sushruta Samhita. Vol. 1. Varanasi: Chaukhambha Sanskrit Sansthan; 2018. Kalpa Sthana, Chapters 4-5 (Sarpa Dashta Chikitsa and Dundubhi Svaneeyam).
- Sharangadhara. Sharangadhara Samhita with Adhamalla's Dipika and Kashirama's Gudhartha Dipika Commentary. Varanasi: Chaukhambha Orientalia; 2006. Madhyama Khanda, Chapter 7 (Vati-Gutika Prakarana).
- Ancheril IJ, Kumar BA, Sailekha P, Niveditha P, Deepthi IVL. A clinical study on the efficacy of Karanjabeejaitaila along with Dooshivishari Agada in the management of psoriasis. *Global J Res Med Plants Indigen Med.* 2015;4(8):162-171.
- Binorkar SV, Jaiswal R. Pre-clinical appraisal of Dooshivishari Agada for antimicrobial, antifungal, and antioxidant activity: an in vitro trial. *J Ayurveda Integr Med.* 2018;9(1):45-49.
- Sreejith GS, Ittoop JA, Anitha MG, Ravishankar. Hepatoprotective activity of Dushivishari Agada in paracetamol induced hepatotoxicity of Wistar rats. *Int J Res Ayu Pharma.* 2015;6(5):602-608.
- Deepa P, Nataraj HR, Anushree CG, Shirwar AK. A critical review on Dooshivishari Agada: a herbo-mineral formulation. *Int J Ayurveda Pharma Res.* 2022;10(10):70-77.
- Dharmannavar GS, Akshata, Mathapati IS. A case study on Kitibha Kusta (psoriasis) with Samshodhana Chikitsa. *J Ayurveda Integr Med Sci.* 2023;8(11):206-210.
- Berbi P, et al. Ayurvedic management of Kitibha Kushta - a case study. *J Ayurveda Integr Med Sci.* 2022;7(4):158-163.
- Deepa P, Nataraj HR, Anushree CG. Flow cytometry analysis of Dooshivishari Agada-induced cell cycle arrest in human T-cell acute lymphocytic leukaemia (Jurkat) cell lines. *Int J Green Pharm.* 2022;16(2):203-207.
- Hassan PG, et al. Physicochemical and phytochemical investigation of Dooshivishari Agada by HPLC. *Int J Res Ayurveda Pharm.* 2022;13(4):52-56.
- Anushree CG, Nataraj HR, Deepa P. An in-vitro study to screen Dooshivishari Agada for its GSK3 inhibition in Alzheimer's disease. *Int J Sci Res.* 2022;11(2):57-59.
- Binorkar SV. In vitro evaluation of Bilvadi Agada (herbo-mineral compound) for anti-microbial and anti-fungal activity. *Pharm Chem J.* 2015;2(3):15-21.
- Kumar S, Swatika. Concept of antidotes vs. Prativisha in Ayurveda: a review article. *Int Ayurvedic Med J.* 2021;9(10):2554-2558.
- Prabha KU, Krishnakumar TS, Jayasmitha SJ, Ambili TS. Dasanga Agada in Keetavisha: a review. *J Ayu Int Med Sci.* 2022;7(5):75-79.
- Bhavaprakasha of Bhavamishra with Vidyotini Hindi Commentary. 11th ed. Varanasi: Chaukhambha Sanskrit Bhawan; 2012. Madhyama Khanda, Kushthadhikara.
- Pandey G. Dravyaguna Vijnana. Part 2. Varanasi: Chaukhambha Bharti Academy; 2001.
- Ayurvedic Pharmacopoeia of India. Part 1, Vol. 1. New Delhi: Ministry of Health and Family Welfare, Govt. of India; 1999.

22. Nestle FO, Kaplan DH, Barker J. Psoriasis. *N Engl J Med*. 2009;361(5):496-509.
23. Parisi R, Symmons DPM, Griffiths CEM, Ashcroft DM. Global epidemiology of psoriasis: a systematic review of incidence and prevalence. *J Invest Dermatol*. 2013;133(2):377-385.
24. Dogra S, Yadav S. Psoriasis in India: prevalence and pattern. *Indian J Dermatol Venereol Leprol*. 2010;76(6):595-601.
25. Sharma PV. *Charaka Samhita (text with English translation)*. Vol. 2. Varanasi: Chaukhambha Orientalia; 2000. Chikitsa Sthana, Chapter 23.
26. Tripathi B, editor. *Charaka Samhita with Charaka Chandrika Hindi Commentary*. Vol. 2. Varanasi: Chaukhambha Surbharati Prakashan; 2014.
27. Lochan K. *Ashtanga Hridaya of Vagbhata*. Vol. 3. Varanasi: Chaukhambha Publication; 2017. Visha Pratisedha Adhyaya, Chapter 35.
28. Govinda Das. *Bhaishajya Ratnavali with Vidyotini Hindi Commentary*. Varanasi: Chaukhambha Prakashan; 2016. Vishadhikara Chapter.
29. Patwardhan B. Bridging Ayurveda with evidence-based scientific approaches in medicine. *EPMA J*. 2014;5(1):19.
30. Zhang S, Wang J, Liu L, et al. Efficacy and safety of curcumin in psoriasis: preclinical and clinical evidence and possible mechanisms. *Front Pharmacol*. 2022;13:903160.
31. Boehncke WH, Schon MP. Psoriasis. *Lancet*. 2015;386(9997):983-994.
32. Lowes MA, Suarez-Farinas M, Krueger JG. Immunology of psoriasis. *Annu Rev Immunol*. 2014;32:227-255.
33. Gupta AK, Dhua S, Prasad P, et al. Indian traditional treatments for psoriasis: a critical appraisal of available evidence supporting efficacy. *Chin J Integr Med*. 2022;28(11):1031-1040.
34. Tsankov N, Angelova I, Kazandjieva J. Drug-induced psoriasis: recognition and management. *Am J Clin Dermatol*. 2000;1(3):159-165.