AYUSHDHARA
ISSN: 2393-9583 (P)/ 2393-9591 (O)
An International Journal of Research in AYUSH and Allied Systems

Review Article

POISONINGS OF THE SKIN: A CRITICAL REVIEW OF CLASSICAL AYURVEDIC AND CONTEMPORARY SCIENTIFIC PERSPECTIVES BY *VISHA* AND *TWAK VIKARA*

Ravi Dalal[1]*, Sagar S P[2], Sushant Sud[3], Megha Pandya[4]

*[1]Final-year MD Scholar, [2]2nd-year MD Scholar, [3]Assistant Professor, Department of Agada tantra Evum Vidhivaidyaka, Jamnagar, Gujarat, India.

[4]Assistant Professor, Department of Kayachitisa, Institute of Teaching and Research in Ayurveda (INI), Jamnagar, Gujarat, India.

Article info

Article History:
Received: 22-02-2026
Accepted: 27-03-2026
Published: 06-05-2026

KEYWORDS:
Ayurvedic Toxicology, Poison-Induced Skin Disorders, *Dushivisha, Garavisha, Kushtha*, Dermatology.

ABSTRACT

Ayurveda describes *Visha* as a broad category of poisons that may produce *Twak vikara* through direct toxicity, cumulative exposure, or improper use of potent substances. This review explores classical Ayurvedic classifications such as *Garavisha, Dushivisha*, and *Upavisha* and relates them to contemporary toxicological and dermatological concepts. **Methods:** A critical narrative review was conducted using classical Ayurvedic references and selected contemporary scientific literature addressing poison-related skin disorders, *Kushtha, Twacha* physiology, and *Agada Tantra*. Relevant concepts were compared to identify points of convergence between traditional and modern explanations of toxin-induced skin disease. **Results:** The review shows that Ayurveda presents a detailed framework for understanding poison-related skin manifestations, including acute, chronic, and subtle toxic effects. *Kushtha* is described as a broad dermatological category, while *Twacha* is recognized as a vital protective and diagnostic organ. Modern literature similarly supports the role of toxins in inflammatory, allergic, and chronic skin disorders. **Conclusion:** Ayurveda offers a sophisticated toxicological model for interpreting skin disorders associated with *Visha*. Integrating classical concepts with contemporary science may improve understanding of etiology, diagnosis, and management of poison-related dermatological conditions.

INTRODUCTION

Ayurveda, an ancient medical system, comprehensively delineates numerous types of *Visha* (poisons) and their toxicological effects, including manifestations as *Twak vikara* (skin illnesses).[1] Systematically analyzes the classification of *Visha* in classical Ayurvedic texts, differentiating between naturally occurring and synthetic poisons, such as *Garavisha* and *Dushivisha*, and correlates their dermatological manifestations with contemporary scientific insights into toxin-induced skin pathologies.[2]

Access this article online	
Quick Response Code	
	https://doi.org/10.47070/ayushdhara.v13i2.2619

This encompasses an examination of how particular *Visha*, even those deemed therapeutic in controlled dosages, might provoke detrimental cutaneous responses when misapplied or inadequately absorbed.[3] Conditions ranging from eczema to melanoma are included in the comprehensive Ayurvedic framework's *Kushtha* classification, which incorporates a wide range of skin ailments. [4] *Maha Kushtha* and *Kshudra Kushtha* are further sub-classifications of *Kushitha*. This complex classification system underscores Ayurveda's holistic approach to dermatological diseases, acknowledging both exterior and interior causes of skin disorders.[5,6] Modern interpretations of *Kushtha* often link some Ayurvedic descriptions to modern dermatological diseases. This shows how important it is to do a comparative analysis to connect ancient knowledge with modern medical knowledge.[7] The Ayurvedic concept of *Visha* encompasses not only overt poisoning but also subtle toxic exposures that may present as chronic

dermatological conditions, such as dyshidrotic eczema, which has been effectively treated with *Vishahara* (antitoxic) and *Rasayana chikitsa* in Ayurvedic practice. [8] This nuanced understanding underscores Ayurveda's acknowledgement of cumulative or low-dose toxicities, illustrated by concepts such as *Dushi visha*, which may result from dietary patterns characterized by ultra-processed foods and chemical additives, leading to chronic health issues, including dermatological manifestations.[9] The traditional Ayurvedic pharmacopoeia recognizes the inherent toxicity of certain natural substances, categorizing them as *Upavisha*, and prescribes stringent purification protocols *(Shodhana samskara)* to alleviate adverse effects and enhance their therapeutic efficacy, as illustrated by compounds such as *Kuchala* (*Strychnos Nux Vomica*).[10] This methodical strategy highlights the complex toxicological concepts inherent in Ayurvedic medicine, which places an emphasis on cleansing and correct dosage in order to utilize medicinal compounds safely. [11] As the biggest organ in the body, the skin is responsible for shielding cells from harmful substances and regulating internal hormone levels; thus, it is an important measure of general physiological well-being.[12] The complex anatomy and physiological processes of this organ are discussed in great detail in Ayurvedic literature, which emphasizes its involvement in thermoregulation, sensory perception, and immune defence.[13] Therefore, it is essential to have a comprehensive grasp of the traditional and modern ways in which dermatological manifestations, especially *Twak vikara* caused by *Visha*, are classified in order to function as diagnostic indicators that reveal systemic toxicological loads. *Agada Tantra* is the part of Ayurveda that deals with toxicology. It organizes poisons into groups and gives detailed plans for how to deal with different types of toxic exposures, including those that damage the skin and hair. [14]

Review of the Literature

This section will examine classical Ayurvedic texts, concentrating on the descriptions of *Visha* and *Twak vikara*, and will then compare these old classifications and etiologies with contemporary scientific findings in toxicity and dermatology. Particular emphasis will be placed on the pathogenic pathways that cause poison-induced dermatoses, examining both external and endogenous toxic exposures. This comparative investigation will clarify the similarities and differences between the two systems, especially when it comes to distinguishing between direct toxic effects and immune-mediated skin reactions.[15] It will also look at how modern scientific methods can confirm or improve the traditional Ayurvedic view of *Visha* categorization and its effects on the skin. The review will further investigate the *Vishaghna* (anti-poisonous) attributes of particular Ayurvedic formulations, such as *Manjistha*, and their potential mechanisms of action in alleviating toxin-induced dermatological conditions, while correlating these with contemporary pharmacological understandings of detoxification pathways.[16] This encompasses a rigorous assessment of the *Shodhana* process, an Ayurvedic detoxification technique for hazardous plants and heavy metals, alongside its scientific corroboration via contemporary toxicological research.[17,18] This comparative methodology is essential for the translation of traditional Ayurvedic knowledge into modern evidence-based practice, particularly in light of the acknowledged toxicity issues linked to specific Ayurvedic formulations due to heavy metals and inherently toxic plant species.[19,20] For instance, *Śhodhana* is a detoxification procedure that has been demonstrated to lower the amounts of poisonous substances such as aconite, bhilawanols, strychnine, β-asarone, and abrin in different medicinal plants, which can make them work better as medicines. Even with these ancient ways of cleaning, there is still a big gap in the complete toxicological profiling of many Ayurvedic medicinal plants, especially when it comes to their long-term effects and exact dose-response correlations.[21] This lack of comprehensive data often hinders the integration of Ayurvedic remedies into mainstream healthcare, despite documented clinical success in managing conditions like *Vicharchika* with formulations such as *Panchatikta Ghrita* and *Nalpamaradi Taila*.[22] To close this gap, we need to do thorough pharmacokinetic and pharmacodynamic research to find out how safe and effective these complicated herbal formulations are by modern scientific standards.[23.24] This encompasses a comprehensive examination of their absorption, distribution, metabolism, and excretion, which is now constrained for numerous Ayurvedic drugs, hence hindering wider therapeutic acceptability.[25] The enduring fallacy that natural goods are intrinsically harmless exacerbates this issue, frequently resulting in the neglect of possible adverse reactions and toxicities, especially when utilized as herbal cosmetics or traditional treatments.[26] Additionally, the lack of strict regulatory frameworks and quality control in the production of certain Ayurvedic products leads to problems like adulteration, substitution, and contamination. This raises serious safety concerns that call for stricter oversight.[27,28] These problems show that we need better research methods, reverse pharmacology techniques, and cooperation between other fields to make sure that Ayurvedic medications are accepted around the world and validated in clinical settings.[29,30] Concerns about the presence of heavy

metals like lead, mercury, and arsenic in commercially available Ayurvedic drugs, especially *Rasa shastra* preparations, have been raised. This means that strict standards must be followed before the drugs can be sold to protect patients and preserve Ayurvedic heritage.[31] These stringent standardization and quality control protocols are crucial for reconciling traditional Ayurvedic practices with contemporary biomedical evaluation, mitigating skepticism arising from the absence of double-blinded crossover trials and erratic manufacturing processes.[32] This needs a re-evaluation of existing regulatory frameworks to require thorough pre-clinical and clinical trials, thereby guaranteeing the safety and efficacy of Ayurvedic formulations before their broader implementation[33]. To prove their therapeutic value and safety, this project will need strong, well-planned clinical trials and established production methods[34].

Furthermore, since metals such as lead, mercury, and arsenic have been found in a significant number of traditional Ayurvedic medicines made in India, especially those that use rasa shastra, strict testing procedures must be put in place to protect against possible heavy metal toxicity. This strict testing should also include requiring thorough heavy metal screening for all Ayurvedic herbal medicine products sold around the world, especially those from South Asia, where studies have found worrying levels of lead, mercury, and arsenic in commercially available formulations. This highlights the imperative for transparent labelling and stringent compliance with good manufacturing procedures to alleviate the dangers linked to such contaminants. This proactive approach would require a worldwide effort to standardize production methods, make sure dosages are always the same, and find active chemicals to keep impurities out. This entails formulating standardized protocols for Ayurvedic therapies and instituting stringent quality control systems to guarantee the purity, safety, and efficacy of Ayurvedic goods. These steps will make it possible for Ayurveda to be accepted and used in modern healthcare systems all across the world, giving a complete way to control diseases. To this aim, it is very important to create strong analytical procedures such as hyphenated methods like GC-MS, LC-MS, and LC-NMR. These approaches will help authenticate and standardize complicated Ayurvedic formulations, even those that only have small amounts of marker compounds.[35-40]

Moreover, the formulation of explicit regulatory frameworks and certification bodies is essential to supervise the collection, processing, manufacturing, and distribution of Ayurvedic medicines, thereby guaranteeing their quality and averting the dissemination of inferior products. This regulatory framework should also include pharmacovigilance systems to keep an eye on the safety of Ayurvedic goods after they are sold. These systems should keep track of any negative events so that future formulations and usage directions can be improved. This all-encompassing strategy will not only boost customer trust but also make it easier to use Ayurvedic techniques in global healthcare settings based on evidence. It is very important to have such strict quality controls and regulatory oversight because there have been reports of heavy metals like cadmium, lead, arsenic, and mercury in some herbal medicines. This is a big public health threat, especially in unregulated markets. To address this issue, regulatory bodies must require thorough toxicological testing of all Ayurvedic formulations, particularly those with mineral or metallic components, to guarantee compliance with recognized international safety standards, including those established by the WHO. This requires a global alignment of analytical methodologies for standardization to guarantee the uniform quality and safety of these intricate polyherbal compositions across various markets.[41-47]

Furthermore, the creation of specialized institutions for Ayush educational technology and innovation, in conjunction with policy-driven implementation science, would cultivate the essential infrastructure for comprehensive study and the global assimilation of Ayurvedic practices. This involves creating more advanced hyphenated approaches for fingerprint profiling, which is important for making sure that Ayurvedic formulations such *Asava-aristas* are of high quality and follow the same rules. These sophisticated chromatographic and spectroscopic techniques, along with chemometric methods, are essential for qualitative and structural investigation, guaranteeing consistency between batches and verifying the authenticity of intricate botanical components. At the same time, it is important to set up a strong worldwide pharmacovigilance system for herbal medications so that potential side effects may be found and dealt with before they happen, and safety can continue to be monitored in real-world settings. This kind of approach would help solve problems that are now making it hard for traditional medicine to be accepted and used more widely in conventional healthcare systems. For example, there isn't enough recording of proof and study data. This strict method fits with the expanding global acceptance of traditional medicine, which means that Ayurvedic techniques need to be scientifically proven and standardized in order to be used effectively in mainstream healthcare. The implementation of standardized global quality standards and rigorous analytical techniques, such as advanced trace elemental analysis, is essential for

detecting and quantifying potential contaminants, thereby guaranteeing the safety and effectiveness of these intricate formulations. This requires strong cooperation with international organizations such as WHO and ISO to align protocols, safety standards, and pharmacopoeial specifications, thereby enabling cross-border regulatory adoption and the expansion of integrative care models. [48-50]

Methodology

This comparative analysis methodically scrutinizes textual descriptions of poison-induced dermatoses from seminal Ayurvedic texts, juxtaposing them with contemporary dermatological insights into toxic epidermal necrolysis, contact dermatitis, and other toxin-mediated cutaneous conditions. This multidisciplinary approach seeks to reconcile the epistemic disparity between old medical knowledge and modern biomedical science, thereby facilitating a holistic comprehension of *Visha*-induced *Twak vikara*. Additionally, the methodology combines ethnopharmacological data with clinical case reports to confirm historical findings with empirical evidence, pinpointing certain plant-derived poisons and their dermatological consequences. This will facilitate the formulation of evidence-based strategies for prevention, diagnosis, and treatment, integrating traditional Ayurvedic knowledge with modern medical practices and enhancing the scientific validation of these traditional remedies. [51]

This integrated approach requires a thorough review of nomenclature and classification systems in both traditions, as discrepancies in naming conventions for traditional medicines can hinder precise reporting and evaluation of adverse drug responses. Additionally, the variability in herbal drug preparation and the risk of adulteration or misidentification of plant species highlight the necessity for rigorous quality control measures and standardized manufacturing processes to reduce toxicity and guarantee consistent therapeutic efficacy. Consequently, a comprehensive system for standardization, including both raw material verification and completed product evaluation, is essential for protecting public health and facilitating the broader acceptance of Ayurvedic formulations. The philosophical foundations of *Agadatantra* in Ayurveda, which characterize *Visha* as deriving from *"Visannam"* and appearing as a destructive force, underscore its historic systematic methodology in toxicology. This viewpoint is essential for comprehending the intricate relationship between environmental toxins and physiological responses, highlighting the systemic aspects of poisoning that extend beyond singular dermatological manifestations. This review further assesses the influence of systems biology tools, safety data, and clinical trials on the developing intersection of Ayurvedic principles and modern biomedical research, rigorously evaluating translational prospects for incorporating traditional knowledge into current medical frameworks.[52-58]

To solve the problems of detecting unanticipated toxicity, this integration needs a complete database that lists the toxicological profiles of natural compounds, such as how they are absorbed, distributed, metabolized, and excreted. Additionally, studying genetic predispositions and individual differences in metabolic pathways will help us better understand why some people are more likely to get *Visha*-induced skin problems than others. This will lead to individualized treatment options. This comprehensive integration, which includes chemical diversity analysis, uniform nomenclature, and advanced metabolomic profiling, is essential for confirming and enhancing the knowledge of Ayurvedic treatments within a contemporary scientific context. To do this, strict quality control measures, such as checking the authenticity of herbal sources and standardizing the manufacturing processes, are essential to stop adulteration and make sure that Ayurvedic formulations are safe and effective. This method is essential for guaranteeing batch-to-batch uniformity and the therapeutic effectiveness of Ayurvedic medicines, thereby facilitating their wider acceptance and application in modern healthcare systems.[59-62]

This research examines the current material on *Visha* and *Twak Vikara* in classical Ayurvedic texts and contemporary scientific studies to offer a cohesive perspective on poison-induced dermatological conditions. This thorough analysis seeks to pinpoint deficiencies in existing knowledge and suggest directions for future study, especially with the identification of specific phytotoxins linked to dermatological symptoms and the formulation of focused therapy strategies. This encompasses a comprehensive analysis of detoxification techniques, including the *Putpak* approach delineated by Charaka, which historically targeted deleterious components in conventional medicines. The review will also look at the pharmacodynamics of herbal medicines used in Ayurvedic skin treatments. It will do this by looking at how they work at the molecular level to treat skin problems caused by poison. This investigation will include both orally ingested and topically applied Ayurvedic formulations, assessing their efficacy and safety profiles through a comprehensive examination of existing preclinical and clinical data. This method seeks to systematically classify and evaluate the therapeutic potential of essential Ayurvedic herbs, such as Aconitum heterophyllum, which exhibit

considerable pharmacological activities pertinent to dermatological disorders, inflammatory conditions, and gynaecological concerns, although their extensive application in routine clinical practice remains inadequately investigated. Standardizing these multi-component formulations is still very hard since many chemicals interact with each other in ways that make it hard to get the same results from batch to batch and make them less reliable as treatments.[63-68]

RESULTS

This investigation examines the pathogenic mechanisms of various categories of *Visha*, including *Sthavara visha* (plant-based poisons) and *Jangama visha* (animal-based poisons), along with their dermatological consequences as delineated in classical Ayurvedic texts. Simultaneously, it analyzes current toxicological data regarding particular natural compounds associated with dermatological reactions, assessing their dose-dependent effects and potential for multi-systemic harm, including hepatotoxicity and nephrotoxicity, in addition to cutaneous manifestations. This comparison methodology will elucidate the intersections where contemporary science supports ancient Ayurvedic insights and will pinpoint innovative research avenues to authenticate and enhance traditional knowledge.[69-72]

This integration will pinpoint particular *Agada Tantra* formulations, including *Sugandhadi Agada*, that possess documented antitoxic properties necessitating further experimental and clinical exploration for their efficacy in treating poison-induced dermatological conditions. This analysis will also investigate the pharmacological effects of specific components within these formulations, linking them to their historical applications and contemporary biochemical insights. This entails a rigorous evaluation of their methods of action at cellular and molecular levels, especially regarding their anti-inflammatory, antioxidant, and immunomodulatory qualities pertinent to skin health. The review will also look at the problems in standardizing Ayurvedic skin care products, especially because the plants used, how they are processed, and how they are traditionally made might all be different.[73-75]

These intrinsic obstacles frequently hinder the dependable production of therapeutically effective Ayurvedic medications, requiring stringent quality control methods and standardized manufacturing protocols to guarantee safety and efficacy. So, the next important step is to create and use standardized analytical methods for fingerprinting complex Ayurvedic formulations. This will make sure that the phytochemical profiles are always the same and that the active markers can be measured. This strict standardization is important not just for making sure that Ayurvedic skin care products are of high quality and work consistently, but also for bringing together traditional knowledge and modern drug standards. This methodology is essential for the evidence-based validation of Ayurvedic dermatology, promoting regulatory approval and incorporation into global healthcare systems. This integration is also necessary to promote interdisciplinary collaborations that combine traditional Ayurvedic principles with modern scientific methods, such as advanced molecular pharmacology and metabolomics, to accurately identify and measure biomarkers and active ingredients that affect therapeutic outcomes in skin conditions. [76-79]

This all-encompassing method will not only confirm conventional Ayurvedic assertions but also promote the identification of innovative therapeutic agents and enhance current treatment protocols for poison-induced dermatoses. The creation of alternative experimental models, such as co-cultures of keratinocyte–fibroblast and three-dimensional skin cultures, may yield more refined insights into the molecular mechanisms of wound healing in dermatological toxicology, thereby diminishing the dependence on animal testing. In the end, rigorous clinical trials with a wide range of people are the only way to be sure about the safety and effectiveness of these natural products. This means that extraction procedures, dosage forms, and quality control measures need to be standardized. This will enable the systematic assessment of Ayurvedic therapies against established benchmarks, promoting their wider acceptability and incorporation into evidence-based medical practice. [80-82]

DISCUSSION

Even though phytochemicals in Ayurvedic formulations have promising pharmacological effects, more thorough research is needed to find out how they work, how well they work, and how safe they are for treating skin diseases. This entails clarifying the specific molecular pathways affected by these botanical compounds and performing thorough toxicological evaluations to guarantee patient safety, particularly regarding the risk of negative interactions with standard pharmaceutical agents. Additionally, extensive toxicological investigations concentrating on long-term in vivo safety and thorough characterization of undiscovered chemical elements within these formulations are essential to completely define their safety profiles and therapeutic potential.[83-85]

This rigorous scientific examination is essential for their appropriate incorporation into conventional dermatological and skincare products, rectifying the

existing deficiencies in comprehending their complete therapeutic potential and associated hazards. This thorough review requires a return to the ancient discipline of *Agada Tantra*, which focuses on toxicology and how to deal with poisoning, to help modern research on the safety and effectiveness of Ayurvedic formulations. Given the complexities of natural product extracts, subsequent research ought to concentrate on sophisticated analytical methodologies to isolate and define specific active chemicals, hence reducing possible toxicities linked to crude extracts. This resurrection of *Agada Tantra* is important because Ayurveda was one of the first medical systems to create a specialist field in toxicology. Sadly, this field is not well represented in the current Ayurvedic curriculum. This historical viewpoint highlights the necessity for a revitalized academic and research emphasis on this vital field to successfully tackle modern toxicological issues. This requires a coordinated effort to combine traditional knowledge with modern scientific methods, such as advanced analytical chemistry and pharmacology, in order to fully assess the safety and therapeutic potential of traditional antitoxic compositions. [86-88]

This kind of interdisciplinary approach would not only prove that traditional Ayurvedic remedies work for Visha-induced skin problems, but it would also help create new, evidence-based ways to treat them. Furthermore, an enhanced comprehension of traditional Ayurvedic diagnostic criteria, especially those pertaining to *Visha* exposure and *Twak Vikara* manifestation, could improve patient classification for clinical trials and tailor treatment strategies, in accordance with precision medicine principles. This would also help us understand poison-induced skin illnesses better from both Ayurvedic and current scientific points of view. It would show where the two systems agree and disagree, which could help with integrative treatment plans. For example, using advanced metabolomics on samples from patients with poison-induced skin problems could find particular metabolic markers that are linked to Ayurvedic doshic imbalances. This would make it possible to objectively measure how well a treatment works. This method could close the gap between subjective clinical observations in Ayurveda and measurable physiological changes. This would make diagnostic and prognostic markers that are stronger and more widely accepted. Additionally, examining ancient Ayurvedic texts for classifications of various *Visha* types and their associated *Twak Vikara* presentations could yield a comprehensive framework for categorizing dermatological manifestations of toxic exposures, potentially offering innovative insights beyond existing allopathic classifications. Such a framework could improve the accuracy of diagnoses and help with focused treatments, especially in complicated circumstances where standard tests might not work. This combination of old and new diagnostic methods could also help find new biomarkers for early detection and individualized treatment of skin disorders caused by *Visha*. [89]

Furthermore, the integration of machine learning algorithms to scrutinize extensive datasets derived from Ayurvedic diagnostic criteria and contemporary dermatological evaluations may facilitate the creation of predictive models for disease progression and therapeutic response in poison-induced dermatoses. These AI-driven methods that use multi-omic data along with clinical and Ayurvedic texts could greatly improve precision medicine in dermatology by finding the best herbal combinations and treatment plans for skin problems caused by venom. [90-92]

In this analysis, we looked at how modern toxicology understands dermatological symptoms caused by Visha and how they match up with the old Ayurvedic classifications of *Twak Vikara*. The detailed descriptions of *Sthavara Visha* and *Jangama Visha*, which lead to symptoms similar to contact dermatitis and urticaria, respectively, demonstrate the continued significance of Ayurvedic toxicological concepts in contemporary dermatological practice. Additionally, the Ayurvedic notion of *Dushi Visha*, defined by the accumulation of low-potency toxins, serves as a significant conceptual analogy to chronic allergic dermatoses such as eczema and urticaria, providing a comprehensive framework for elucidating their pathogenesis from both traditional and contemporary immunological viewpoints. These traditional perspectives on *Dushi Visha's* involvement in chronic dermatological conditions, particularly its suggested mechanism of impairing *Rakta Dhatu* and weakening immunity, correspond with contemporary theories of IgE-mediated inflammation and mast cell degranulation in allergic reactions.

This conceptual overlap highlights the potential for Ayurvedic *Shodhana* and *Shamana* therapies to offer comprehensive detoxification and enhance contemporary allergy avoidance techniques for certain illnesses. [93-95]

Future research should look into the molecular mechanisms by which Ayurvedic detoxification protocols affect immune regulation and reduce inflammatory pathways that are thought to play a role in chronic skin conditions. This would provide an evidence-based basis for their use in modern dermatology. Moreover, an in-depth investigation of the *Kushtagna Dashemani* and analogous Ayurvedic

pharmacopoeia may reveal innovative therapeutic agents with proven effectiveness against diverse toxin-induced dermatological conditions, requiring stringent scientific validation to clarify their active components and mechanisms of action. The thorough comprehension of diverse categories of *Visha* and their dermatological presentations, as elucidated in Ayurvedic literature, provides a substantial basis for diagnostic and prognostic assessment in contemporary medicine. This all-encompassing approach can improve the accuracy of diagnoses and help doctors choose the best treatments for skin problems caused by different kinds of hazardous exposure. [96]

CONCLUSION

This review underscores the imperative for ongoing research to empirically substantiate the effectiveness of Ayurvedic interventions for poison-induced dermatological disorders, thereby promoting the formulation of cohesive therapeutic approaches that amalgamate traditional knowledge with modern scientific precision. This combination could result in the formulation of innovative therapeutic strategies and improve patient outcomes in dermatological toxicology by synergistically utilizing the advantages of both systems. Additionally, acknowledging the risk of acute allergic reactions, similar to anaphylaxis, from diverse exposures underscores the essential function of prompt and suitable therapies, including *Shodhana* procedures, to avert significant systemic problems. The Ayurvedic technique of *Shodhana*, a detoxification procedure that lowers toxicity while keeping medicinal characteristics, may help lessen the harmful effects of several hazardous substances, including those that cause skin problems. This purification procedure, called "*Shodhana*," is very important for using "*Visha Dravya*" in medicine since it lowers their natural toxicity while keeping their healing properties. This old process changes potentially deadly substances into drugs by carefully lowering their toxicity. Indeed, these detoxifying strategies are widely utilized in *Rasashastra* for mineral and metallic medications, as well as in the preparation of herbal decoctions, highlighting their importance in improving therapeutic efficacy and safety.

REFERENCES

1. Manohar PR. Agad Tantra: Ayurvedic toxicology and its clinical relevance. J Ayurveda Integr Med. 2014; 5(2): 89–95.
2. Kumar V, Sharma A, Singh R. Toxicological implications of Ayurvedic poisons and dermatological correlations. Int J Res Ayurveda Pharm. 2022; 13(6): 1180–1185.
3. Singh P, Yadav R, Mishra S. Therapeutic and toxic effects of visha dravya in Ayurveda. J Ethnopharmacol. 2025; 310: 115423.
4. Bishnoi A, Kumari S, Kaur I. Ayurvedic perspective of Kushtha and its correlation with dermatological disorders. Indian J Dermatol. 2025;70(2): 101–106.
5. Deepti SS. Concept of Kushtha in Ayurveda. World J Pharm Res. 2019; 8(5): 2430–2435.
6. Rakesh R, Sharma M, Patel K. Holistic dermatology in Ayurveda: A review. AYU. 2025; 46(1): 12–18.
7. Korade MS, Ratnaparkhi MP. Comparative analysis of Ayurvedic and modern dermatology. Int J Ayurvedic Med. 2024; 15(2): 365–372.
8. Dhaliya SA, Babu R. Management of dyshidrotic eczema through Ayurveda. J Ayurveda Case Rep. 2020; 3(1): 12–16.
9. Patil S, Jadhav P, Kulkarni A. Dushi visha and lifestyle disorders: A modern interpretation. J Ayurveda Integr Med. 2025;16(1):100789.
10. Mishra S, Patil R. Shodhana of Kuchala (Strychnos nux-vomica) and its pharmacological significance. J Res Ayurveda Sci. 2024; 8(2): 85–90.
11. Sikder M. Toxicological principles in Ayurveda: A review. J Complement Med Res. 2024;15(1): 45–52.
12. Kuldeep K, Sharma R, Gupta V. Skin as a diagnostic organ in systemic diseases. Int J Dermatol. 2023; 62(3): 320–325.
13. Sharma PV. Ayurvedic physiology and skin functions. Chaukhambha Orientalia; 2023. p. 750–760.
14. Ganer A, Baragi P. Agada Tantra and its role in modern toxicology. AYU. 2026; 47(1): 1–6.
15. Anand K, Mehta R, Singh S. Toxic dermatoses: Mechanisms and clinical implications. Dermatol Ther. 2021; 34(2): e14765.
16. Khatik GL, Sharma A. Pharmacological properties of Manjistha in skin disorders. Int J Pharm Sci Rev Res. 2018; 49(1): 10–15.
17. Maurya SK, Seth A. Scientific validation of Shodhana process in Ayurveda. AYU.2015;36(3): 251–256.
18. Rabb S. Detoxification processes in herbal medicine. J Herbal Med. 2022; 32: 100520.
19. Addissouky TA. Toxicity concerns in herbal medicine. Toxicol Rep. 2024; 11: 1–8.
20. Bhattacharya S, Ghosh S. Heavy metal toxicity in Ayurvedic formulations. J Ethnopharmacol. 2019; 234: 360–368.
21. Hasan SS, Ahmed SI. Toxicological profiling of medicinal plants. Phytother Res. 2018; 32(1): 20–28.

22. Journal of Research in Ayurvedic Sciences. Clinical efficacy of Panchatikta Ghrita in Vicharchika. 2017; 1(2): 45–50.
23. Grigorov M, et al. Pharmacokinetics of herbal medicines. Front Pharmacol. 2022; 13: 845678.
24. Patwardhan B, et al. Reverse pharmacology approach for Ayurveda. J Altern Complement Med. 2017; 23(7): 543–545.
25. Madgulwar A, et al. ADME studies in Ayurvedic drugs. J Ayurveda Integr Med. 2024; 15(2): 101234.
26. Muley BP. Safety misconceptions of herbal drugs. Pharmacogn Rev. 2024; 18(1): 1–6.
27. Kotmire S, et al. Adulteration issues in Ayurvedic drugs. J Drug Deliv Ther. 2024; 14(3): 210–220.
28. Verma R, et al. Regulatory challenges in Ayurveda. AYU. 2024; 45(2): 1–10.
29. Sandeep K, et al. Interdisciplinary research in Ayurveda. J Ayurveda Integr Med. 2024; 15(1): 100890.
30. Swathi S, Sumathi P. Reverse pharmacology and Ayurveda. Int J Pharm Sci. 2023; 15(1): 1–5.
31. Chauhan NS, et al. Heavy metal toxicity in Rasashastra. AYU. 2015; 36(4): 365–370.
32. Gupta SK. Standardization of Ayurvedic drugs. J Ayurveda Integr Med. 2024; 15(1): 1–5.
33. Patwardhan B. Ayurveda and evidence-based medicine. J Ayurveda Integr Med. 2014; 5(1): 1–3.
34. Agarwal A, et al. Clinical validation of Ayurvedic therapies. AYU. 2023; 44(1): 1–4.
35. Kumar A, et al. Heavy metals in traditional medicines. Environ Health Perspect. 2016; 124(5): 597–603.
36. Saper RB, et al. Lead, mercury in Ayurvedic medicines. JAMA. 2008; 300(8): 915–923.
37. Saper RB, et al. Heavy metals in Ayurvedic products. JAMA. 2004; 292(23): 2868–2873.
38. Singh A, Purohit B. Herbal drug safety concerns. J Ethnopharmacol. 2011; 134(1): 65–70.
39. Etaware PM, et al. Global standardization of herbal medicine. Front Pharmacol. 2025; 16: 110234.
40. Pant B, et al. Hyphenated techniques in herbal analysis. J Chromatogr B. 2021; 1173: 122680.
41. Unnikrishnan PM, et al. Quality control of Ayurvedic drugs. J Ayurveda Integr Med. 2020; 11(1): 1–8.
42. Gyamfi MA. Pharmacovigilance of herbal medicines. Drug Saf. 2019; 42(2): 181–190.
43. Mikulski M, et al. Safety monitoring of herbal products. Front Pharmacol. 2017; 8: 186.
44. Breeher L, et al. Heavy metal toxicity in herbal medicine. Mayo Clin Proc. 2015; 90(3): 300–310.
45. Luo H, et al. Toxic metals in herbal medicines. Sci Total Environ. 2021; 750: 141350.
46. Ibrahim A, et al. WHO standards in herbal medicines. J Ethnopharmacol. 2024; 320: 117120.
47. Sahoo N, et al. Standardization challenges in Ayurveda. J Ayurveda Integr Med. 2023; 14(2): 100650.
48. Nesari T, et al. AYUSH integration strategies. AYU. 2025; 46(1): 5–10.
49. Das S, et al. Chromatographic fingerprinting in Ayurveda. J Pharm Biomed Anal. 2019; 165: 1–10.
50. Sethi A, et al. Pharmacovigilance in herbal medicine. Front Pharmacol. 2025; 16: 110890.
51. Asaaga FA, et al. Ethnopharmacological approaches in dermatological disorders. J Ethnopharmacol. 2024; 318: 116012.
52. Thamizhoviya S. Integrative dermatology: Bridging Ayurveda and modern science. Int J Res Dermatol. 2025; 11(2): 120–126.
53. Barvaliya MJ, et al. Adverse drug reactions and herbal medicines. Indian J Pharmacol. 2023; 55(1): 5–10.
54. Prajapati PK. Standardization of Ayurvedic formulations. AYU. 2024; 45(1): 1–6.
55. Janugade HB. Quality assurance in Ayurveda. J Ayurveda Integr Med. 2026; 17(1): 100900.
56. Sawarkar G, Deshmukh V. Concept of Visha in Agad Tantra. Int J Ayurveda Res. 2019; 10(1): 1–5.
57. Jain AK. Environmental toxins and health. Environ Res. 2022; 204: 112089.
58. Ojha R. Systems biology in Ayurveda research. Front Med. 2025; 12: 110567.
59. Wang X, et al. Toxicokinetics of natural compounds. Toxicol Lett. 2021;350:10–18.
60. Venkatasubramanian P, et al. Ayurveda biology and systems approach. Curr Sci. 2010; 98(5): 600–605.
61. Agarwal R, Goyal M. Herbal drug standardization techniques. Pharmacogn Rev. 2021; 15(29): 35–40.
62. GS S, et al. Quality control in herbal medicines. J Pharm Sci Res. 2016; 8(2): 78–82.
63. Changade V, et al. Putapaka method in Ayurveda. AYU. 2024; 45(2): 1–5.
64. Bolatkyzy Z, et al. Pharmacodynamics of herbal compounds. Front Pharmacol. 2025; 16: 111234.
65. Maurya SK, et al. Herbal pharmacology in dermatology. J Ethnopharmacol. 2023; 302: 115789.
66. Singh R, et al. Clinical evaluation of Ayurvedic dermatological therapies. AYU. 2024; 45(3): 1–7.
67. Kour K, et al. Pharmacological activities of Aconitum heterophyllum. Int J Pharm Sci Rev Res. 2016; 37(2): 20–25.

68. Boini KM, et al. Challenges in herbal drug standardization. Front Pharmacol. 2025; 16: 112000.
69. Priyanka P, et al. Classification of Visha in Ayurveda. AYU. 2023; 44(2): 1–6.
70. Chen L, et al. Toxicological effects of natural compounds. Toxicol Rep. 2023; 10: 30–40.
71. Ma Y, et al. Multi-organ toxicity of plant toxins. J Toxicol Sci. 2025; 50(1): 1–10.
72. Li X, et al. Integrating traditional medicine with modern science. Front Pharmacol. 2025; 16: 113210.
73. Katru P, et al. Sugandhadi Agada in toxicology. AYU. 2023; 44(3): 70–75.
74. Deng Y, et al. Herbal skincare product variability. J Cosmet Dermatol. 2023; 22(5): 1200–1208.
75. Gupta R, et al. Quality issues in Ayurvedic cosmetics. J Cosmet Sci. 2023; 74(3): 150–158.
76. Katiyar C, Dubey SD. Standardization challenges in herbal drugs. AYU. 2023; 44(1): 1–5.
77. Jain SK, et al. Herbal drug safety and efficacy. Pharmacogn Rev. 2018; 12(23): 45–50.
78. Balkrishna A, et al. Evidence-based Ayurveda. J Ayurveda Integr Med. 2025;16(2):101000.
79. Das S, et al. Advanced metabolomics in herbal medicine. Front Pharmacol. 2026;17:114500.
80. Goh BH, et al. Biomarkers in dermatology research. Int J Mol Sci. 2021; 22(3): 1–10.
81. Prabhath N, et al. 3D skin models in toxicology. Toxicol In Vitro. 2024; 85: 105450.
82. Sahoo N, Manchikanti P. Evidence-based integrative medicine. Pain Physician. 2013; 16(5): E961–E970.
83. Nyagumbo MT, et al. Phytochemicals in dermatology. J Ethnopharmacol. 2025; 310: 115500.
84. Kombate K, Metowogo K. Toxicological evaluation of herbal medicines. Toxicol Rep. 2023; 10: 1–6.
85. Ahmed S, et al. Safety of herbal formulations. Front Pharmacol. 2024; 15: 109876.
86. Ajanal M, et al. Ayurvedic pharmacology overview. AYU. 2013; 34(1): 1–5.
87. Yuan H, et al. Traditional medicine modernization. Pharmacol Res. 2025; 190: 106800.
88. Liu Y, et al. Isolation of active compounds. J Nat Prod. 2022; 85(1): 10–18.
89. Hridya P, Vasudev DT. Biomarkers in Ayurveda. AYU. 2025; 46(2): 1–6.
90. Laprade R, et al. Machine learning in healthcare. Front Med. 2023; 10: 100567.
91. Nath S, Mandal M. AI in medical diagnosis. J Med Syst. 2020; 44(9): 160–165.
92. Madgulwar A, Shewalkar A. Precision Ayurveda. J Ayurveda Integr Med. 2025; 16(1): 100980.
93. Ramesh R. AI and dermatology. Int J Dermatol. 2025; 64(3): 3540–3548.
94. Tang Y, et al. Multi-omics in precision medicine. Nat Rev Genet. 2025; 26(1): 1–12.
95. Kamal R, et al. Visha and skin disorders. AYU. 2018; 39(2): 100–105.
96. Tiwari S. Dushi Visha and allergic disorders. J Ayurveda Case Rep. 2026; 10(1): 1–5.

Cite this article as:
Ravi Dalal, Sagar S P, Sushant Sud, Megha Pandya. Poisonings of the Skin: A Critical Review of Classical Ayurvedic and Contemporary Scientific Perspectives by Visha and Twak Vikara. AYUSHDHARA, 2026;13(2):478-486.
https://doi.org/10.47070/ayushdhara.v13i2.2619
Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**
Dr. Ravi Dalal
MD Scholar,
Department of Agada tantra Evum Vidhivaidyaka, Institute of Teaching and Research in Ayurveda (INI), Jamnagar.
Email: Dalal.ravi2@gmail.com