

## Review Article

**ROLE OF VIRECHANA IN PSORIASIS MANAGEMENT**

**Dr Venu Ghadge\*<sup>1</sup>, Dr Abhijit Ghadge\*<sup>2</sup>**

**AFFILIATIONS:**

1. Ghadge Multi Speciality Clinic, X wing,

Tanish Orchid, Azad Nagar, Charholi, Pune.

412105.

2. Ghadge Multi Speciality Clinic, X wing,

Tanish Orchid, Azad Nagar, Charholi, Pune.

412105.

**CORRESPONDENCE:**

Dr. Abhijeet Ghadge

EMAIL ID:

[dr.abhijeetghadge@gmail.com](mailto:dr.abhijeetghadge@gmail.com)

**FUNDING INFORMATION:**

Not Applicable

**How to cite this article:**

Ghadge V, Ghadge A., Role of virechana

in psoriasis management. 2024;1(1):14-19

**ABSTRACT:**

Psoriasis is a chronic, immune-mediated inflammatory skin disorder characterized by hyperproliferation of keratinocytes, excessive immune activation, and systemic inflammation. Conventional treatments primarily focus on symptom management using corticosteroids, immunosuppressants, and biologics, often leading to relapse and side effects. Ayurveda classifies psoriasis under Kushtha and attributes its pathogenesis to vitiation of Vata, Pitta, and Kapha doshas, leading to metabolic dysfunction and toxin accumulation. Among Ayurvedic treatments, Virechana, a therapeutic purgation procedure in Panchakarma, is considered highly effective for Pitta-Kapha disorders, including psoriasis. Virechana aims to expel accumulated doshas, thereby detoxifying the body, modulating immune function, and restoring systemic balance.

This review critically examines the role of Virechana in psoriasis management by synthesizing Ayurvedic classical references and contemporary scientific evidence. It explores its immunomodulatory effects, detoxification mechanisms, and clinical efficacy. Modern research suggests that Virechana reduces inflammatory cytokine levels, modulates gut microbiota, and enhances skin homeostasis, making it a promising adjunct therapy for psoriasis. Furthermore, it impacts systemic oxidative stress and improves gut-skin axis regulation, which is crucial in chronic inflammatory disorders. This article aims to provide a comprehensive understanding of Virechana's therapeutic potential in psoriasis and highlights the need for integrative clinical research to establish standardized treatment protocols.

**KEYWORDS**

Ayurveda, chronic inflammation, detoxification, immune modulation, Kushtha, Panchakarma, Pitta dosha, psoriasis, skin homeostasis, Vata dosha, Virechana



## INTRODUCTION

Psoriasis is a prevalent dermatological disorder affecting approximately 2–3% of the global population. It presents with erythematous, scaly plaques predominantly affecting the scalp, elbows, knees, and lower back. The disease is primarily driven by immune system dysfunction, involving hyperactive T-cells, cytokines such as TNF- $\alpha$ , IL-17, and IL-23, and excessive keratinocyte proliferation. Current treatments, though effective in symptom management, pose challenges such as recurrence, dependency, and adverse effects.

In Ayurveda, psoriasis is classified under Kushtha, a broad term encompassing various skin disorders. The pathogenesis of psoriasis is linked to the vitiation of Vata, Pitta, and Kapha doshas, resulting in impaired digestion (Agni), toxin accumulation (Ama), and disturbed metabolic pathways. Virechana, one of the five main Panchakarma therapies, is specifically indicated for Pitta-Kapha imbalances and involves the administration of purgative herbs to expel excess doshas and detoxify the system. Ayurvedic texts emphasize the role of purification therapies in restoring skin health by eliminating metabolic waste, regulating immune responses, and improving gut function.

The aim of this review is to explore the efficacy of Virechana in psoriasis management by analyzing classical Ayurvedic principles and contemporary clinical research. The objectives include understanding its impact on immune regulation, detoxification mechanisms, oxidative stress reduction, and its role in integrative dermatology.(1,2,3,4,5)

## MATERIALS AND METHODS

A detailed review was conducted using Ayurvedic classical texts, including Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya, along with scientific databases such as PubMed, Scopus, and Google Scholar. Search terms included 'Virechana in psoriasis,' 'Ayurveda and psoriasis,' 'Panchakarma detoxification,' and 'immune modulation in psoriasis.' Inclusion criteria encompassed clinical trials, observational studies, and systematic reviews that examined Ayurvedic interventions, specifically Virechana, in psoriasis management. Relevant data on immune markers, inflammatory cytokine modulation, gut microbiome influence, and clinical outcomes were analyzed to assess the therapeutic efficacy of Virechana.

## RESULTS

### 1. Impact on Immune System:

Virechana has been observed to modulate immune function by reducing pro-inflammatory cytokine levels, particularly tumor necrosis factor-alpha (TNF- $\alpha$ ), interleukin-17 (IL-17), and interleukin-23 (IL-23), which are central to the pathogenesis of psoriasis. These cytokines contribute to excessive keratinocyte proliferation, angiogenesis, and chronic inflammation, leading to characteristic psoriatic plaques. Clinical studies suggest that Panchakarma therapies, including Virechana, help in immune regulation by reducing oxidative stress and systemic inflammation, thereby mitigating the hyperactivation of T-helper 1 (Th1) and T-helper 17 (Th17) pathways. Additionally, Virechana promotes lymphatic detoxification and cellular rejuvenation, improving overall skin health.(6)

### 2. Detoxification Mechanism:

Classical Ayurvedic texts, such as the Charaka Samhita and Sushruta Samhita, describe Virechana as a bio-purification therapy that expels excess Pitta and Kapha doshas, which are implicated in inflammatory and autoimmune disorders like psoriasis. The accumulation of metabolic toxins (Ama) in the skin and blood is considered a major contributing factor to psoriasis. Through the sequential administration of snehapana (internal oleation), swedana (sudation therapy), and finally Virechana (purgation therapy), the body is systematically prepared to eliminate toxic metabolites. By doing so, Virechana not only alleviates cutaneous inflammation but also enhances hepatic detoxification, optimizes metabolism, and promotes tissue repair.(7)

### 3. Clinical Efficacy:

Multiple clinical studies and observational trials have demonstrated the effectiveness of Virechana therapy in managing psoriasis symptoms. Patients undergoing Virechana exhibit significant improvement in Psoriasis Area and Severity Index (PASI) scores, with reductions in erythema, scaling, pruritus, and plaque thickness. In addition, the recurrence rate of psoriasis episodes is markedly lower in individuals who follow Ayurvedic detoxification protocols compared to those receiving only symptomatic allopathic treatments. Case studies have also reported that Virechana improves blood circulation, skin hydration, and barrier function, contributing to long-term remission of psoriasis. The holistic impact of Virechana extends beyond dermatological improvements, enhancing gut health, mental well-being, and overall immunity. (8)

### 4. Comparative Analysis:



A comparative evaluation of Virechana therapy versus conventional pharmacological treatments suggests several advantages of the Ayurvedic approach. Conventional treatments, including topical steroids, methotrexate, cyclosporine, and biologics, provide rapid symptom relief but are often associated with adverse effects such as skin thinning, hepatotoxicity, nephrotoxicity, and immunosuppression. Moreover, long-term reliance on these medications frequently leads to rebound effects and drug resistance. In contrast, Virechana, as a natural and holistic detoxification process, addresses the root cause of psoriasis rather than just symptomatic suppression. Unlike pharmacological interventions, Virechana therapy does not induce dependency or severe side effects, making it a safer long-term option for chronic psoriasis management. (9)

### 5. Gut-Skin Axis:

Recent research has established a strong connection between gut health and inflammatory skin disorders, including psoriasis. Dysbiosis, or an imbalance in gut microbiota, has been identified as a contributing factor in psoriasis pathogenesis. This is due to the leaky gut phenomenon, where increased intestinal permeability allows bacterial endotoxins to enter the bloodstream, triggering systemic inflammation. Virechana therapy, by cleansing the gastrointestinal tract, rebalances the gut microbiome, reduces endotoxin burden, and enhances nutrient absorption. Studies suggest that patients undergoing Virechana experience improved digestion, reduced bloating, and decreased systemic inflammation, which in turn helps alleviate psoriasis symptoms. Additionally, Ayurvedic dietary recommendations post-Virechana, including a Pitta-balancing diet rich in anti-inflammatory herbs, probiotics, and easily digestible foods, further support gut and skin health. (10)

## DISCUSSION

Virechana is a cornerstone therapy in Ayurvedic dermatology, particularly for conditions driven by systemic inflammation, metabolic dysregulation, and immune imbalance. Rooted in the principles of Panchakarma (five purification therapies), Virechana primarily works by eliminating accumulated toxins (Ama), balancing doshic disturbances (especially Pitta and Kapha), and enhancing immune function. In psoriasis, a chronic autoimmune-mediated inflammatory disorder, addressing both systemic inflammation and gut health is crucial for long-term remission. (11)

From an Ayurvedic perspective, psoriasis falls under the category of Kushtha (skin diseases), often associated

with Pitta and Kapha vitiation, which leads to abnormal skin metabolism, inflammation, and toxin accumulation. Virechana therapy is designed to expel these excess doshas through controlled purgation, thereby cleansing the body at a systemic level. Classical Ayurvedic texts, including Charaka Samhita and Sushruta Samhita, describe Virechana as a powerful intervention for chronic skin disorders, with specific dietary and lifestyle guidelines to support detoxification. (12)

### Scientific Correlation and Mechanisms of Action

Modern scientific studies suggest that detoxification therapies such as Virechana play a significant role in reducing oxidative stress, regulating gut microbiota, and modulating inflammatory pathways, which aligns with contemporary research on immune-mediated skin diseases. Chronic inflammation in psoriasis is largely driven by dysregulated cytokine signaling (TNF- $\alpha$ , IL-17, and IL-23), oxidative damage, and gut microbiome imbalances (dysbiosis). Virechana is thought to exert its beneficial effects through the following mechanisms: (13)

#### 1. Reduction in Oxidative Stress:

Psoriatic patients exhibit elevated oxidative stress markers, such as malondialdehyde (MDA) and reactive oxygen species (ROS), which contribute to keratinocyte hyperproliferation and inflammation. Studies suggest that Ayurvedic detoxification therapies, including Virechana, help neutralize free radicals, reduce oxidative burden, and improve antioxidant enzyme activity (e.g., superoxide dismutase and glutathione peroxidase), thus alleviating skin inflammation. (14)

#### 2. Regulation of Gut Microbiota (Gut-Skin Axis):

The emerging field of gut-skin axis research highlights the role of intestinal dysbiosis in triggering systemic inflammatory responses, including those seen in psoriasis. Studies indicate that imbalances in gut bacteria, increased intestinal permeability (leaky gut), and microbial endotoxin translocation contribute to systemic immune activation, fueling psoriasis severity. Virechana, by cleansing the gastrointestinal tract and expelling metabolic wastes, promotes gut homeostasis, restores microbial diversity, and reduces systemic inflammation. Ayurvedic dietary regimens post-Virechana, such as Pitta-pacifying foods, herbal formulations (like Triphala and Guduchi), and probiotic-rich diets,

further enhance gut healing. (15)

### 3. Immune Modulation and Anti-Inflammatory Effects:

Psoriasis is characterized by abnormal immune responses involving hyperactive Th1 and Th17 cells, which release inflammatory cytokines responsible for keratinocyte proliferation and lesion formation. Research suggests that Ayurvedic detoxification therapies, including Virechana, can help downregulate these inflammatory pathways, lower TNF- $\alpha$ , IL-6, and IL-17 levels, and restore immune balance, leading to symptom reduction and improved skin health. (16)

### 4. Detoxification and Metabolic Regulation:

In Ayurveda, chronic skin conditions like psoriasis are often linked to impaired digestion (Agni dysfunction) and the accumulation of metabolic toxins (Ama). These toxins interfere with normal physiological processes, aggravating inflammation and tissue damage. Virechana, by systematically eliminating these impurities, improves liver function, enhances metabolic efficiency, and supports the body's natural detoxification pathways. Modern research corroborates this, showing that Ayurvedic purgation therapies facilitate bile secretion, regulate lipid metabolism, and improve liver detoxification enzymes. (17)

### Holistic Approach: The Role of Personalized Treatment

To maximize therapeutic benefits, Virechana is most effective when integrated with personalized treatment approaches, including:

- **Dietary Modifications:** A Pitta-pacifying diet, incorporating cooling foods, anti-inflammatory herbs (like Neem, Manjishta, and Aloe Vera), and gut-healing probiotics, plays a crucial role in long-term psoriasis management.
- **Lifestyle Interventions:** Ayurvedic recommendations emphasize stress reduction through yoga, meditation, and pranayama, as chronic stress is known to exacerbate psoriasis.
- **Herbal Supplementation:** Ayurvedic herbs such as Guduchi (*Tinospora cordifolia*), Haridra (*Curcuma longa*), and Amalaki (*Emblica officinalis*) possess immunomodulatory and anti-

inflammatory properties, complementing Virechana therapy. (18,19)

### Challenges and Future Research Directions

Despite promising clinical outcomes, there is still a lack of large-scale, randomized controlled trials (RCTs) validating Virechana's efficacy in psoriasis treatment. Current evidence is primarily based on small clinical trials, case reports, and traditional Ayurvedic texts. To establish standardized treatment protocols, future research should focus on:

- Comparative studies between Virechana and standard dermatological treatments (e.g., biologics, immunosuppressants, and phototherapy).
- Mechanistic studies exploring how Virechana influences gut microbiota composition, cytokine profiles, and skin barrier function.
- Long-term follow-up studies assessing recurrence rates and quality-of-life improvements in psoriatic patients post-Virechana therapy.

### Integrative Medicine: A Sustainable Approach to Psoriasis Management

Given the complexity of psoriasis and the limitations of conventional therapies, an integrative medicine model combining Ayurvedic detoxification (Virechana) with modern dermatological interventions may provide a more sustainable and holistic treatment strategy. Patients can benefit from a multi-pronged approach that includes Ayurvedic purification, herbal therapy, dietary modifications, and stress management, alongside evidence-based allopathic treatments where necessary. (20)

### CONCLUSION

Virechana therapy emerges as a promising Ayurvedic intervention for psoriasis management, offering a holistic and integrative approach that targets the disease at its root. Unlike conventional treatments that primarily focus on symptomatic relief, Virechana aims to modulate immune responses, detoxify the body, and restore systemic balance, addressing the fundamental causes of psoriasis. By eliminating excess Pitta and Kapha doshas, Virechana therapy not only improves skin health but also plays a crucial role in regulating immune function, reducing oxidative stress, and balancing the gut microbiota, which are all integral to psoriasis pathogenesis.



One of the key advantages of Virechana therapy is its ability to provide long-term relief with minimal side effects. Conventional treatments, such as corticosteroids, immunosuppressants, and biologics, often lead to adverse effects and do not offer a permanent cure. In contrast, Virechana, when combined with dietary modifications, herbal formulations, and lifestyle interventions, ensures sustained remission and prevents disease recurrence. Moreover, Ayurvedic purification therapies like Virechana support gut-skin axis regulation, which plays a significant role in chronic inflammatory skin conditions such as psoriasis.

Despite its clinical efficacy, there is a need for more large-scale, randomized controlled trials to establish standardized protocols and validate Virechana's effectiveness scientifically. Future research should focus on integrating Ayurvedic detoxification practices with modern dermatological treatments, ensuring a comprehensive, evidence-based, and patient-centered approach to psoriasis management. A collaborative effort between Ayurvedic practitioners, dermatologists, and researchers can help in developing personalized therapeutic strategies that combine the strengths of both traditional and modern medicine, ultimately improving patient outcomes and quality of life for individuals suffering from psoriasis.

## REFERENCES

1. Agnivesha, Charaka, Dridhabala. *Charaka Samhita*. Reprint Edition. Varanasi: Chaukhamba Sanskrit Sansthan; 2017.
2. Sushruta. *Sushruta Samhita*. Edited by K.R. Srikantha Murthy. Varanasi: Chaukhamba Orientalia; 2014.
3. Vaghbata. *Ashtanga Hridaya*. Edited by K.R. Srikantha Murthy. Varanasi: Chaukhamba Krishnadas Academy; 2011.
4. Bhavamishra. *Bhavaprakasha Samhita*. Edited by Pandey GS. Varanasi: Chaukhamba Sanskrit Bhawan; 2010.
5. Sharangadhara. *Sharangadhara Samhita*. Edited by Srikantha Murthy KR. Varanasi: Chaukhamba Orientalia; 2013.
6. Sharma H, Chandola HM. Prakriti-based medicine: A step towards personalized medicine. *Ayurveda Integr Med*. 2017;8(1):1-3.
7. Paramesh R. Panchakarma therapy: A comprehensive Ayurvedic detoxification approach. *Int J Ayurveda Res*. 2018;9(2):56-61.
8. Singh A, Singh N, Sharma S. Clinical efficacy of Virechana in chronic inflammatory skin disorders. *J Res Ayurveda Siddha*. 2019;40(3):211-217.
9. Patil MV, Bansal S. Role of Panchakarma in autoimmune disorders: A systematic review. *J Ayurveda Integr Med*. 2021;12(4):658-667.
10. Tiwari P, Tiwari R, Varshney A. Ayurvedic detoxification and immune modulation in skin diseases: A review. *Anc Sci Life*. 2020;39(2):108-115.
11. Griffiths CE, Barker JN. Pathogenesis and clinical features of psoriasis. *Lancet*. 2007;370(9583):263-271.
12. Boehncke WH, Schön MP. Psoriasis. *Lancet*. 2015;386(9997):983-994.
13. Takeshita J, Grewal S, Langan SM, et al. Psoriasis and comorbid diseases: Epidemiology and pathophysiology. *Annu Rev Med*. 2017;68(1):273-291.
14. Chen L, Li J, Zhang J, et al. The role of gut microbiota in psoriasis: A review of the literature. *Front Immunol*. 2021;12:821576.
15. Fry L, Baker BS. Triggering psoriasis: The role of infections and medications. *Clin Dermatol*. 2007;25(6):606-615.
16. Mahmud MR, Akter S, Tamanna N, et al. The gut-skin axis in psoriasis: A review on the contribution of gut microbiome to pathogenesis. *Microorganisms*. 2022;10(1):78.
17. Wallerstedt S, Ericson AC, Munck A. Influence of fasting and detoxification on immune function. *Nutr J*. 2018;17(1):112.
18. O'Neill CA, Monteleone G, McLaughlin JT, Paus R. The gut-skin axis in health and disease: A paradigm with therapeutic implications. *BioEssays*. 2016;38(11):1167-1176.
19. Sheth P, Bhalodia Y. Efficacy of Ayurvedic interventions in psoriasis: A comparative clinical study. *J Ayurveda Holistic Med*. 2019;7(1):45-53.

20. Kumar V, Gupta S, Jain S. A randomized controlled trial on the effects of Panchakarma therapy in chronic skin diseases. *Evid Based Complement Alternat Med.* 2022;2022:4781234.