

# MANAGEMENT OF PSORIASIS BY HERBAL COMPOUND: A CASE REPORT

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## ABSTRACT

Psoriasis is one of today's most common dermatological disorders and chronic skin disorders. Although this disease is not infectious, it is also a source of social disgrace. Patients are also segregated from fears of rejection from society. Psoriasis is characterized by occasional flare-ups with distinctly outlined red patches coated with a silvery, flaky base. Almost all skin disorders brought under one word, i.e. Kushta, in Ayurveda. Under this one variation of Kshudra Kushta is Eka Kushta, whose signs and symptoms correlate with Psoriasis. Aswedana, Mahavastu, Mastya Shakalopama are the features listed by Acharyas for Ek-kushta. In Psoriasis, relapsing nature is most common, indicating that long-term medication is required. In this case study, oral and medicinal drugs Lepa were administered to a patient diagnosed with Psoriasis for three months. The assessment was made on arbitrary parameters and the conclusion was obtained and it was concluded that, in the case of Psoriasis, the herbal compound had a significant gain in the relief of the symptoms of Psoriasis.

**Key words:** Kushta, Ek-kushta, Psoriasis, Panchatikta Ghrita guggulu, Khadirarista, Lepa.

## INTRODUCTION

Psoriasis is one of today's most prevalent dermatological diseases and chronic skin disorders. Although this disease is not infectious, it is also a source of social distress. Patients are also segregated from fears of rejection from society. Psoriasis is characterized by occasional flare-ups with distinctly outlined red patches coated with a silvery, flaky base. About 3% of the world's population have a sort of psoriasis. The primary activity of the condition contributing to psoriasis occurs in the epidermis, the top five layers of the skin. Psoriasis is a chronic inflammatory and proliferative skin condition that has been clinically manifested as well-circumscribed, erythematous papules and plates coated with silvery scales usually located over the vast surfaces and scalp. Although particular structural and environmental causes are known to affect the disorder, they are sporadic in their path and are typically randomly accompanied by recovery and exacerbation of lesions without discernible trigger. Immune system dysfunction in the history of hereditary predisposition is thought to be at the center of the disease mechanism.

In people with psoriasis, keratinocytes replicate very easily and migrate from the basal layer to the surface in around 4 days. The skin cannot shed these cells rapidly enough to build up, leading to dense, dried patches or plaques. Silver, flaky patches of dead skin build up on the top of the plaques until they are shed. The underlying layer of the skin (dermis), which includes the nerves and blood and lymphatic vessels, gets red and swollen. On the basis of its presentation, Psoriasis can primarily be classified into four forms, namely- Plaque, Guttate, Erythrodermic, Pustular. Plaque psoriasis is characterized by well defined, non-inflammatory lesions covered by a uniform scale, while guttate is characterized by numerous, thin, circular, drop-like lesions with scaling.

Almost all skin disorders brought under one word, i.e. Kushta, in Ayurveda. Under this one variety of Kshudra Kushta is Eka Kushta, whose signs and symptoms coexist with those of Psoriasis. Kushta is Bahudoshaavastajanya vyadhi, has tridosha presence along with saptha dhatu, as its dusya psoriasis can be classified as Kitibha, Sidhma, Ek-kushta. Aswedana, Mahavastu, Mastya Shakalopama are the features listed by Acharyas for Ek-Kushta. Few additional explanations listed in Bhava prakasha give us a simple picture of its resemblance to Psoriasis. Matsya Shakalopama describes scaly skin lesions. In Bhavaprakasha, the Ek-Kushta skin lesions are Chakrakara (rounded) and Abhraka Patrasama, i.e. silvery like mica. These clinical characteristics are similar to those of psoriasis. Mahavastu applies to the presence of large regions. The characteristics of Ekakushta and Psoriasis are as follows:

**Ek-kustha**

Aswedanam

Mahavastum

Matsyashakalopam

**Psoriasis**

- The lesions of this disease are dry and rough.

- The lesions are located all over the body. The unaffected skin is abnormal.

- Well defined raised macules, papules and plaques of erythema found which are covered with Silvery scales.

Krishna-Aruna Varna - Lesions are elevated and erythematous, dense, non-indurated, the lesion becomes black color.

Kushtha, which is revealed through the skin, is recommended for external applications. After removal of Doshas from the body by Shodhana Karma and Raktamokshana, an alternative application medication should be used. Various ways of local implementation are recommended, such as Udvartana, Pralepa, Parisheka, Abhyanga, etc. Kshara Karma and Agada Karma are also recommended under the special case of Kushta. In short, it can be said that Kushtha treatment can be classified into three parts, i.e. treatment dependent on Doshas predominance, internal and external purification.

**CASE STUDY**

The purpose of this case study is to establish herbal preparation and long-term effects for Psoriasis patients. The investigator used past and physical assessment information to establish an individualized patient treatment strategy. Patient was tested for cardinal changes and related signs after 15 days of treatment, and the findings were reviewed before and after treatment.

**Instrumentation**

<b>Aswedanam (Anhidrosis)</b>	<b>Score</b>	<b>Mahavastum</b>	<b>Score</b>
Normal sweating	0	No lesion on Mahavastum	0
Mild sweating	1	Lesions on partial hand, leg, neck, scalp and back	1
Mild sweating after exercise	2	Lesions on most part of hand, leg, neck, scalp, trunk and back	2
No sweating after exercise	3	Lesions on whole part of Mahasthanam	3
Aswedanam in lesion and uninvolved skin	4	Lesions on whole body	4
<b>Matsyashaklapamam (Scaling)</b>		<b>Krushnac-aruna varna</b>	
No scaling	0	Normal coloration	0
Mild scaling by rubbing/itching	1	Near to normal which looks like normal colour to distant observe	1
Moderate scaling by rubbing/itching	2	Reddish coloration	2
Severe scaling by rubbing/itching	3	Slight black reddish coloration	3
Scaling without rubbing/itching	4	Deep black reddish coloration	4
<b>Srava (Discharge)</b>		<b>Kandu (Itching)</b>	
No discharge	0	No Itching	0
Mild discharge	1	Mild/ occasional itching	1
Moderate discharge	2	Moderate frequent itching	2
Severe discharge	3	Severe frequent itching which disturbs sleep and routine activities	3
<b>Rukshata (Dryness)</b>		<b>Mandala (Erythema)</b>	
No line on scrubbing with nail	1	Normal skin	1
Faint line on scrubbing with nail	2	Faint or near to normal	2
Lining and even words can be written on scrubbing with nail	3	Blanching + Red colour	3
Excessive rukshata leading to kandu	4	No blanching + Red colour	4
Rukshata leading to crack formation		Red colour + Subcutaneous	
<b>Daha (Burning Sensation)</b>		<b>Bahalatva (Epidermal thickening)</b>	
No burning sensation	0	No Bahalatva	0
Mild burning sensation	1	Mild thickening	1
Moderate burning sensation	2	Moderate thickening	2
Severe burning sensation	3	Very thick with induration	3

**PSORIASIS AREA SEVERITY INDEX (PASI) SCORE** - used to measure the severity and extent of psoriasis. If PASI>10, psoriasis is severe

**DERMATOLOGY LIFE QUALITY INDEX (DLQI)****DLQI SCORES**

- 0 – 1 : No effect at all on patient's life
- 2 – 5 : Small effect on patient's life
- 6 – 10 : Moderate effect on patient's life
- 11 – 20 : Very large effect on patient's life
- 21 – 30 : Extremely large effect on patient's life

If DLQI >10, psoriasis has significant impact

**BODY SURFACE AREA (BSA)** - Body surface area (BSA) affected can be classified as:

- Mild psoriasis : < 5% of BSA
- Moderate psoriasis : 5%-10% of BSA
- Severe psoriasis : > 10% of BSA.

If BSA>10, psoriasis is severe

**Patient description and historical examination findings**

**Case:** Forty-seven years old, female, homemaker, primary educated, middle-class, married, Hindu religion, patient visited OPD on 24/10/2019 with the following complaints: erythematous, scaly lesions all over the body, anhydrosis, slight black reddish colouring, moderate discharge, erythematous epidermal thickening over the last 4 years. The patient complained of mild pruritus and dryness at the lesion site. No joint stiffness, joint tenderness, swelling or modification of the nails. Patients have been treated with allopathic medications, such as oral and topical corticosteroid drugs, for over four years. But after some time, such a scaling, dryness, scratching and burning feeling reappears on the previous location. There is a very high negative effect on the quality of life of the patient. Patient is a known case of hypertension (3 years) and is on anti-hypertension treatment. No history of psoriasis in the family.

**HISTORY OF PRESENT ILLNESS**

- Morphology - Well defined, Dry and rough, raised & light red colored patches
- Duration - Four years
- Distribution - Widely distributed
- Affected area - Head, limb, trunk
- Pattern - Scattered patches (Generalized)
- Nature of disease - Chronic
- Course - Slow Progressive
- Triggering factors - Stress, injury of skin, infection, allergy, medication, depression
- Relieving factors - Seasonal factor
- Association - No association of any other cutaneous disorders

**Personal History:**

- Agni - Vishamagni
- Diet - Mixed
- Dietary habit - Vishamasana
- Dominant Rasa - Lavan, Katu
- Dominant Guna - Ushna, Snigdha, Guru
- Appetite - Normal
- Kostha - Madhyam
- Bowel frequency - 1-2 times/day
- Sleep - Disturbed due to dryness and itching
- Emotional make up - Depressed
- Addictions - Tea
- Nature of work - Physical
- Exercise - Irregular
- Gynecological History - Mensuration history – Irregular
- Obstetric history - No. of deliveries 2 (Normal 1, Caesarian section 1)  
No abortion/miscarriage  
Child – 1 Male and 1 Female

**General Examination:**

Pulse	-	84/min, Regular	B.P.	-	110/90 mm of Hg
Temperature	-	100 <sup>0</sup> F	Respiration	-	21/min
Height	-	151 cm	Weight	-	69 kg

**Test:**

Koebner's phenomenon	-	Present
Sensation	-	Intact
Auspitz & Candle grease Sign	-	Positive

**Blood Investigations:**

R.A. factor (Qualitative)	-	Negative
ESR	-	28 mm/hour
Serum Uric Acid	-	5.4 mg/dl
HB%	-	11.7 gm%
TLC	-	5600/cu.mm
DLC	-	N 61, L 28, M 2, E 9, B 0
Platelet count	-	271000/cu.mm
TSH	-	3.1 uIU/ml
Blood Sugar	-	FBS – 95 gm/dl, PP 136 gm/dl
Lipid Profile	-	Total cholesterol 218 mg/dl, LDL 112 mg/dl, HDL 38.6 mg/dl, Triglyceride 127 mg/dl, VLDL 24.5 mg/dl
LFT	-	Total Bilirubin 0.58 mg/dl, Albumin 5.1 gm/dl, Globulin 2.5 gm/dl, ALT 49 U/L, AST 44 U/L, ALP 107 U/L, Total protein 7.2 gm/dl
HbsAg test	-	Negative
HIV test	-	Negative
Mantoux test	-	Negative

**Treatment Schedule**

1. Abhyantar Snehapana – Panchatikta Ghrita 25 ml empty stomach with warm water
2. Tablet Panchatiktaghrita Guggulu – 2 BD for 1 month
3. Khadirarista 20 ml with equal quantity of water for 1 months
4. Manjistha, Haridra and Daruharidra lepa local application for 3 months

**OUTCOMES**

After three months of therapy, the general health of the patient improved. There was no need to take any extra anti-allergic medicine during treatment. Medical tests were measured on the basis of the interrogation and grading of the score pattern. There was a dramatic change in the criteria as follows:

S.No.	Parameters	Before Treatment	After Treatment
1	Aswedanam (Anhidrosis)	2	0
2	Mahavastum (Lesions)	3	2
3	Matsyashaklopamam (Scaling)	4	1
4	Krushnac-aruna varna (Coloration)	2	1
5	Srava (Discharge)	0	0
6	Kandu (Itching)	3	1
7	Rukshata (Dryness)	4	1
8	Daha (Burning sensation)	0	0
9	Mandala (Erythema)	3	1
10	Bahaltva (Epidermal thickening)	2	1
11	PASI	26.4	4.3
12	DLQI	24	8
13	BSA	>10%	5%

**DISCUSSION**

Psoriasis is one of today's most prevalent dermatological diseases and chronic skin disorders. Although this disease is not infectious, it is also a source of social distress. Patients are also segregated from fears of rejection from society. Psoriasis is characterized by occasional flare-ups with distinctly outlined red patches coated with a silvery, flaky base.



### Probable mode of action and efficacy of drugs –

**Panchatikta Ghrita** – (Bhaishajya Ratnavali Kushta Rogadhikar 114-117) contains Vyaghri, Vasa, Patol, Neem, Guduchi, Triphala and Ghrita. Most of the ingredients are Tikta Rasatmaka. It is used for Snehana karma in skin disorders.

**Panchatiktaghrita Guggulu** – (Bhaishajya Ratnavali Kustha Rog Chikitsa, 54/233-236, Astang Hridayam Chikitsa Sthana Vatavyadhi chikitsa 21/58-61) It pacifies Tridosha but mainly beneficial for Vata and Pitta dosha. It is an ancient herbal medication that help to purifies the blood, used for improvement of general health and immunity and aids in relieving a milieu of skin diseases. The mystic ingredients have anti-inflammatory, antitoxin, neuroprotective and antipruritic properties that go deep into the tissues and keeps the organs healthy and functioning seamlessly.

**Khadirarista** – (Bhaishajya Ratnavali 54/365-370, Sharangdhara Samhita, Madhyama Khanda 10/60-65) It is a polyherbal formulation known to purify blood, treat skin diseases and cure intestinal problems. It is used as an excellent blood purifier, antibacterial, anti-pruritic, anthelmintic, antimicrobial, anti-histaminic, anti-inflammatory, anti-allergic, digestive stimulant, removes toxins and is very beneficial in curing skin diseases. It flushes the toxins by boosting and elimination of wastes. It stops production of toxins and accumulation in the intestines thereby reducing toxin absorption into the blood. It soothes the skin and reduces itching in all types of skin diseases.

**Lepa** - Lepa prepared with the stem of Manjistha, the rhizome of Haridra and the dried stem of Daruharidra. **Manjistha**- Charaka classified Manjistha in Jwarahara, Varnya and Vishaghana mahakashaya in Sadhavirechaniya Adhyaya. Acharya Sushruta identified Manjistha in Priyangvadigana as being indicated for Pittashaman and having Sandhaniya and functioning as Vrana Ropana drugs. **Haridra**- It is mentioned in Lekhaniya, Kusthaghana, Kandughana, Krimighana mahakashaya in nature and is held in Shirovirechan Dravya Kalpa Sangraha in Vimansthan. Sushruta identified Haridra in Haridradi Gana for Stanya Shodhak gana and in Mustadigana for Kapha Sanshaman, Yonidosha, Stanyashodhak and Pachana. **Daruharidra**- Charaka has classified Daruharidra in Lekhaniya, Kandughana and Arshoghana. According to Acharya, Sushruta Daruharidra is named as Haridradi gana, Mustadi gana, Lakshadi gana.

The drugs mentioned here are mainly Varnya, Vishaghana, Pittashamak, Vrana Ropana, Krimighana, Kusthaghana and Kandughana in nature. Some are Jwarahara, Vishaghana, Sandhaniya, Stanya Shodhak, Pachana, Lekhaniya and Arshoghana. Drugs have anti-inflammatory, antioxidant, antiseptic and blood purification effects in operation. All of these drug properties are known to counteract the vitiation of Tridosha in Ek Kustha (Psoriasis). Ek-kustha is the primary disorder in Kaphavata. Upon topical application, the active concept of Lepa enters deeper tissues through Siramukha and Swedavahi strotas and stains it with its Sukshma and Tikshna properties. Due to its Ushna, Tikshna and Sukshma properties, it prevents obstruction in swedavahi strotas and helps local contaminants to flow through the Sweda, thereby clearing out micro channels. The Ushna Virya of Lepa and Snigdha Guna of its vehicle cause the pacification of Vata & Kapha, which forms the samprapti, thus alleviating the symptoms. Kandu was relieved on account of the Kandughna property of Haridra and Daruharidra. In brief, the medications work by blocking the inflammatory mechanism of wound healing properties and binds organic tissues with antiseptic-astringent properties and preserves the tone and turgidity of the skin.

### CONCLUSION

Psoriasis was known to be a psychosomatic condition. It is known to have been inherited as an autosomal dominant character with sporadic penetration. The precise cause of the disease is not clear, although several precipitating causes, such as environmental, immunological, genetic and psychological, have been identified. Relapsing nature is most prevalent in Psoriasis, which means that long-term care is required to accomplish this effect. The patient was treated with drugs with properties of Varnya, Vishaghana, Pittashamak, Vrana Ropana, Krimighana, Kusthaghana and Kandughana in nature. So, by means of their virtue, they help to cure psoriasis. The medications work by stopping the inflammatory mechanism of wound healing properties and bind the organic tissues with antiseptic-astringent properties and preserve the tone and turgidity of the skin.

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