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Case Study

EXPLORING THE THERAPEUTIC POTENTIAL OF BHRINGARAJA (ECLIPTA ALBA HASSK) CHURNA IN EKA KUSTA (PSORIASIS)

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ABSTRACT

"Rooted in ancient Indian wisdom, Ayurveda, a holistic science of life, offers a unique approach to health and wellness through natural therapies and herbal remedies. Emphasizing individualized treatment, Ayurveda aims to balance the body's three fundamental energies (Vata, Pitta, Kapha) for optimal health and disease prevention." Psoriasis, known as Eka Kustha in Ayurveda, is a chronic autoimmune disorder characterized by hyperproliferation of the skin cells, leading to erythematous, scaly plaques that cause discomfort and affect patient's quality of life. From an Ayurvedic perspective, Eka Kustha is associated with imbalances in the Vata and Kapha doshas, as well as impurity in blood (Rakta dhatu) and aggravated toxins (Ama). Bhringaraja is praised for its multiple therapeutic properties, including balancing Kapha and Vata, promoting hair health, treating skin diseases like psoriasis, and offering general rejuvenation and strengthening benefits. It is recognized as a powerful herb in traditional Ayurvedic medicine. Present case report, A 52yrs old male patient presented with scaling, itching all over body predominantly upper and lower back for 8 months. The patient was treated with Bhringraja (Eclipta alba Hassk.) churna for period of 45 days, Patient got significant improvement after 45 days. The patient showed significant improvement in PASI score and quality of life with no adverse effects. The treatment protocol adopted based on the Ayurvedic principles, targeting the Vatakapha dosha predominance in Ekakusta. This case report highlights the effectiveness of Shamana oushadi in managing psoriasis and support further research to explore its potential as a complementary therapy.

INTRODUCTION

Ayurveda, the ancient science of life and healing, is rooted in a holistic philosophy that seeks to harmonize the body, mind, and spirit with the natural world. Originating in India over 5,000 years ago, Ayurveda is based on the balance of three fundamental bio-energies or *Doshas: Vata, Pitta,* and *Kapha.* These *Doshas* govern physiological functions, and their balance is believed to promote health, while imbalance leads to disease. Ayurvedic treatments focus on restoring this balance through personalized dietary practices, lifestyle modifications, and herbal therapies.

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The Charaka Samhita classifies skin diseases into two main groups: Maha Kustha (major skin diseases) and Kshudra Kustha (minor skin diseases)[1]. The text emphasizes that skin diseases are caused by the imbalance of the three Doshas- Vata, Pitta, and Kapha- and their effect on the four factors: Rasa (plasma), Rakta (blood), Mamsa (muscle), and Lasika (lymph). Ekakusta, specifically, is categorized under Kshudra Kustha. It is described as a condition where the skin becomes dry, thickened, and covered with silvery scales. The imbalance of Vata and Kapha doshas is primarily responsible for this condition. The Charaka Samhita outlines the etiology. symptomatology, and treatment of Ekakusta, focusing on restoring the balance of the Doshas through dietary modifications, herbal treatments, and cleansing procedures.

Eka Kushta

Charka Quotes in Chikitsa sthana 7th chapter *Asvedana* maha vastu Yat matsya kalopamam.^[2]

Asvedana - Absence of sweating

Mahayasthu-Extensive localisation and

Yat matsya kalopamam - Resembles the scales of fish.

It occurs due to increase of Vata and Kapha Dosha

Psoriasis is a chronic, non-communicable, auto immune skin condition characterized by the rapid production of new skin cells. This accelerated cell turnover leads to the accumulation of thick, scaly patches on the skin, known as plagues[3]. These plagues are typically red, inflamed, and covered with silvery-white scales. Psoriasis can affect any part of the body, but it is most commonly found on the scalp, elbows, knees, and lower back. The prevalence of psoriasis in India is between 0.44% and 2.8% [4]. The exact cause of psoriasis is not fully understood, but it is believed to involve a combination of genetic and environmental factors. Immune system dysfunction plays a central role, with T cells mistakenly attacking healthy skin cells. Common triggers include skin injuries, infections, certain medications, stress, and lifestyle factors such as smoking and alcohol consumption.

Bhringaraja (Eclipta alba Hassk.) is a commonly used drug for the purpose of cosmetics as well as therapeutics and is easily available. Bhringaraja is considered as best Keshya dravya Whole plant has been used in many formulations from the time of *Puranas* to till date. In *Samhitas* and *Nighantus*, Twachva and Rasavana karmas have been attributed to Bhringaraja. It finds its reference in the treatment of Charmavikara, Pandu, Palitya, Kushta, Vrana etc. Sharangadhara^[5] while explaining *Rasayana* according to age, mentions Bhringaraja as Rasayana to prevent skin aging. It has been screened for many pharmacological activities. Bhringaraja contains bioactive compounds with anti-inflammatory, antioxidant, and immunomodulatory properties.

MATERAILS AND METHODS

Case Report

Chief Complaint: Patient complaining of multiple silvery scaly lesions, all over body predominantly upper and lower back.

Associated complaints: Itching and scaling

History of present Illness

A 52 yrs old male patient, presented to OPD of Dravyaguna Govt. Ayurvedic Hospital, Erragadda, Hyderabad, on 27 Feb 2024. He is complaining of Multiple silvery scaly lesions, all over body predominantly upper and lower back associated with itching, scaling for 8 months. Patient had no history of

any previous medications. However his symptoms worsened in winter season.

History of past Illness

Not a known case of HTN, T2DM, CAD, CKD

Family history: Nothing significant

Table1: Subject's Personal History

Name: abc	Bowel: Normal
Age: 52 years	Appetite: Normal
Marital status: Married	Bala: Madhyama
Occupation: Daily wage labour	Height: 155cm
Diet: Mixed	Weight: 62kg

Table 2: Asta Sthana Pareeksha

Nadi	Pitta Kaphaja
Mala	Prakruta
Mutra	Prakruta
Jihwa	Ama
Shabda	Prakruta
Sparsha	Prakruta
Drik	Prakruta
Akriti	Madhyama

Table 3: Dashavidha Pareeksha

Prakriti	Pitta kapha	
Vikriti	Vata pradhana Kapha	
Sara	Madhyama	
Samhanana	Susamhata	
Satmya	Madhura pradhana sarvarasa	
Satva	Madhyama	
Vyayama shakti	Madhyama	
Ahara Shakti	Abhyavaharana shakthi – Madhyama Jarana shakthi – Avara	
Pramana	Height – 155cm Weight – 62kg	
Vaya	Vruddha	

Table 4: Nidana Panchaka

Nidana	Katu, Amla pradhana ahara sevena frequently, Adhyashana
Poorva rupa	Itching and scaling
Rupa	Multiple silvery scaly lesions
Upashaya & Anupashya	Nothing specific

Table 5: General Examination

Pallor - Absent	Blood pressure - 110/80 mm of Hg
Icterus - Absent	Temperature - 37°Celsius
Oedema - Absent	Pulse rate - 72/min
Clubbing - Absent	Respiratory rate: 18/min
Lymphadenopathy - Absent	

Table 6: Integumentary System Examination

- · g ·		
Size of the lesion	5-6 cm	
Shape of the lesion	Irregular	
Color of the lesion	Silver red	
Edges of the lesion	Not raised	
Surface of the lesion	Indurate	

Assessment Criteria

PASI Score [6]

Intensity	Absent (Score 0)	Mild (Score 1)	Moderate (Score 2)	Severe (Score 3)	Very Severe (Score 4)
Erythema (Redness)	Clear skin	Mild redness	Moderate redness	Severe redness	Very severe redness
Induration (Thickness)	Clear skin	Mild thickness	Moderate thickness	Severe thickness	Very severe thickness
Desquamation (Scaling)	Clear skin	Mild scaling	Moderate scaling	Severe scaling	Very severe scaling

Dose

Internal (Antah parimarjana): 3 gm of whole plant powder given, half an hour before food, twice a day with water orally.

External (Bahir parimarjana): whole plant powder with water as required as Pradeha for 4 hours.

OBSERVATIONS AND RESULTS

S.No	Clinical features	Before treatment	After treatment
1	Anhydrous	2	0
2	Scaling	2	0
4	PASI Score	11.6	5.7

The table shows a comparison of clinical features before and after treatment

Anhydrous

- Before treatment: The score was 2.
- After treatment: The score dropped to 0.
- Interpretation: The treatment appears highly effective in addressing anhydrous (dryness), as it completely eliminated the condition.

Scaling

- Before treatment: The score was 2.
- After treatment: The score dropped to 0.
- Interpretation: The treatment successfully resolved the issue of scaling, as indicated by the reduction to a score of 0.

PASI Score

- Before treatment: The PASI score was 11.6.
- After treatment: The PASI score reduced to 5.7.
- Interpretation: There was a significant reduction in the PASI (Psoriasis Area and Severity Index) score, indicating a marked improvement in the severity and extent of the condition being treated.

Overall, the data suggests that the treatment was effective in reducing the clinical features listed, demonstrating a notable improvement in the patient's condition.

PASI Score before Treatment

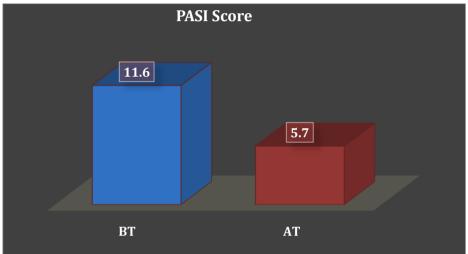
PASI Score after Treatment

PASI: 11.6

	Head <10%		Arms <10%	
Area				
Erythema (redness)	1		1	
Induration (thickness)	1	\ ! /	1	/
Desquamation (scaling)	2		2	
	Trunk		Legs	
Area	50-69%		<10%	
Erythema (redness)	2		1	
Induration (thickness)	2	/	1	/ <u> </u> \
Desquamation (scaling)	3		3	

PASI: 5.7

	Head	Arms	
Area	<10%	<10%	
Erythema (redness)	0	1	
Induration (thickness)	1 /[\	1	
Desquamation (scaling)	1	1	
	Trunk	Legs	
Area	30-49%	<10%	
Erythema (redness)	1	0	
Induration (thickness)	2	1 / \	
Desquamation (scaling)	2	0	





Showing before and after treatment of upper back

DISCUSSION

This case study presents an insightful exploration into the therapeutic potential of *Bhringaraja* (*Eclipta alba* Hassk) *Churna* in the treatment of *Eka Kusta* (psoriasis). Psoriasis, a chronic inflammatory skin condition characterized by reddish silvery, scaly plaques, presents a significant

therapeutic challenge due to its complex pathogenesis and multifactorial etiology. *Bhringaraj* botanically known as *Eclipta alba* Hassk, is a prominent herb in Ayurvedic medicine, traditionally utilized for its hepato-protective, anti-inflammatory, and rejuvenating properties. The use of *Bhringaraja*

Churna in this case study is grounded in its holistic approach, aiming to address not only the symptomatic manifestations of psoriasis but also underlying systemic imbalances.

The clinical outcomes observed in this study are notable. The significant reduction in anhydrous and Scaling scores to zero post-treatment highlights the herb's efficacy in alleviating dryness and desquamation. This can be attributed to the herb's moisturizing and anti-inflammatory properties, which help restore skin barrier function and reduce inflammatory responses. The reduction in PASI Score from 11.6 to 5.7 further substantiates the therapeutic potential of Bhringaraja Churna. The PASI Score is a widely accepted measure of psoriasis severity, encompassing lesion characteristics and extent. The observed improvement indicates a substantial reduction in both the severity and extent of psoriatic lesions, underscoring the herb's effectiveness in managing the condition. Bhringaraja Churna efficacy may be synergistically enhanced by dietary and lifestyle modifications recommended alongside Avurvedic treatments, which aim to balance the body's Doshas. This integrative approach may contribute to more sustainable therapeutic outcomes. However, while the results are promising, they are derived from a single case study, necessitating caution in generalizing the findings. Further research involving larger, controlled studies is essential to validate these preliminary observations and elucidate the precise mechanisms through which Bhringaraja exerts its therapeutic effects. In conclusion, this case study suggests that Bhringaraja (Eclipta alba Hassk) Churna has potential as a complementary therapeutic agent in the management of Eka Kusta (psoriasis). The significant clinical improvements observed warrant further investigation, offering a potential avenue for integrative treatment approaches management.

The case study demonstrates that *Bhringaraja* (Eclipta alba Hassk) Churna shows promise as an effective complementary treatment for Eka Kusta (psoriasis). The notable reductions in clinical features such as Anhydrous and Scaling (both improving to a score of 0) and the significant decrease in the PASI score from 11.6 to 5.7 suggest that this Ayurvedic herb can substantially improve the symptoms of psoriasis. The holistic nature of Ayurvedic treatments, which often include lifestyle and dietary recommendations, likely enhances the efficacy of Bhringaraja Churna. However, the findings are based on a single case study, highlighting the need for further research involving larger sample sizes and controlled studies to validate these preliminary results and better understand the mechanisms of action.

Probable Mode of Action

The action on the body is explained and understood on the level of *Rasa Panchaka* of the drug [7].

Rasa	Katu Tikta
Guna	Laghu, Ruksha
Veerya	Ushna
Veepaka	Katu
Dosha Karma	Kaph vata Hara

Bhringaraja (Eclipta alba) works on the Doshas involved in Ekakusta (psoriasis) by balancing Vata and Kapha doshas.

Rasa (Taste): Bhringaraja has a Katu (pungent) and Tikta (bitter) taste, which helps in reducing Kapha. Tikta rasa which decrease Pitta dosha results in decrease of erythema (redness).

Guna (Property): It is *Laghu* (light) and *Ruksha* (dry), *which* helps in reducing the heaviness and moisture associated with *Kapha*.

Veerya (Potency): The herb is *Ushna* (hot), which helps in reducing the *Sheetha* associated with *Vata*. *Ushna veerya* drugs can dilate sweat glands and increase sweat production which results decrease of *Aswedhnam*.

Vipaka (post-digestive effect): The post digestive effect is *Katu* (pungent), which further helps in reducing *Kapha*.

Prabhava (Special potency): Bhringaraja is known for its unique ability to nourish and rejuvenate the skin, making it particularly effective for skin conditions like psoriasis.

By balancing these *Doshas, Bhringaraja* helps in reducing the symptoms of *Ekakusta*, such as scaling, redness, and inflammation. *Eclipta alba (Bhringaraja)* contains several bioactive phytoconstituents that contribute to its therapeutic effects in psoriasis.

Probable Mode of Action Modern Aspect[8]

- Coumestans: The primary active compound in Eclipta alba is wedelolactone, a coumestan derivative. Coumestans exhibit anti-inflammatory and antioxidant properties, which help reduce inflammation and oxidative stress in psoriatic lesions.
- Flavonoids: *Eclipta alba* contains flavonoids like luteolin and apigenin. These flavonoids have antioxidant and anti-inflammatory effects, which help in reducing the redness, scaling, and inflammation associated with psoriasis.
- Triterpenes: Compounds like ursolic acid and oleanolic acid are present in *Eclipta alba*. Triterpenes have anti-inflammatory and immunomodulatory properties, which help in

- managing the immune response and reducing inflammation in psoriatic skin.
- Phenolic Compounds: These compounds exhibit antioxidant properties, which help in neutralizing free radicals and reducing oxidative stress in the skin.
- Saponins: Saponins have anti-inflammatory and antimicrobial properties, which help in reducing inflammation and preventing infections in psoriatic lesions.
- > Steroids: *Eclipta alba* contains stigmasterol, a phytosterol with anti-inflammatory and immunomodulatory properties, which help in managing psoriasis symptoms.

CONCLUSION

The case study demonstrates that *Bhringaraja* (Eclipta alba Hassk) Churna shows promise as an effective complementary treatment for Eka Kusta (psoriasis). The notable reductions in clinical features such as anhydrous and scaling (both improving to a score of 0) and the significant decrease in the PASI score from 11.6 to 5.7 suggest that this Ayurvedic herb can substantially improve the symptoms of psoriasis. The results indicate that *Bhringaraja Churna* may help restore skin hydration and reduce inflammation, leading to a marked improvement in the overall severity and extent of psoriatic lesions. The holistic nature of Ayurvedic treatments, which often include lifestyle and dietary recommendations, likely enhances the efficacy of Bhringaraja Churna. However, the findings are based on a single case study, highlighting the need for further research involving larger sample sizes and controlled studies to validate these preliminary results and better understand the mechanisms of action. In conclusion, Bhringaraja

Churna holds potential as a therapeutic agent in the integrative management of psoriasis, warranting further scientific exploration to establish its efficacy and safety.

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