

A Critical Review Of *Dushi-Visha* In The Pathogenesis Of Chronic Eczema And Psoriasis

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Abstract

The escalating global prevalence of chronic inflammatory skin disorders, such as psoriasis and chronic eczema, has necessitated a deeper exploration into their underlying etiopathological mechanisms, beyond mere genetic and local inflammatory factors. In the profound architectural framework of Ayurvedic medicine, these conditions are frequently recalcitrant due to the presence of *Dushi-visha* a latent, cumulative toxin sequestered within the tissues, resisting conventional therapeutic interventions. This research paper provides an exhaustive critical review of the role of *Dushi-visha* in the pathogenesis of chronic eczema and psoriasis, drawing parallels between ancient toxico-pathological concepts and modern dermatological findings. By analyzing the ten classical properties of *Visha* and their attenuation into a latent state, this study elucidates how environmental pollutants, xenobiotics, and incompatible dietary patterns (*Viruddhahara*) act as modern incarnations of *Dushi-visha*. The research highlights the specific vitiation of *Rakta Dhatu* (blood tissue) and the subsequent manifestation of *Kitibha* (Psoriasis) and *Vicharchika* (Eczema). Through a detailed examination of the IL-23/IL-17 axis and Th2-mediated inflammatory pathways in conjunction with Ayurvedic *Samprapti* (pathogenesis), the paper establishes a unique integrative model. Furthermore, the therapeutic efficacy of *Shodhana* (purification) and the herbo-mineral formulation *Dushi-vishari Agada* are analyzed as targeted interventions to neutralize these deep-seated toxins. This review concludes that the management of chronic dermatoses must shift from symptomatic suppression to the fundamental elimination of cumulative toxicity.

Key words: *Dushi-visha*, *Kitibha*, *Vicharchika*, Psoriasis, Eczema, Cumulative Toxicity, IL-17/23 Axis, *Dushi-vishari Agada*, *Agadatantra*.

1. Introduction

The integumentary system represents the primary immunological barrier between the internal biological milieu and an increasingly hostile external environment. In contemporary clinical practice, the management of chronic inflammatory dermatoses like psoriasis and eczema poses a significant challenge due to their recurrent nature and the limits of current immunosuppressive therapies. Ayurveda, particularly the branch of *Agadatantra* (toxicology), offers a sophisticated paradigm for understanding these chronic conditions through the concept of *Dushi-visha*. This term refers to a poison whether of plant (*Sthavara*), animal (*Jangama*), or artificial (*Kritrima*) origin that has lost its acute lethality but remains resident in the body, progressively vitiating the tissues over a prolonged period.

The historical and mythological origins of *Visha* describe it as a substance that causes *Vishada* (despair or depression), a term that resonates with the psychological morbidity often associated with chronic skin diseases. Unlike acute poisoning, *Dushi-visha* is characterized by its *Hina-veerya* (attenuated potency), which allows it to evade the body's immediate excretory mechanisms. Acharya Sushruta, in the *Kalpa Sthana* of the *Sushruta Samhita*, provides a seminal definition that links this latent state to the enveloping action of *Kapha Dosha*, which sequesters the toxin and prevents its complete elimination.

In the modern era, the human "exposome" the totality of environmental exposures throughout a lifetime closely mirrors the Ayurvedic concept of *Dushi-visha*. Chronic exposure to sub-lethal concentrations of heavy metals, pesticides, food preservatives, and industrial pollutants leads to bio-accumulation in the tissues, triggering persistent low-grade inflammation. This review critically examines how such cumulative toxins specifically target the *Rakta Dhatu* (blood), leading to the complex pathologies of *Kitibha* (Psoriasis) and *Vicharchika* (Eczema). By weaving together classical

Sanskrit shlokas with the latest advancements in cytokine research and dermatotoxicology, this paper seeks to provide a robust theoretical and clinical foundation for the management of these intractable disorders.

2. Methodology

The research methodology for this critical review involved a systematic and exhaustive analysis of two distinct domains of knowledge: classical *Ayurvedic Samhitas* and contemporary peer-reviewed scientific literature.

The Ayurvedic component focused on the *Brihatrayee* (the three great treatises): *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya*. Within these texts, specific attention was directed toward *Agadatantra* and *Kushtha Chikitsa*. Key chapters analyzed included *Charaka Samhita Chikitsa Sthana* Chapter 23 (*Visha Chikitsa*) and Chapter 7 (*Kushtha Chikitsa*), *Sushruta Samhita Kalpa Sthana* Chapter 2 (*Dushi-visha*), and *Ashtanga Hridaya Uttara Sthana* Chapter 35. Sanskrit shlokas were extracted and translated to ensure the preservation of original insights regarding the signs, symptoms, and treatment principles of latent toxicity.

The modern scientific component involved a structured search of Scopus, PubMed, and Web of Science databases for articles published between 2015 and 2025. Search terms included "psoriasis immunology," "atopic dermatitis pathogenesis," "xenobiotic-induced skin inflammation," "IL-23/IL-17 axis," and "environmental toxins in chronic dermatoses." Studies focusing on the bio-accumulation of heavy metals, pesticides, and the role of the Aryl Hydrocarbon Receptor (AhR) in skin barrier dysfunction were prioritized.

3. Pathophysiology

The pathogenesis of chronic eczema and psoriasis, when viewed through the lens of *Dushi-visha*, reveals a multi-staged process of systemic contamination and tissue degradation.

3.1. The Ayurvedic Perspective: Corrected Samprapti of Dushi-visha

The development of disease starts with the entry or formation of a poison that is not fully expelled. This may occur after the partial treatment of an acute poisoning, or through the chronic ingestion of *Viruddhahara* (incompatible foods) and *Kritrima Visha* (artificial toxins). The authentic definition from *Sushruta Samhita Kalpa Sthana* 2/25-26 describes this latent state:

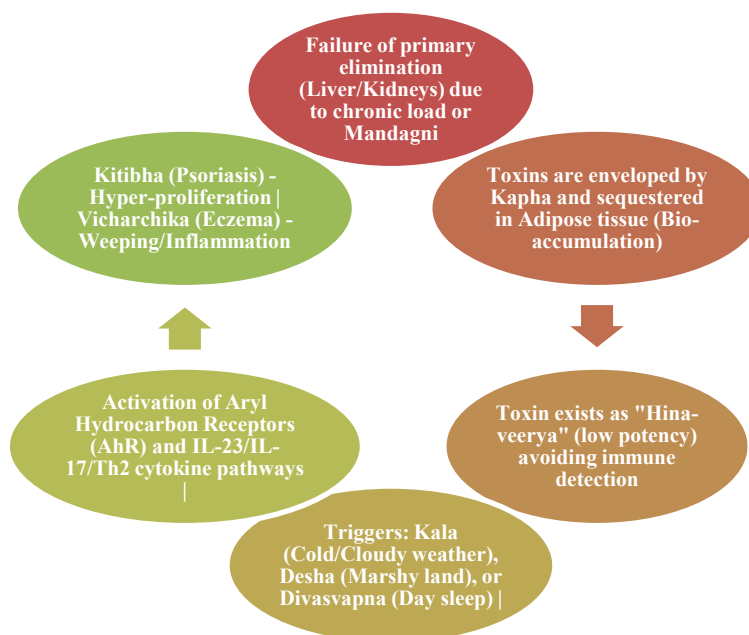
यत् स्थावरं जङ्गमकृत्रिमं वा देहादशेषं यदनिर्गतं तत् । जीर्णं विषग्नौषधिभिर्हितं वा दावाग्निवातातपशोषितं वा ।२५॥

स्वभावतो वा गुणविप्रहीनं विषं हि दूषीविषतामुपैति । वीर्याल्पभावान्न निपातयेत्तत् कफावृतं वर्षगणानुबन्धि ।२६॥

According to Acharya Sushruta, that poison (plant, animal, or artificial) which has not been completely expelled from the body, or which has become old, or partially neutralized by anti-toxic drugs, or dried by forest fire, wind, or sun, or is naturally deficient in its potent qualities, attains the stage of *Dushi-visha*. Because of its low potency, it does not cause immediate death but remains in the body for many years, enveloped by *Kapha*.ⁱ

Pathogenetic Cascade of *Dushi-visha* induced Dermatoses

1. **Initial Exposure:** Ingestion/Inhalation of *Sthavara/Jangama/Kritrima Visha* or modern Xenobiotics.
2. **Phase of Incomplete Clearance:** Failure of liver/kidneys to fully eliminate toxins due to chronic load.
3. **Sequestration (Kapha-Avarana):** Toxins are enveloped by *Kapha*, residing in adipose/tissue layers (Bio-accumulation).
4. **Latency Period:** Toxin exists as *Dushi-visha* (denatured poison) with *Hina-veerya*.
5. **Excitation (Prakopa):** Environmental triggers (*Kala/Desha*) or *Viruddhahara* activate the latent toxin.
6. **Affliction of Blood (Rakta-dushti):** Vitiation of *Rakta* and *Twak* (skin).
7. **Clinical Manifestation:** IL-23/17 activation leading to *Kitibha* (Psoriasis) or Th2 activation for *Vicharchika* (Eczema).ⁱⁱ



3.2. The Modern Perspective: The Inflammatory Cascade

Modern science characterizes psoriasis and eczema as results of dysregulated immune responses to environmental and genetic triggers. In psoriasis, the central driver is the IL-23/IL-17 axis. Keratinocyte stress leads to the release of antimicrobial peptides like LL-37, which activate dendritic cells to produce IL-23. IL-23 subsequently drives the differentiation and proliferation of Th17 cells, which secrete IL-17A and IL-17F, leading to psoriatic plaque formation.ⁱⁱⁱ In chronic eczema, environmental pollutants disrupt the skin barrier, leading to the release of "alarmins" like TSLP and IL-33. This activates Th2 cells to produce IL-4 and IL-13, which impair the skin barrier by downregulating filaggrin expression^{iv}.

Table: 1. Pathophysiological Comparison of *Visha Guna* and Dermatological Impact^v

<i>Visha Guna</i>	Ayurvedic Pathological Action	Modern Dermatological Parallel
<i>Ruksha (Dry)</i>	Aggravates Vata; causes scaling and cracks.	Transepidermal Water Loss (TEWL); barrier failure.
<i>Ushna (Hot)</i>	Vitiates Pitta/Rakta; causes redness and burning.	Vasodilation; release of pro-inflammatory cytokines.
<i>Sukshma (Minute)</i>	Enters micro-channels (<i>Srotas</i>).	Cellular penetration of PM 2.5 and nanoparticles.
<i>Ashu (Fast)</i>	Rapid spread across the body.	Acute inflammatory flares and systemic spread.
<i>Vyavayi (Pervasive)</i>	Spreads before digestion.	Systemic absorption and bio-distribution.
<i>Vikasi (Depressive)</i>	Loosens joints and tissues.	Extracellular matrix degradation; collagenolysis.
<i>Apaki (Non-metabolized)</i>	Resists digestion/transformation.	Persistence of xenobiotics and metabolic residues.

3.3. Contemporary (Modern and Ayurveda Point of View)

The convergence of *Dushi-visha* and modern chronic dermatoses provides a robust framework for integrative medicine.

3.3.1. The Concept of Latency and Bio-accumulation

Ayurveda posits that *Dushi-visha* remains dormant due to *Kapha-Avarana*. This aligns with the sequestration of lipophilic compounds, such as organochlorines and heavy metals (Cadmium, Mercury), in adipose tissues. In these "hidden" sites, they evade primary detoxifying pathways until released into the bloodstream during metabolic stress a process identical to the *Prakopa* of *Dushi-visha*.^{vi}

3.3.2. Environmental Triggers: *Prakopaka Hetus* and AhR

Air pollutants like PM2.5 and ozone activate the Aryl Hydrocarbon Receptor (AhR) in keratinocytes, inducing inflammatory gene expression and impairing differentiation—a molecular explanation for the vitiation of *Twak* (skin) by

Visha. The chronic consumption of *Viruddhahara* leads to gut dysbiosis and "Leaky Gut," allowing the translocation of bacterial endotoxins that manifest as *Raktapradoshaja* skin diseases.^{vii}

4. Signs and Symptoms

General symptoms of Dushi-visha^{viii}

Dushi-visha presents with systemic prodromal signs (*Poorvaroop*) including narcolepsy (*Klama*), body heaviness (*Gaurava*), laxity of joints (*Sandhi-shaithilya*), and altered senses.

4.1. Kitibha Kushtha (Psoriasis)

According to *Charaka Samhita Chikitsa Sthana 7/22*, the cardinal signs of Kitibha are :

श्यावं किणखरस्पर्शं परुषं किटिभं स्मृतम् |

Acharaya said *Kitibha* is characterized by Shyava (blackish-brown discoloration), Kina-khara sparsha (texture like a rough scar), and Parushata (extreme hardness/dryness to touch).

4.2. Vicharchika (Eczema)

Charaka Samhita Chikitsa Sthana 7/26 describes Vicharchika as follows :

सकण्डः पिडका श्यावा बहुस्रावा विचर्चिका |

It Means *Vicharchika* is characterized by *Kandu* (intense itching), *Pidika* (vesicles or papules), *Shyava* (dark discoloration), and *Bahusrava* (profuse oozing or discharge).^{ix}

Comparison Table:2. Ayurvedic Signs vs. Modern Parallels

Ayurvedic Sign	Pathological Interpretation	Modern Dermatological Parallel ^x
Kina-khara	Scar-like, rough scaling.	Hyperkeratosis and Parakeratosis.
Shyava	Dark, ashy, or cyanotic hue.	Post-inflammatory hyperpigmentation.
Bahusrava	Profuse serous discharge.	Spongiosis and "weeping" stage of eczema.
Parushata	Hardness and loss of elasticity.	Lichenification due to chronic rubbing.
Utsanna	Thickened, raised plaques.	Epidermal hyperplasia (Acanthosi

5. Management

Pharmacological Insights of Dushi-vishari Agada

- **Visha-pachana (Toxic Digestion):** *Pippali* and *Kusta* act as bio-enhancers to digest metabolic residues.
- **Raktashodhana (Blood Purification):** *Lodhra* and *Chandana* address the vitiation of *Rakta Dhatu*.
- **Immune Modulation:** *Yashtimadhu* provides natural anti-inflammatory effects and barrier repair.

5.1. Shodhana: The Primary Purification

The treatment of *Dushi-visha* requires aggressive purification to break the "Kapha-enveloping" of toxins.

सुस्विन्नं वमितं चोभौ शोधितं च विरेचनैः |

दूषीविषार्तं नित्यं च रक्षाऽगदैः सुयन्त्रितम् | ५० ||

Acharya Sushruta explains (*Kalpa Sthana 2/50-51*) A patient suffering from *Dushi-visha* should first undergo Swedana (sudation), followed by Vamana (emesis) and Virechana (purgation). Afterward, the patient should be strictly maintained on anti-toxic Agada formulations

Charaka adds the importance of *Raktamokshana* (bloodletting) in *Chikitsa Sthana 23/63*:

दूषीविषं रक्तगतं विस्राव्यं शिराभिस्तथा |

Means If the *Dushi-visha* has settled in the blood (*Rakta*), it should be removed by bloodletting (*Venesection*).

Dushi-vishari Agada: Formulation of Choice

The specific formulation for neutralizing latent toxins is mentioned in *Ashtanga Hridaya Uttara Sthana 35/39-40* :

पिप्पलीध्यामकं मांसी लोध्रमेला सुवर्चिका |

कुटत्रटं नतं कुष्ठं यष्टीचन्दनगैरिकम् | ३९ ||

दूषीविषारिर्नाम्नाऽयमगदः क्षौद्रसंयुतः |

न तं जयति दुर्वारं दूषीविषमतोऽन्यथा ४० ||

This *Agada* containing *Pippali*, *Dhyamaka*, *Jatamansi*, *Lodhra*, *Ela*, *Suvarchika*, *Kutannata*, *Natam*, *Kusta*, *Yashtimadhu*, *Chandana*, and *Gairika*, when mixed with honey, conquers the otherwise invincible *Dushi-visha*.^{xi}

Drug	Rasa/Guna	Karma (Action)	Relevance
Pippali	Katu / Tikshna	<i>Yogavahi, Deepana</i>	Bio-enhancer; toxin digestion (<i>Visha-pachana</i>).
Jatamansi	Tikta / Laghu	<i>Kushtaghna, Vishaghna</i>	Antioxidant; reduces stress-induced flares.
Lodhra	Kashaya / Ruksha	<i>Raktashodhana</i>	Anti-inflammatory; stops oozing in <i>Vicharchika</i> .

Kushta	Tikta / Katu	<i>Vata-Kaphahara</i>	Relieves severe itching and scaling.
Gairika	Madhura / Sheetal	<i>Vishaghna</i>	Neutralizes heavy metals; calms burning.

6. Discussion and Conclusion

The critical review of *Dushi-visha* reveals that global epidemics of psoriasis and eczema are significantly driven by the bio-accumulation of low-potency environmental toxins. The activation of the Aryl Hydrocarbon Receptor (AhR) by these pollutants serves as a molecular sensor for "Visha," triggering the inflammatory cascades seen in *Kitibha* and *Vicharchika*. This review justifies the use of *Shodhana* and *Agada* therapies to shift the treatment paradigm from symptomatic suppression to the fundamental elimination of systemic chemical burdens. Quantifying the clearance of environmental biomarkers following *Dushi-visha* protocols should be the next step in integrative dermatological research.^{xiii}

7. References

- i Sushruta. (2019). *Sushruta Samhita, Vol II (Chikitsa Sthana and Kalpa Sthana)*. (K.R. Srikantha Murthy, Trans.). Varanasi: Chaukhambha Orientalia. Sthavara Visha Vijnaniya Adhyaya (Chapter 2), Shlokas 25-26, p. 33.
- ii Patil, S. J., et al. (2025). Current Harmful Food Trends and Correlation with Dushi visha: An Ayurvedic Perspective Supported by Evidence. *Sanjeevani Darshan - National Journal of Ayurveda & Yoga*, 3(2), 26-31. (<http://doi.org/10.55552/SDNJAY.2025.3203>)
- iii Deepa, P., Nataraj, H. R., Anushree, C. G., & Shirwar, A. K. (2022). A Critical Review on Dooshivishari Agada: A Herbo Mineral Formulation. *International Journal of Ayurveda and Pharma Research*, 10(10), 70-77. <https://doi.org/10.47070/ijapr.v10i10.2576>
- iv Francis, L., et al. (2024). Inflammatory memory in psoriasis. *Journal of Allergy and Clinical Immunology*. <https://doi.org/10.1016/j.jaci.2024.05.008>
- v Charaka. (2020). *Charaka Samhita, Vol IV (Chikitsa Sthana)*. (R.K. Sharma & Bhagwan Dash, Trans.). Varanasi: Chaukhambha Sanskrit Series Office. Visha Chikitsa Adhyaya (Chapter 23), Shlokas 31, 63, pp. 812-824.
- vi Hankare, M. A. (2024). Dushivishari agada: A unique formulation for chronic skin diseases. *World Journal of Pharmaceutical and Medical Research*, 10(10), 288-292.
- vii Guttman-Yassky, E., et al. (2025). Atopic dermatitis. *The Lancet*. ([https://doi.org/10.1016/S0140-6736\(24\)02519-4](https://doi.org/10.1016/S0140-6736(24)02519-4))
- viii Charaka. (2020). *Charaka Samhita, Vol II (Chikitsa Sthana)*. (R.K. Sharma & Bhagwan Dash, Trans.). Varanasi: Chaukhambha Sanskrit Series Office. Kushtha Chikitsa Adhyaya (Chapter 7), Shloka 22, 26, pp. 320-324.
- ix Charaka. (2020). *Charaka Samhita, Vol IV (Chikitsa Sthana)*. (R.K. Sharma & Bhagwan Dash, Trans.). Varanasi: Chaukhambha Sanskrit Series Office. Visha Chikitsa Adhyaya (Chapter 23), Shlokas 31, 63, pp. 812-824.
- x Kang, S., et al. (Eds.). (2019). *Fitzpatrick's Dermatology* (9th ed.). New York, NY: McGraw-Hill Education.
- xi Vagbhata. (2022). *Ashtanga Hridayam (Uttara Sthana)*. (K.R. Srikantha Murthy, Trans.). Varanasi: Chaukhambha Krishnadas Academy. Visha Pratishedha Adhyaya (Chapter 35), Shlokas 33-34, 39-40, p. 342.
- xii Zhang, X., et al. (2024). Association between United States Environmental Contaminants and the Prevalence of Psoriasis Derived from the NHANES. *Toxics*, 12(7), 522. <https://doi.org/10.3390/toxics12070522>