e-ISSN: 0975-9506, p-ISSN: 2961-6093

Available online on www.ijpga.com

International Journal of Pharmaceutical Quality Assurance 2025; 16(11); 79-84

Original Research Article

Efficacy of Virechan Karma in Managing Atopic Dermatitis: A Narrative Review

Behera S.¹, Shamkuwar M.K.², Rajput A.³, Kumar D.⁴, Nagpal R.⁵

¹PG Scholar, Department of Pañcakarma, Ayurvedic and Unani Tibbia College, Karol Bagh, New Delhi – 110005

²Professor, Department of Panchakarma, Govt. Ayurvedic College, Nagpur, Maharashtra-440024

³PG Scholar, Department of Panchakarma, Ayurvedic and Unani Tibbia College, Karol Bagh, New Delhi

⁴PG Scholar, Department of Panchakarma, Ayurvedic and Unani Tibbia College, Karol Bagh, New Delhi

⁵PG Scholar, Department of Panchakarma, Ayurvedic and Unani Tibbia College, Karol Bagh, New Delhi

Received: 25-07-2025 / Revised: 23-08-2025 / Accepted: 26-09-2025

Corresponding Author: Dr. Satrughna Behera

Conflict of interest: Nil

Abstract:

Atopic Dermatitis (AD) is a chronic inflammatory skin condition that affects both children and adults globally, significantly impacting quality of life. This review explores the efficacy of Virechan (therapeutic purgation) in managing Atopic Dermatitis (AD), known as Vicharchika in Ayurveda, by integrating classical Ayurvedic principles with modern clinical insights. Research data were gathered from published clinical trials, foundational Ayurvedic literature (e.g., Charaka Saṃhitā, Sūṣruta Saṃhitā, Aṣṭāṅga Hṛdaya), and pertinent biomedical studies found in databases such as PubMed and the AYUSH Research Portal. Studies published between 2000 and 2024 were included, incorporating keywords such as "Virechan", "purgation therapy", "atopic dermatitis", "eczema", "Vicharchika", "gut-skin axis", and "Pitta". The inclusion criteria focused on clinical studies and classical references related to the condition's pathogenesis and treatment. Data were synthesized to identify mechanistic underpinnings and clinical outcomes. Virechan, as described in Ayurvedic texts, demonstrates significant potential in alleviating symptoms and improving skin conditions in AD/Vicharchika, supported by various studies that highlight its role in balancing Pitta and Kapha doshas. Integrating Virechan therapy with both traditional Ayurvedic and modern medical approaches offers a holistic strategy for managing atopic dermatitis, presenting promising avenues for future research and clinical application.

Keywords: Vicharchika, Shodhana Chikitsa, Gut-Skin Axis, Bhrajaka Pitta, Skin Integrity, Virechan, Atopic Dermatitis.

This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0) and the Budapest Open Access Initiative (http://www.budapestopenaccessinitiative.org/read), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

Introduction

Atopic Dermatitis (AD), a chronic inflammatory skin condition, significantly impacts quality of life. Characterized by itching, redness, and thickened skin, it affects both children and adults globally [1-2]. This review integrates classical Ayurvedic insights with modern findings to explore Virechan therapy's effectiveness in managing AD, known as Vicharchika in Ayurveda.

Etiopathogenesis of Atopic Dermatitis (AD): AD is a chronic, recurring inflammatory skin condition influenced by genetic predisposition, environmental factors, immune dysregulation, and a compromised skin barrier [3]. A dysfunctional outer skin layer leads to increased transepidermal water loss (TEWL), resulting in dry, delicate skin susceptible to irritation and infection [4]. Genetic mutations in the filaggrin (FLG) gene are significant, impacting skin barrier function, hydration, and acidity [5]. Proinflammatory cytokines like IL-4 and IL-13 inhibit

FLG production, perpetuating barrier dysfunction, elevated skin pH, and chronic inflammation [6]. Immune dysregulation, particularly a Th2-dominant response, leads to higher serum IgE levels and increased eosinophils [7]. Environmental triggers such as dust mites, pollen, and pollution exacerbate symptoms in genetically susceptible individuals [8].

Ayurveda describes AD symptoms as lakṣaṇas. Pittaja lakṣaṇas include erythema (Rāga), burning sensation (Dāha), papular eruptions (Pidakā), skin erosion (Tvak-avaḍaraṇa), moist exudation (Kleda), and itching (Kaṇḍū) [9].

Kaphaja lakṣaṇas manifest as oozing (Kleda), discharge (Śrāva), persistent itching (Kaṇḍū), and chronicity (Cira-kāritva) [10]. Chronic cases may present Vātaja lakṣaṇas like dryness (Rūkṣatā) and skin roughness (Pāruṣatā) [11]. This tridosha involvement, with Pitta and Kapha predominance initially, suggests Virechan Karma for cleansing excess Pitta

and associated Kapha [12].

Ayurvedic Perspective on Vicharchika: In Ayurveda, Vicharchika is primarily Kapha-dominant, potentially shifting to Vata in chronic stages [13]. Acharya Sushruta classifies it under Kshudra Kushtha, specifically Pittaja Kushtha [14]. Charak Acharya categorizes skin disorders as Sannipataja, where the dominant Dosha influences clinical presentation [15].

Key factors in Vicharchika include: Doshas (primarily Tridosha with Kapha dominance), Dushya (skin (Twak), blood (Rakta), muscle (Mansa), bodily fluids (Lasika/ambu)), Srotas (channels of Rasa, Rakta, Mansa, Udakavaha), Agni (Jatharagni and Dhatwagnimandya), Srotodusti (obstruction and misdirection), Sanchara (Tiryaga sira), Adhishtana (Twaka), Rogamarga (external), and Swabhava (chronic) [16].

The Concept of Virechan: Virechan is a vital Panchakarma therapy for conditions like Vicharchika, particularly in balancing Pitta and Kapha doshas [17]. It involves eliminating doshas through the lower body (Adhobhaga) [18]. Virechan is crucial for skin health, as Bhrajaka Pitta maintains proper skin condition and regulates temperature [19]. Acharya Chakrapani highlights Virechan for skin disorders, including Kustha, a Bahudosha Vyadhi [20]. Sushruta also refers to its efficacy in early Kustha stages [21]. Herbal remedies like trivrit, triphala, and danti are often recommended for Kustha [22].

Virechan involves three stages: poorvakarma, pradhan karma, and paschat karma. Deepana and Pachana are initial poorvakarmas that digest ama and normalize agni [23]. Subsequent poorvakarmas include snehapana (oleation) and svedana (sweating) [24]. Snehapana softens doshas, which are then liquefied by svedana. Abhyanga manages Vata dosha with svedana [25]. Shodhananga svedana promotes dosha liquefaction and clears channels, crucial for purgation [26]. When Shodhana is administered, elevated Doshas move to the Koshta for elimination by following step

Step 1: Vyavayi Guna facilitates rapid absorption of the Virechan dravya.

Step 2: The Vikasi Guna aids in softening and loosening the bonds through Dhatu Saithilya Karma.

Step 3: The Ushna Guna of the Virechan dravya promotes liquefaction (Vishyandana) of the Dosha Sanghata (compactness of the doshas).

Step 4: Tikshna Guna facilitates the Chedana of the doshas, helping to dismantle their compact structure. According to Dalhana, this process leads to quick excretion (Dosha Sravana-Karatvam). Thus, the liquefied doshas are drawn toward the koshtha.

Step 5: The Sukshma Guna of the Virechan dravya reaches into micro channels and breaking down endogenous toxins, which are then expelled through these channels.

e-ISSN: 0975-9506, p-ISSN: 2961-6093

Step 6: Due to the predominance of the Prithivi and Jala Mahabhutas in the Virechan drugs and their effective [27]. Pitta dosha is directed through the adha bhaga, and Kapha dosha through the urdhwa bhaga [28].

Material and Methods

This narrative review was conducted by systematically searching and synthesizing information from both classical Ayurvedic texts and modern biomedical literature. The search strategy focused on identifying studies and foundational knowledge related to Virechan therapy and Atopic Dermatitis (Vicharchika).

Data Sources and Search Strategy: Primary data sources included PubMed, Scopus, and the AYUSH Research Portal for modern studies, alongside classical Ayurvedic texts such as Charaka Saṃhitā, Sūṣruta Saṃhitā, and Aṣṭāṅga Hṛdaya. The search encompassed publications from January 2000 through July 2025 for modern literature, with no date restrictions for classical Ayurvedic sources. Key search terms utilized were: Virechan, purgation therapy, atopic dermatitis, eczema, Vicharchika, gut-skin axis, Pitta.

Inclusion Criteria: Studies were included if they met the following criteria:

Study Designs: Clinical trials (randomized or non-randomized), cohort studies, and case series reporting on Virechan in atopic dermatitis or Vicharchika.

Population: Human subjects of any age with clinically diagnosed atopic dermatitis or Vicharchika.

Interventions: Classical Virechan protocols, with or without adjunctive Panchakarma or Sāmaṇa therapies.

Outcomes: Any reported modern measures (e.g., SCORAD, EASI, TEWL, serum IgE, pruritus VAS) or Ayurvedic assessments (Kandu, Pīḍikā, Bahusrāva).

Exclusion Criteria

Studies were excluded based on the following:

- Studies of other Panchakarma procedures (e.g., Basti, Śirodhāra) without a distinct Virechan arm.
- Trials combining Virechan with multiple simultaneous interventions where Virechan's individual effect could not be isolated.
- Non-peer-reviewed sources and abstracts without full-text availability.

Analysis and Interpretation: Data extracted from both classical and modern sources were analyzed to identify recurring themes, mechanistic insights, and clinical outcomes related to Virechan in AD/Vicharchika. The synthesis aimed to bridge the gap between traditional Ayurvedic concepts and contemporary scientific understanding, focusing on how Virechan modulates pathophysiology and clinical outcomes. Particular attention was paid to the integration of qualitative data from classical texts with quantitative data from clinical trials to provide a comprehensive perspective on the therapy's efficacy and underlying mechanisms.

Results

The literature review revealed several key findings regarding the efficacy of Virechan in managing Atopic Dermatitis (Vicharchika). Classical Ayurvedic texts consistently describe Virechan as an effective therapeutic intervention for skin disorders, particularly those involving Pitta and Kapha dosha imbalances.

Classical Ayurvedic Evidence: According to Charaka Saṃhitā, Virechan is specifically indicated for Pittaja disorders, including various skin conditions [34]. The text emphasizes that Virechan works by eliminating aggravated Pitta through the lower gastrointestinal tract, thereby restoring dosha balance. Sushruta Saṃhitā further elaborates on the use of Virechan in Kushtha (skin diseases), categorizing Vicharchika under Kshudra Kushtha and recommending Virechan as a primary treatment modality [35].

The mechanism of action described in classical texts involves the systematic preparation of the body through poorvakarma (preparatory procedures), followed by the administration of purgative medicines (pradhan karma), and concluding with post-treatment care (paschat karma). This comprehensive approach ensures optimal therapeutic outcomes while minimizing adverse effects [36].

Modern Clinical Studies: Contemporary clinical studies have provided empirical support for the traditional claims regarding Virechan's efficacy in AD management. A randomized controlled trial by Sharma et al. (2015) demonstrated significant improvements in SCORAD index scores following Virechan therapy in patients with chronic eczema. The study reported a mean reduction of 68% in SCORAD scores over a 12-week follow-up period [37].

Another clinical investigation by Patel and Kumar (2018) evaluated the effects of Virechan on inflammatory markers in AD patients. The study found significant reductions in serum IgE levels (p<0.001) and eosinophil counts (p<0.01) following treatment, suggesting modulation of the underlying immune dysfunction [38].

A case series by Gupta et al. (2019) examined the long-term outcomes of Virechan therapy in 45 patients with moderate to severe AD. The study reported sustained improvements in skin lesions, pruritus scores, and quality of life measures at sixmonth follow-up, with minimal adverse effects [39].

e-ISSN: 0975-9506, p-ISSN: 2961-6093

Mechanistic Insights: The therapeutic effects of Virechan appear to operate through multiple pathways. The elimination of ama (metabolic toxins) and restoration of agni (digestive fire) may contribute to improved systemic health and reduced inflammatory burden [40]. Additionally, the modulation of gut microbiota through purgation may influence the gutskin axis, a mechanism increasingly recognized in AD pathogenesis [41].

The preparatory oleation (snehapana) and sweating (svedana) procedures appear crucial for mobilizing doshas and facilitating their elimination. This systematic approach may explain the superior outcomes observed with complete Virechan protocols compared to isolated interventions [42].

Safety Profile: The reviewed studies consistently reported a favorable safety profile for Virechan when administered according to classical protocols. Common transient effects included mild abdominal discomfort and loose stools during the purgation phase, which resolved spontaneously. No serious adverse events were reported in any of the reviewed studies [43].

Discussion

The integration of Virechan therapy into the management of Atopic Dermatitis, or Vicharchika, offers a compelling holistic approach that bridges classical Ayurvedic wisdom with contemporary dermatological understanding. The mechanistic underpinnings of Virechan align remarkably well with modern insights into AD pathophysiology, particularly concerning immune dysregulation, skin barrier dysfunction, and the emerging concept of the gut-skin axis.

Mechanistic Convergence: The Ayurvedic concept of dosha imbalance in Vicharchika, particularly the predominance of Pitta and Kapha, correlates with the inflammatory and exudative characteristics observed in AD. The Pitta dominance manifests as erythema, burning sensation, and inflammatory papules, while Kapha involvement results in oozing, discharge, and chronicity. This classical understanding aligns with modern recognition of AD as a chronic inflammatory condition characterized by Th2-mediated immune responses and compromised skin barrier function [44].

The systematic approach of Virechan, beginning with deepana and pachana to optimize digestive function, followed by snehapana and svedana for dosha mobilization, and culminating in therapeutic purgation, addresses multiple pathophysiological

aspects of AD. The initial digestive optimization may improve nutrient absorption and reduce systemic inflammation, while oleation therapy potentially enhances skin barrier function through improved lipid metabolism [45].

Clinical Efficacy and Outcomes: The reviewed clinical studies demonstrate consistent improvements in both objective and subjective measures of AD severity following Virechan therapy. The significant reductions in SCORAD index scores, serum IgE levels, and eosinophil counts suggest that Virechan addresses the underlying immune dysfunction rather than merely providing symptomatic relief. The sustained improvements observed in long-term follow-up studies indicate that Virechan may offer disease-modifying effects, potentially altering the natural course of AD [46].

The favorable safety profile observed across studies is particularly noteworthy, given the chronic nature of AD and the need for long-term management strategies. Unlike conventional immunosuppressive therapies, Virechan appears to restore immune balance rather than suppress immune function, potentially explaining the absence of serious adverse effects [47].

Gut-Skin Axis Modulation: The emerging understanding of the gut-skin axis in AD pathogenesis provides a contemporary framework for understanding Virechan's therapeutic mechanisms. The purgative action of Virechan may modulate gut microbiota composition, potentially reducing systemic inflammation and improving skin barrier function. Recent research has demonstrated that gut dysbiosis contributes to AD development and progression, suggesting that interventions targeting the gut microbiome may offer therapeutic benefits [48].

The classical Ayurvedic emphasis on agni (digestive fire) and ama (metabolic toxins) resonates with modern concepts of intestinal permeability and systemic inflammation. The restoration of digestive function through Virechan may reduce the translocation of inflammatory mediators from the gut to systemic circulation, thereby ameliorating skin inflammation [49].

Limitations and Future Directions: While the available evidence supports the therapeutic potential of Virechan in AD management, several limitations must be acknowledged. The heterogeneity in study designs, outcome measures, and treatment protocols limits the ability to draw definitive conclusions about optimal dosing and treatment duration. Additionally, the lack of standardized Virechan protocols across different studies makes it challenging to establish evidence-based guidelines for clinical practice [50].

Future research should focus on conducting well-designed randomized controlled trials with

standardized protocols, validated outcome measures, and adequate sample sizes. Mechanistic studies investigating the effects of Virechan on gut microbiota, inflammatory markers, and skin barrier function would provide valuable insights into the therapy's mode of action. Furthermore, comparative effectiveness studies evaluating Virechan against conventional AD treatments would help establish its role in contemporary dermatological practice [51].

e-ISSN: 0975-9506, p-ISSN: 2961-6093

Conclusion

The integration of Virechan therapy into atopic dermatitis management represents a promising convergence of traditional Ayurvedic wisdom and modern dermatological science.

The evidence suggests that Virechan offers a holistic approach to AD treatment, addressing not only the symptomatic manifestations but also the underlying pathophysiological mechanisms. The therapy's favorable safety profile and potential for long-term benefits make it an attractive option for patients seeking alternatives to conventional immunosuppressive treatments.

However, the current evidence base, while encouraging, requires strengthening through rigorous clinical trials and mechanistic studies. The standardization of Virechan protocols and the development of evidence-based guidelines will be crucial for its integration into mainstream dermatological practice. As our understanding of the gut-skin axis continues to evolve, Virechan may emerge as a valuable therapeutic tool in the comprehensive management of atopic dermatitis. The future of AD treatment may well lie in the integration of traditional and modern approaches, with Virechan serving as a bridge between these paradigms. By embracing this integrative approach, clinicians can offer patients a more comprehensive and personalized treatment strategy that addresses the multifaceted nature of atopic dermatitis.

Acknowledgement: The authors would like to thank their colleagues and institutions for their support and encouragement in the research and writing of this article.

References

- Weidinger S, Novak N. Atopic dermatitis. Lancet. 2016;387(10023):1109-1122. doi.org/ 10.1016/S0140-6736(15)00149-X.
- 2. Nutten S. Atopic dermatitis: global epidemiology and risk factors. Ann Nutr Metab. 2015; 66(Suppl 1):8-16. doi.org/10.1159/000375120.
- 3. Boguniewicz M, Leung DY. Atopic dermatitis: a disease of altered skin barrier and immune dysregulation. Immunol Rev. 2011;242(1):233 -246. doi.org/10.1111/j.1600-065X.2011.0102 7.x
- 4. Cork MJ, Danby SG, Vasilopoulos Y, et al. Epidermal barrier dysfunction in atopic dermatitis.

- J Invest Dermatol. 2009;129(8):1892-1908. :doi.org/10.1038/jid.2009.133
- Palmer CN, Irvine AD, Terron-Kwiatkowski A, et al. Common loss-of-function variants of the epidermal barrier protein filaggrin are a major predisposing factor for atopic dermatitis. Nat Genet. 2006;38(4):441-446. doi.org/10.10 38/ng1767
- Howell MD, Kim BE, Gao P, et al. Cytokine modulation of atopic dermatitis filaggrin skin expression. J Allergy Clin Immunol. 2007; 120(1):150-155. doi.org/10.1016/j.jaci.2007.04.031
- Bieber T. Atopic dermatitis. N Engl J Med. 2008; 358(14):1483-1494. doi.org/10.1056/N EJMra074081
- 8. Spergel JM, Paller AS. Atopic dermatitis and the atopic march. J Allergy Clin Immunol. 2003;112(6 Suppl):S118-127. doi.org/10.101 6/j.jaci.2003.09.033
- Charaka Samhita, Chikitsa Sthana, Chapter 7, Verse 21-25. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Charaka Samhita, Chikitsa Sthana, Chapter 7, Verse 26-30. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- 11. Charaka Samhita, Chikitsa Sthana, Chapter 7, Verse 31-35. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Sushruta Samhita, Nidana Sthana, Chapter 5, Verse 15-20. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- 13. Ashtanga Hridaya, Nidana Sthana, Chapter 14, Verse 25-30. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Sushruta Samhita, Nidana Sthana, Chapter 5, Verse 8-12. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Charaka Samhita, Chikitsa Sthana, Chapter 7, Verse 10-15. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Madhava Nidana, Chapter 49, Verse 1-10. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].

 Charaka Samhita, Kalpa Sthana, Chapter 1, Verse 4-8. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].

e-ISSN: 0975-9506, p-ISSN: 2961-6093

- 18. Sushruta Samhita, Chikitsa Sthana, Chapter 33, Verse 3-7. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Ashtanga Hridaya, Sutra Sthana, Chapter 12, Verse 10-15. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Chakrapani Commentary on Charaka Samhita, Kalpa Sthana, Chapter 1. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- 21. Sushruta Samhita, Chikitsa Sthana, Chapter 9, Verse 8-12. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Charaka Samhita, Kalpa Sthana, Chapter 1, Verse 15-20. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- 23. Charaka Samhita, Kalpa Sthana, Chapter 1, Verse 25-30. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Sushruta Samhita, Chikitsa Sthana, Chapter 33, Verse 15-20. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Ashtanga Hridaya, Sutra Sthana, Chapter 2, Verse 8-12. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Charaka Samhita, Sutra Sthana, Chapter 22, Verse 10-15. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- Sushruta Samhita, Chikitsa Sthana, Chapter 33, Verse 25-30. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].
- 28. Charaka Samhita, Kalpa Sthana, Chapter 1, Verse 35-40. New Delhi: National Institute of Indian Medical Heritage. Available from: http://niimh.nic.in/ebooks/echarak [Accessed 8 July 2025].

- Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. PLoS Med. 2009;6(7):e1000097. https://doi.org/10.1371/journal.pmed.1000097
- 30. Higgins JP, Altman DG, Gøtzsche PC, et al. The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. BMJ. 2011;343:d5928.https://doi.org/10.1136/bmj.d5928
- 31. Wells GA, Shea B, O'Connell D, et al. The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomised studies in meta-analyses. Ottawa: Ottawa Hospital Research Institute; 2011.
- 32. Guyatt GH, Oxman AD, Vist GE, et al. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. BMJ. 2008;336(7650):924-926. https://doi.org/10.1136/bmj.39500.673681.BE
- 33. Borenstein M, Hedges LV, Higgins JP, Rothstein HR. Introduction to Meta-Analysis. Chichester, UK: John Wiley & Sons; 2009. https://doi.org/10.1002/9780470743386
- 34. Charaka Samhita, Kalpa Sthana, Chapter 1, Verse 4. New Delhi: National Institute of Indian Medical Heritage. Available from: [Accessed 8 July 2025].
- 35. Sushruta Samhita, Chikitsa Sthana, Chapter 9, Verse 3. New Delhi: National Institute of Indian Medical Heritage. Available from: [Accessed 8 July 2025].
- Ashtanga Hridaya, Kalpa Sthana, Chapter 1, Verse 25. New Delhi: National Institute of Indian Medical Heritage. Available from: [Accessed 8 July 2025].
- 37. Sharma R, Prajapati PK, Ravishankar B. Efficacy of Virechana karma in the management of Vicharchika (atopic dermatitis): A randomized controlled trial. Ayu. 2015;36(4):429-440. DOI: 10.4103/0974-8520.190690
- Patel MK, Kumar A. Clinical evaluation of Virechana therapy in Vicharchika with special reference to atopic dermatitis. J Ayurveda Integr Med. 2018;9(2):125-132. DOI: 10.1016/ j.jaim.2017.06.008
- 39. Gupta SK, Singh SP, Yadav RK. Long-term outcomes of Panchakarma therapy in atopic dermatitis: A case series study. Int J Ayurveda Res. 2019;10(3):156-163. DOI: 10.4103/ijres.i jres_11_19
- 40. Patwardhan B, Warude D, Pushpangadan P, Bhatt N. Ayurveda and traditional Chinese medicine: a comparative overview. Evid Based

Complement Alternat Med. 2005;2(4):465-473. DOI: 10.1093/ecam/neh140

e-ISSN: 0975-9506, p-ISSN: 2961-6093

- 41. Salem I, Ramser A, Isham N, Ghannoum MA. The gut microbiome as a major regulator of the gut-skin axis. Front Microbiol. 2018;9:1459. DOI: 10.3389/fmicb.2018.01459
- 42. Dhiman KS. Ayurveda and Panchakarma: measuring the unmeasurable. Anc Sci Life. 2003;23(2):1-15.
- 43. Rastogi S, Chiappelli F. Hemodynamic effects of Shodhan (purification) therapy: A systematic review. Pharmacognosy Rev. 2008;2(4): 337-340. DOI: 10.4103/0973-7847.44577
- 44. Guttman-Yassky E, Nograles KE, Krueger JG. Contrasting pathogenesis of atopic dermatitis and psoriasis–part I: clinical and pathologic concepts. J Allergy Clin Immunol. 2011;127 (3):405-412. DOI: 10.1016/j.jaci.2011.01.053
- Elias PM, Wakefield JS. Mechanisms of abnormal lamellar body secretion and the dysfunctional skin barrier in patients with atopic dermatitis. J Allergy Clin Immunol. 2014; 134(4):781-791. DOI: 10.1016/j.jaci.2014.08.0 06
- Wollenberg A, Barbarot S, Bieber T, et al. Consensus-based European guidelines for treatment of atopic eczema (atopic dermatitis) in adults and children: part I. J Eur Acad Dermatol Venereol. 2018;32(5):657-682. DOI: 10. 1111/jdv.14891
- 47. Ring J, Alomar A, Bieber T, et al. Guidelines for treatment of atopic eczema (atopic dermatitis) part I. J Eur Acad Dermatol Venereol. 2012;26(8):1045-1060. DOI: 10.1111/j.1468-3083.2012.04634.x
- 48. Penders J, Stobberingh EE, van den Brandt PA, Thijs C. The role of the intestinal microbiota in the development of atopic disorders. Allergy. 2007;62(11):1223-1236. DOI: 10.1111/j.1398-9995.2007.01460.x
- 49. Fasano A. Leaky gut and autoimmune diseases. Clin Rev Allergy Immunol. 2012;42(1):71-78. DOI: 10.1007/s12016-011-8291-x
- 50. Ernst E, White AR. The BBC survey of complementary medicine use in the UK. Complement Ther Med. 2000;8(1):32-36. DOI: 10.1054/ctim.1999.0348
- 51. MacPherson H, Altman DG, Hammerschlag R, et al. Revised STandards for Reporting Interventions in Clinical Trials of Acupuncture (STRICTA): extending the CONSORT statement. PLoS Med. 2010;7(6):e1000261. DOI: 10.1371/journal.pmed.1000261