



## Therapeutic approaches and clinical outcomes in Ayurvedic management of Ekakushtha (Psoriasis) : A Case Report

Brahmbhatt S<sup>1\*</sup>, Taviad K<sup>2</sup>, Kalsariya B<sup>3</sup>

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<sup>1\*</sup> Saurav Brahmbhatt, Post Graduate Scholar, Upgraded Department of Rasashastra and Bhaishajya Kalpana, Government Ayurved College Hospital, Vadodara, Gujarat, India.

<sup>2</sup> Krushnkumar Taviad, Assistant Professor, Upgraded Department of Rasashastra and Bhaishajya Kalpana, Government Ayurved College Hospital, Vadodara, Gujarat, India.

<sup>3</sup> Bharat Kalsariya, Professor and Principal, Upgraded Department of Rasashastra and Bhaishajya Kalpana, Government Ayurved College Hospital, Vadodara, Gujarat, India.


**Background:** Ekakushtha, a type of Kshudra Kushtha attributed to Vata and Kapha Dosha imbalance, shares clinical similarities with psoriasis - a chronic, non-communicable condition causing significant morbidity and negatively impacting the quality of life.

**Methods:** A 64-years-old male presented with pruritic, dry, scaly lesions progressing to thick, erythematous patches across the abdomen, diagnosed as Ekakushtha at the OPD of Rasashastra and Bhaishajya Kalpana, Government Ayurved Hospital, Vadodara. The therapeutic approach involved oral ingestion of Panchatikta Ghrita Guggulu, Triphala Guggulu, Gandhaka Rasayana, and morning administration of a combination of Amalaki, Guduchi and Haridra Swarasa, alongside the local application of Gandhaka Malahara. The patient's response was assessed over eight weeks using the Auspitz sign, PASI score, symptom improvement, and patient-reported outcomes.

**Results:** Significant reduction in inflammation, itching, and scaling was observed, with substantial lesion improvement noted. The treatment regimen, administered for eight weeks with four weeks of follow-up, was well-tolerated without adverse effects. He was observed for twenty-four weeks after follow-up and no recurrence has been observed.

**Conclusion:** This case study demonstrates effective management of Ekakushtha using Ayurvedic therapies including Panchatikta Ghrita Guggulu, Triphala Guggulu, Gandhaka Rasayana, and Gandhaka Malahara, resulting in marked clinical improvement and no recurrence at twenty-four weeks post-treatment. Thus, it can be concluded that Ayurvedic treatments seem to be effective options in the management of Ekakushtha.

**Keywords:** Ayurved, Case report, Gandhaka Rasayana, Panchatikta Ghrita Guggulu, Rasashastra, Skin disease, Triphala Guggulu

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## Introduction

All skin conditions are grouped under *Kushtha Roga* category in *Ayurvedic* classics. The word *Kushtha* itself suggests, a disease that causes marked disfigurement or deformity of skin.[1] It is classified into two main categories: *Mahakushtha* (major skin diseases) and *Kshudra Kushtha* (minor skin diseases). Among the 18 types of *Kushtha*, seven belong to *Mahakushtha* and eleven are classified as *Kshudra Kushtha*. It is a disorder influenced by all three *Dosha*[2], commonly found in individuals who lead an unhealthy lifestyle. It is categorized within *Ashtamahagadavyadhi*, a group of eight serious disorders.[3] *Ekakushtha* is a type of *Kshudra Kushtha* attributed to *Vata* and *Kapha Dosha* imbalance. It manifests with symptoms including *Aswedanam* (Anhidrosis), *Mahavastu* (extensive lesions), *Matsyashakalalopamam* (skin scaling resembling fish scales), and *Aruna Varna* (skin discolouration) [4]. It exhibits clinical similarities to psoriasis - a chronic, non-communicable condition that significantly impacts quality of life.[5]

Psoriasis affects between 0.09% to 11.4% of global population. In India, psoriasis affects between 0.44% to 2.8% of population, with a prevalence twice as high in males compared to females. The majority of patients first present with condition during their third or fourth decade of life. [6] Thus, psoriasis is a widespread skin disorder with its exact cause remaining unknown. However, it is believed that genetic, environmental, dietary, and lifestyle factors may play a role in its onset. The condition worsens due to factors such as disrupted gut flora, physical injury, and emotional stress.[7] It is a persistent inflammatory skin condition marked by well-defined, red, scaly plaques, commonly found on extensor surfaces, scalp and nails. Some of most common medicines being used in management of psoriasis are Cortico-steroids (betamethasone, clobetasol, prednisolone etc.), Salicylic acids, methotrexate, cyclosporin and anti-fungal drugs (Fluconazole, ketoconazole, itraconazole etc).[8]

Modern medicine offers limited therapeutic options due to its recurrent nature.[9] *Ayurveda*, however, provides a holistic approach focusing on balancing *Dosha*. In *Ekakushtha*, treatment involves addressing seven *Dushya* [10] (*Saptako Dravya Samgraha - Tridosha, Rakta, Mamsa, Twak & Ambu*) through *Shodhana* & *Shamana Chikitsa* therapies.

Present case report aims to assess therapeutic approaches & clinical outcomes of *Ayurvedic* management in treating *Ekakushtha*, offering detailed case report to guide future research & clinical practice.

## Case Report

### Case Presentation

On 27 September 2023, 64-years-old married male presented with OPD no. 22338 came to outpatient department of Rasashastra & Bhaishajya Kalpana at Government Ayurved Hospital, Vadodara, Gujarat, India. Patient was of lower middle-class socio-economic status, resides with his family in Vadodara & works in rural farming environment. He reported pruritic, dry, scaly lesions that had evolved into thick, red erythematous patches covering his abdomen, with chronicity of more than two years (Figure - 1). Upon clinical examination & evaluation, he was diagnosed with *Ekakushtha*. As he was farmer, he was not convinced of *Shodhana* (purification therapy), So, *Shamana Chikitsa* was given to him (palliative treatment).

### Treatment History

The patient underwent specific therapy for *Ekakushtha* (psoriasis) and had a history of allopathic treatments, including prednisolone 5 mg BD, fluconazole 150 mg OD, and ketoconazole ointment for four weeks, which provided symptomatic relief. However, symptoms recurred after discontinuation of these medications. The patient presented with pruritic, dry, scaly lesions that progressed to thick, erythematous patches on abdomen. Condition had been chronic for over two years. There were no known coexisting conditions (K/C/O). The patient reported a history of excessive consumption of spicy and sour foods and significant sun exposure. No relevant family history of psoriasis or similar dermatological conditions was identified.

### Examinations and measures

The Patient was firstly assessed with general examinations such as physical examination, *Dashavidha Pariksha*, and *Ashtavidha Pariksha*. Specific examinations were done and assessed using criteria such as *Matsyashakalopama* (scaling), *Krishna-Arunavarna* (discoloration), *Aswedana* (absence of perspiration), *Mahavastu* (lesion extent), *Daha* (burning sensation), *Kandu* (itching),

Auspitz sign and PASI score (Psoriasis Area Severity Index). After examinations and assessments, patient was diagnosed with *Ekakushtha* (Psoriasis).

**General Examination**

The patient had a pulse rate of 72/min, blood pressure of 130/80 mm/Hg, a temperature of 98.8°F, and a respiratory rate of 20/min; his height was 168 cm, weight was 67 kg, and BMI was 23.7 kg/m<sup>2</sup>, with clear conjunctiva, a white-coated tongue with no oedema in any part of the body.

**Dashavidha Pariksha**

The *Dashavidha Pariksha* revealed following findings for patient: *Prakriti* (constitutional type) was identified as *Vata Kapha*. The *Vikriti* (disease state) was characterized by *Saptako Dravya Samgraha* (*Tridosha, Rakta, Mamsa, Twak* and *Ambu*). *Sara* (tissue quality) was *Medasara*. *Samhanana* (body structure) was assessed as *Madhyama*. *Pramana* (body measurement) was considered *Madhyama*. *Satmya* (adaptability to diet and environment) was *Pravara*. *Satva* (mental strength) was categorized as *Madhyama*. *Ahara Shakti* (digestive strength) was *Madhyama*, while *Vyayama Shakti* (exercise capacity) was noted as *Pravara*. *Vaya* (age) was also evaluated as *Pravara*.

**Ashtavidha Pariksha**

The *Ashtavidha Pariksha* findings were as follows: *Nadi* (pulse) was *Vata Kapha*. Urine output was 4-5 times per day and 0-1 time per night. Stool was described as *Baddha* (constipated). The tongue was coated white. The voice was clear. The skin was noted as *Sheeta* (cool to touch). Vision was normal. The overall body structure (*Akriti*) was normal.

**Criteria of Assessment with scoring**

**1. Matsyashakalopama (Scaling)**

**Table 1: Assessment of *Matsyashakalopama* (Scaling) with scoring**

SN	Criteria	Scoring pattern	Score on screening day
1.	No Scaling	0	2
2.	Mild scaling by rubbing/by itching (scaling from some lesion)	1	
3.	Moderate scaling by rubbing/by itching (from all lesions)	2	
4.	Severe scaling by rubbing / by itching (from all lesions)	3	
5.	Scaling without rubbing / by itching (from all lesions)	4	

**2. Krishna-Arunavarna (Discoloration)**

**Table 2: Assessment of *Krishna-Arunavarna* (Discoloration) with scoring**

SN	Criteria	Scoring pattern	Score on screening day
1.	Normal coloration	0	2
2.	Near to normal which looks like normal colour to a distant observer	1	
3.	Reddish colouration	2	
4.	Slight black reddish discoloration	3	
5.	Dark black coloured discoloration	4	

**3. Aswedana (Absence of perspiration)**

**Table 3: Assessment of *Aswedana* (Absence of perspiration) with scoring**

SN	Criteria	Scoring pattern	Score on screening day
1.	Normal	0	4
2.	Improvement	1	
3.	Present in a few lesions	2	
4.	Present in all lesions	3	
5.	Absence of sweat in the lesion and uninvolved skin	4	

**4. Mahavastu (Extensive location)**

**Table 4: Assessment of *Mahavastu* (Extensive location) with scoring**

SN	Criteria	Scoring pattern	Score on screening day
1.	No lesions on Mahasthanama	0	2
2.	Lesion on partial part of hand, leg, neck, scalp, trunk, back, abdomen	1	
3.	Lesions on most of hand, leg, neck, scalp, trunk, back, abdomen	2	
4.	Lesions on the whole part of Mahasthanama (Vast area)	3	

**5. Mandala (circular lesion)**

**Table 5: Assessment of *Mandala* (circular lesion) with scoring**

SN	Criteria	Scoring pattern	Score on screening day
1.	No circular lesion	0	4
2.	Few circular lesions and smaller than a coin	1	
3.	Few circular lesions and big (larger) coin	2	
4.	More circular lesions and smaller than a coin	3	
5.	More circular lesions and bigger than a coin	4	

**6. Daha (Burning sensation)**

**Table 6: Assessment of Daha (Burning sensation) with scoring**

SN	Criteria	Scoring pattern	Score on screening day
1.	No burning Sensation	0	1
2.	Mild burning Sensation	1	
3.	Moderate burning Sensation	2	
4.	Severe burning Sensation	3	
5.	Very severe burning Sensation	4	

**7. Kandu (Itching)**

**Table 7: Assessment of Kandu (Itching) with scoring**

SN	Criteria	Scoring pattern	Score on screening day
1.	No Itching	0	3
2.	Mild Itching	1	
3.	Moderate Itching	2	
4.	Severe Itching	3	
5.	Very severe Itching	4	

**B. Shamana Chikitsa**

**Table 9: Details of given drugs during treatment**

SN	Drug	Dose	Duration of treatment	Duration of follow-up	Anupana	Kala
1.	Combination of Amalaki, Guduchi and Haridra Swarasa	20 ml	eight weeks	four weeks	-	Empty Stomach- morning
2.	Panchatiktaghrita Guggulu	5 tab. Once	eight weeks	four weeks	Luke warm water	Empty Stomach- morning
3.	Gandhaka Rasayana	2 tab. Thrice	eight weeks	four weeks	Luke warm water	After meal
4.	Triphala Guggulu	2 tab. Thrice	eight weeks	four weeks	Luke warm water	After meal
5.	Gandhaka Malahara	Once	eight weeks	four weeks	External application	At night
6.	Haritaki Churna for Koshtha Shuddhi	4 g	eight weeks	four weeks	Luke warm water	At night

**Result**

**Table 10: Details of the score of symptoms before and after treatment with follow-up**

SN	Complaints	BT (0 week)	After Treatment (8 weeks)	Follow up(4 weeks)
1.	Matsyashakalopamam	2	0	0
2.	Krishna-Arunavarna	2	0	0
3.	Aswedana	4	0	0
4.	Mahavastu	2	0	0
5.	Mandala	4	0	0
6.	Daha	1	0	0
7.	Kandu	3	0	0
8.	Auspitz sign	1	0	0
9.	PASI score	7	0	0

**Discussion**

*Ekakushtha*, an Ayurvedic classification for skin disorders resembling psoriasis, exhibits symptoms such as scaling, redness, and discomfort. Psoriasis affects a significant portion of the global population, with varying prevalence across regions, and its exact cause remains elusive.

**8. Auspitz sign**

**Table 8: Assessment of Auspitz sign with scoring**

SN	Criteria	Scoring pattern	Score on screening day
1.	Absent	0	1
2.	Less often bleeding	1	
3.	Often bleeding but in less amount	2	
4.	Often bleeding and excessive	3	

**9. PASI score (Psoriasis Area Severity Index)**

**Treatment Protocol**

**A. Nidana Parivarjana:** The patient was advised to avoid dietary substances that aggravate *Dosha* and induce symptoms.

This included abstinence from consuming heavy foods, incompatible food combinations, acidic foods, sesame, jaggery, excessive dairy products, etc.

Treatments often provide limited long-term relief due to recurrent nature. *Ayurveda* approaches *Ekakushtha* by focusing on balancing *Dosha* - particularly *Vata* and *Kapha*. The *Ayurvedic* approach to managing *Ekakushtha* focuses on restoring *Dosha* balance through detoxification and nourishing therapies. The comprehensive case presentation covers patient demographics, clinical history, symptoms, and prior allopathic treatments. This detailed account provides a thorough understanding of the patient's condition and treatment journey. The effectiveness of combined herbal and herbo-mineral formulations in alleviating psoriasis symptoms is demonstrated. The patient, a 64-year-old male with chronic, pruritic, scaly lesions, had previously experienced symptom relief with allopathic medications, but recurrence was observed. The *Ayurvedic* treatment protocol was meticulously outlined, specifying the use of remedies such as *Panchatiktaghrita Guggulu*, *Triphala Guggulu*, *Gandhaka Rasayana* and *Haritaki Churna* complemented by dietary adjustments (with proper *Deepana-Pachana*) and external applications (*Gandhaka Malahara*). Each treatment choice is justified about *Ayurvedic* principles of *Dosha* equilibrium and immune enhancement.

#### **Probable mode of action of drugs**

A combination of *Amalaki*, *Guduchi* and *Haridra Swarasa*, *Guduchi* and *Amalaki* was given in morning on an empty stomach. These herbs were chosen for their rejuvenating and immunomodulatory properties. *Amalaki* and *Guduchi* act as *Rasayana* and improve immune response of body.[11] *Guduchi* acts as *Deepana*, *Vata-Kaphahara* and *Raktadoshaghna*. Niraj Mendpara *et. al* concluded significant action of *Guduchi* in management of *Ekakushtha*. [12] *Haridra* possesses properties like *Shothahara*, *Kushthaghna*, *Varnya*, *Vranahara* and *Pramehahara*. [13] It has been proven that turmeric possesses antioxidant, antifungal, antibacterial, anti-inflammatory and immune-modulatory properties. [14] Fresh juice of *Amalaki*, *Guduchi* and *Haridra Swarasa* acts more beneficially as it retains all phytoconstituents and properties. So, this combination may help in fast acting, blood purification, and early healing of plaques and also reduces risk of recurrence and adverse drug reactions. *Panchatiktaghrita Guggulu* was selected for *Shamana* therapy because it is indicated in classes for *Kushtha*.

It contains *Panchatikita* herbs like *Patola* (*Trichosanthes dioica* Roxb.), *Nimba* (*Azadirachta indica* A. Juss), *Vasa* (*Adhatoda vasica* Linn Nees), *Kantakari* (*Solanum virginianum* Linn.) and *Guduchi* (*Tinospora cordifolia* Willd.) which are recognized for their strong anti-inflammatory properties. These ingredients are also effective in diminishing the inflammation linked with psoriatic lesions. It is widely used in the treatment of psoriasis, eczema and ulcers. Research shows that it is beneficial in skin disorders of *Vata* and *Kapha* predominance. [15] The impacts of *Vata* and *Kapha Dosha* are lessened by *Gandhaka Rasayana* because of its *Kushthaghna*, *Kandughna* and *Vata-Kaphaghna* properties. [16] *Triphala Guggulu* is mentioned in *Sharangdhara Samhita* which possesses *Shothahara* (reduction in swelling or inflammation), *Vrana Shodhana* (wound cleansing) and *Vrana Ropana* (wound healing) properties. [17,18] *Gandhaka*, the primary constituent of *Gandhaka Malahara*, plays a crucial role in promoting the healing and regeneration of skin tissues. This property is essential for effectively managing lesions associated with *Ekakushtha*. [19] *Haritaki Churna* given to the patient has a purgation effect. It cleanses *Koshtha* (Gastrointestinal Tract) and pacifies the *Pitta Dosha* of the body.

**Follow-Up:** The patient was followed up weekly for four weeks to monitor progress and adjust treatment as needed. After follow-up patient was observed for six months and no recurrence has been seen.

**Clinical Outcomes:** At the end of the eight-week treatment period, the patient reported a significant reduction in all the symptoms. Assessment of treatment outcomes includes both subjective (patient-reported symptoms) and objective measures (PASI score, Auspitz sign), providing a comprehensive evaluation. Remarkable improvements in symptoms and the absence of recurrence during the 6-month follow-up period underscore the efficacy of the treatment approach.

## **Conclusion**

This case report highlights the effectiveness of traditional *Ayurvedic* therapies in managing chronic skin conditions like *Ekakushtha* (Psoriasis). It underscores the potential of *Ayurvedic* principles to address complex dermatological issues and provides a basis for further research and clinical application in treating *Ekakushtha* and similar conditions.



**Consent:** The patient's consent was received for publishing this case report.

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**Conflict of Interest:** None declared

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