



## Tuvaraka Rasayana in Psoriasis – A Case Report

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**Abstract:** Psoriasis is a multifactorial disorder influenced by both genetic and environmental factors. Weather and climate can induce or exacerbate the condition in many patients. Psychological or emotional stress is a commonly reported exacerbating factor in Psoriasis. The prevalence of psoriasis in India is estimated to be between 0.44% and 2.8%. The current treatment modalities for this condition are reported as not much effective as a lot of relapses occurs. In Ayurvedic literature most of the skin ailments are clustered under “Kushta” (a general terminology for skin ailments). In Kushta, skin ailments are explained based on their morphological characters and hence several modern dermatological conditions could be diagnosed as a specific Kushta based on their clinical presentation. Ayurvedic therapies including Sodhana, Samana and Rasayana prayoga seems clinically effective in many of such disorders with immunological relevance and having multifactorial causation. A 65year old male, presenting with complaints of itchiness over the head, whole back, lateral aspect of bilateral upper and lower limbs with marked skin lesions. Patient also had complaints of non-pitting oedema associated with burning sensation in bilateral lower legs since 3 months. He was a known case of Diabetes mellitus (since 4years) and was a chronic smoker. From the clinical features, the case was discussed under Kitibha Kushta having Vata-kapha dominance with vitiation of pitta up to an extent. He was administered with internal and external therapies along with Sodhana (bio-cleansing procedures) followed by administration of Tuvaraka rasayana. The total duration of the treatment was 41 days and the subject was assessed before and after treatment by PASI score. He positively responded to the proposed Ayurvedic management. Itching, oedema and burning sensation as well as PASI score got reduced.

**Key Words:** Kushta, Sodhana, Tuvaraka rasayana, Psoriasis, PASI score.

### 1. INTRODUCTION:

The disease *Kushta* (skin diseases) is one among the *Ashta mahagada* (Eight great disorders) and *santarpanajanya vyadhi* (diseases of over nutrition). The vitiation of the *tridoshas* and *sapta dhatus* (bodily tissues) occurs in *kushta*. Ayurveda explains eighteen types of *Kushta* under two categories named *Maha Kushta* (major skin diseases) and *Kshudra Kushta* (minor skin diseases), based on severity in their manifestations. Each one among in the categories is further explained in detail with the *dosha* involvement and skin appearances. The disease psoriasis is mainly compared with either *Eka kushta*, *Sidhma Kushta*, or *Kitibha Kushta*, which are of *Vata-Kapha* in origin. Ayurveda has given par importance to both *Sareera* and *manas* along with some codes and conducts of life which everyone should follow to be healthy both physically and mentally. In 21<sup>st</sup> century people have changed their lifestyle and this dramatic adoption of westernisation plays an important role in the vitiation of *tridosha* which further lead to vitiation of *dhatus* and results in the manifestation of different kind of life style diseases and skin disease is one among them. Among all skin diseases, Psoriasis is a chronic, noncommunicable, painful, disfiguring and disabling disease for which there is no complete cure and with great negative impact on patients' quality of life. It can occur at any age, and is most common in the age group 50–69. In 2014 the World Health Organization recognised psoriasis as a serious non-communicable disease and the accompanying WHO report (2016) emphasised the need to better understand the global burden of the disease. The reported prevalence of psoriasis in countries ranges between 0.09% and 11.4%, making psoriasis a serious global problem <sup>[1]</sup>. Indian Prevalence of Psoriasis is 0.44-2.8 % and it commonly affects individuals in their third or fourth decade with males being affected two times more common than females <sup>[2]</sup>.

Psoriasis is a very distressing disease both for the patients and physicians because of its pathogenic mechanism characterised by brownish coloured scaling, thickened-rough skin lesions, in severe cases covers entire body <sup>[3]</sup>.



Majority of the skin diseases in Ayurveda have been discussed under the broad heading of “Kushta”. The disease psoriasis is mainly compared with either *Eka kushta*, *Sidhma Kushta*, or *Kitibha Kushta*, which are of *Vata-Kapha* in origin. *Kitibha kushta* is considered as one of the *Kshudra kushta* having *Vata-kapha* dominance. In this case the symptoms of patient were closely similar to symptoms of *Kitibha kushta*, as the symptoms were *rooksha*(dryness), *kinakhara sparsha* (roughness), *kandu*(itchiness), *parusha*(hardness) and *asita varna* (blackish discolouration) closely resembles with symptoms of Psoriasis [4].

## 2. CASE HISTORY:

A 65 year old male apparently healthy before 4 years, developed itchiness over the scalp with exfoliation of skin and consulted an allopathic doctor and attained considerable relief. In the succeeding years, the symptoms aggravated and lesions were noted on bilateral arms and thighs, which was later relieved by allopathic treatment. He had Herpes zoster infection over right upper limb 5 months ago and recovered completely. Before 3 months he got admitted in a hospital with complaints of weakness of body and bilateral pedal oedema and also difficulty in appreciating touch, pain and temperature sensation over C7-T1 distribution. Later the case was diagnosed as Brachial plexopathy secondary to Herpes zoster infection and he underwent for the appropriate treatment. Since last 2 months patient complaints of increased itching over the head, bilateral upper and lower limbs, upper and middle back with marked skin lesion. Also bilateral pedal oedema, which was pitting in nature. Patient attended Kayachikitsa OPD of the institution, and was diagnosed as *Kitibha kushta* with predominance of *vata* and *kapha* with association of *pitta*. He was admitted to IPD for further management.

## 3. CLINICAL EXAMINATION:

On examination of Vitals - pulse rate was 70/min, regular and of full volume, Heart rate was 70/min, Blood Pressure was 140/90 mm Hg (right arm sitting), Respiration rate was recorded as 14/min and body weight was 69 Kg, having height of 154cm on measurement.

On integumentary systemic examination, lesions were blackish brown in colour, distributed as symmetrical and well demarcated; discoid shape in head, vastly spreaded in bilateral legs and back (small hard elevations), rough and hard to touch. Both Candle grease sign and Auspitz’s sign were positive.

## 4. INVESTIGATION DETAILS:

- Doppler study of both lower limb venous system shows bilateral saphenofemoral junction incompetent and several multiple incompetent perforators.
- Echo showed mild mitral regurgitation.
- Blood investigation showed normal leukocyte counts with elevated ESR, mild hyponatraemia and hypoalbuminemia with A/G reversal and elevated ALP.

## 5. MANAGEMENT:

Table no 1 : Internal medicines administered

Internal medicines	Dose	Rationale
<i>Gulucyadi kwatha</i> [5]	90ml, bd, before food	<i>Deepana – pacana, Rakta prasadana</i>
<i>Punarnavadi kwatha</i> [6]	90 ml, bd, after food	<i>Deepana – pacana, Sophahara</i>
<i>Chandraprabha vati</i> [7]	1 bd, after food	<i>Vatakapha hara, Kushtahara</i>
<i>Arogyavardhini vati</i> [8]	1 bd, after food	<i>Kushta nasaka</i>
<i>Vilwadi gulika</i> [9]	1 bd, after food	<i>Dushi vishaghna</i>
<i>Triphaladi choorna</i> [10] (5gm) + <i>Shankhapushpi choorna</i> [11] (3gm)	1 teaspoon at bedtime with luke warm water	Bowel regulation and stress management

Table no 2 - Procedures done

PROCEDURE	MEDICINE	DURATION	RATIONALE	OBSERVATIONS
<i>Sarvanga seka</i>	<i>Triphala Kashaya</i>	7 days	<i>Vranaghna, sophaghna antimicrobial</i>	Itching reduced, pedal edema reduced



			anti-inflammatory property	
<i>Snehapana</i> (50-190ml)	<i>Aragwada mahatiktaka ghrta</i> (50 -190ml)	6 days	<i>Kushtaghna, kandughna</i>	Itching reduced
<i>Deha abhyanga and ushnodaka snana</i>	<i>Eladi keram</i> <sup>[12]</sup> (100ml)	3 days	To bring back <i>dosha</i> from <i>sakha</i> to <i>koshta</i>	Lightness of body
<i>Virecana</i>	<i>Avipatti churna</i> <sup>[13]</sup> (25gm) + <i>Ichhabhedi rasa</i> <sup>[14]</sup> (1 tablet)	1 day	<i>Pitha hara, alpa vyapat, sukha virechaka</i>	11 vegas obtained Lightness of body
<i>Samsarjana kriya</i> – 4 days				
<i>Sirodhara</i>	<i>Takra</i> + <i>Aragwadhadi gana</i> <sup>[15]</sup> (2L)	7 days	<i>Vrana sodhana, vrana ropana, kandughna,</i>	Tension reduced, itching reduced, improvement in quality of sleep
<i>Nasya</i>	<i>Anu taila</i> <sup>[16]</sup> (1ml/nostril)	3 days	<i>Vataghna, brimhana</i>	Improvement in quality of sleep
<i>Virechana</i>	<i>Hareetakyadi sodhana</i> <sup>[17]</sup> (45gm)	1 day	Preparing the <i>koshta</i> for <i>rasayana</i> therapy	9 vegas Weakness observed
<i>Samsarjana kriya</i> – 1 day				
<i>Rasayana prayoga</i>	<i>Tuvaraka rasayana</i> <sup>[18]</sup> (3ml – 20ml)	8 days	<i>Kushtaghna</i>	Itching & pain reduced

## 6. ASSESSMENT:

Table 3 - PASI score – before and after treatment

Lesion score (Sum A)								
Plague characteristic	Head		Upper limb		Trunk		Lowe limb	
	BT	AT	BT	AT	BT	AT	BT	AT
Erythema	2	1	2	1	2	1	3	2
Induration/ thickness	1	0	2	0	2	0	3	2
scaling	2	1	1	0	2	0	2	2
Total	5	2	5	1	6	1	8	6
Area Score (Sum B)								
Degree of involvement of body region	Head		Upper limb		Trunk		Lowe limb	
	BT	AT	BT	AT	BT	AT	BT	AT
	3	1	2	1	4	1	5	3
Subtotals C (Lesion score A * Area score B)	BT	AT	B	ATT	BT	AT	BT	AT
	15	2	10	1	24	1	40	18
Body surface area	Head ( *0.1)		Upper limb ( *0.2)		Trunk ( *0.3)		Lowe limb ( *0.4)	
	BT	AT	BT	AT	BT	AT	BT	AT
Totals D	1.5	0.2	2	0.2	7.2	0.3	16	7.2

Figure 1 : Skin lesion – Bilateral lower limb (before and after treatment)



Figure 2 : Skin lesion - Upper back (before and after treatment)



Figure 3 : Skin lesion – Thigh (before and after treatment)



## 7. DISCUSSION:

Psoriasis is a common non-infectious disease of the skin characterized by the well-defined erythematous plaque with large adherent silvery scales. Its exact aetiology remains unknown but has a genetic predisposition, and certain stimuli provoke the psoriasis- like trauma, climate, post infection, adverse drug reaction, psychogenic stress, cigarette



smoking and alcoholism. Among all, stress is said to be the key stimuli. The primary psychological stress is acting as a precipitating factor in the causation psoriatic lesions. The presence of disease will then again become the causation of secondary stress, making the disease worst. *Kushta* is the term used in Ayurvedic text for most of the skin disorders including leprosy. The *Vata-Kapha* variety of *Kushta* shows resemblance with psoriasis in symptomatology

#### NIDANA:

Patient had increased stress, irregular diet pattern including excessive intake of non-vegetarian diet, pickles, and *lavana - katu rasa pradhana ahara*, extensive cigarette smoking and presence of *anya vyadhi* such as *prameha*, and *sthoullya* resulted in the manifestation of *Kitibha kushta*. After examining the patient, treatment protocol has been planned by the Ayurvedic principles including *samana*, *sodhana* and *rasayana*. Patient's chief complaints were itchiness over the head, whole back, lateral aspect of bilateral upper and lower limbs with marked skin lesion and non-pitting type of oedema associated with burning sensation in bilateral lower legs since last 3 months.

#### INTERNAL MEDICINES WITH MODE OF ACTION OF DRUGS:

*Cikitsa* was commenced with *Gulucyadi Kashaya* and *Punarnavadi Kashaya* which are not only meant to be *deepana-pachana*, but also *raktaprasadana* and *sophahara* respectively. By considering the formation of *Dushi visha* in *kushta*, *Vilwadi gulika* was administered because of its *vishaghna* property. According to *Rasaratnasamucchaya*, *Bhaisajyaratnavali* and *Bharata bhaisajya ratnakara* the drug *Arogyavardhini vati* possess the pharmacological action such as *Kushta nasaka* (can alleviate skin diseases). Also the drug is having the properties like- *pachana* (digestive), *deepana* (appetizer), *pathya* (wholesome for channel), *hridya* (cardio protective), *medonasaka* (can alleviate the diseases arising from hyperlipidemia), *malashuddhikari* (cleaning of waste materials from body), *Sarvaroga prashamani* (can alleviate all types of disorders from body) <sup>[19]</sup>. By considering the *vatakapha hara* property along with *pramehaghna*, *kushtaghna*, *agni deepana* property *Chandraprabhavati* was selected. Since the patient had constipation *Vara churna* mixed with *Sankhupushpi churna* was advised at bed time, it has action on neurological level also by decreasing the stress <sup>[20]</sup> along with regulation of bowel. During the same time external procedures started with *Sarvanga Triphala kashayadhara* for 7 days. During *dhara*, there had marked changes in itching.

#### SODHANA:

After the attainment of *nirama Lakshana* (optimal symptoms of digestion), the patient was given *Snehapana* with *Aragwadamahatiktaka ghrita* because of its *kushtaghna* property. The initial dose was 30 mL. This was continued for another 5 days up to the dose of 190 mL, followed by *abhyanga* with *Eladi keram* and *bashpa sweda* (oil massage and steam bath) which help to bring back the vitiated *dosha* from *sakha* to *koshta*. On the 4<sup>th</sup> day after the *abhyanga* and *bashpa sweda*, the *Virecana* therapy was done with *Avipathi churna* and *Ichhabhedi rasa*. *Ichhabhedi rasa* is basically a *rasaushadhi* commonly used for *Virecana* and is indicated in *Kushta* also, where strong purgation is needed. *Madhyama shudhi* was observed and *Samsarjana krama* given for 4 days.

#### SIRODHARA:

After *samsarjana krama*, the patient was subjected to *Sirodhara* with *takra* processed with *Aragwadadi gana kashaya*. Due to the dripping of medicated liquid over the forehead, prolonged and continuous pressure causes tranquillity of mind and reduces stress by modulating nerve stimulation <sup>[21]</sup> and also the addition of *Aragwadadi gana* in *takra* aids *sodhana* and *ropana* of *vra* and *kandughna*.

#### NASYA:

*Nasya* was performed with *Anutaila*. *Anutaila* is used for the purpose of *sodhana* (*sodhana nasya*) and which is *sukshma srtotogami* in nature. *Anutaila* reaches to minute channels and mobilises the *kaphadi dosha* from their *sthana*. During *nasya* improvement was noted in the quality of sleep.

#### TUVARAKA RASAYANA:

For *Rasayana* purpose, *Tuvaraka rasayana* was selected. Prior to the *rasayana* administration, the patient was subjected to *Hareetakyadi sodhana* which is typically indicated in *rasayana adhikara* of *Caraka Samhita* in order to make *koshtasuddhi*. *Tuvaraka rasayana* has properties such as *kaphavata hara*, *kushtaghna*, *krimighna*, *pramehaghna*, *kandughna* and possess *ubhayabhaga shodhana* property as it is a *sodya rasayana*. Because of its *ubhayabhagaharatva*, it cleanses the system and will pave a way for the formation of new skin. As per Ayurveda, the skin was formed from *rakta dhatu*. This was due to the effect of *Tuvaraka* on *Pitta sameekarana* (balancing the *pitta* by improving the *dhatvagni*). *Tuvaraka rasayana* administered with a starting dose of 3ml, then increased the dose up



to 20ml and advised *seeta jala* as *anupana*. Even though the patient was weak during *Rasayana prayoga*, there was improvement in his lesions in terms of itching, pain and area of spread.

## 8. CONCLUSION:

Modern medicine treats psoriasis with various medicaments like topical treatment such as application of corticosteroids, Keratolytics, Anthralin and Tars, Tazoterene analogues of Vit-D3. Systemic treatment consists of Cyclosporine, Retinoids, Methotrexate. Photo Therapy consists of UVB, PUVA, Bath PUVA and PDT. Despite their efficacy, these treatments have serious adverse effects like hepato-toxicity, pulmonary toxicity, pancytopenia, teratogenicity, metabolic disturbances and increased risk of malignancies.<sup>[22]</sup> *Ayurveda* have a great role in this arena, along with effective management of symptomatology, good quality life can be provide to the patients. Both the internal and external medications of *Ayurveda* helps to correct the complex pathophysiology of Psoriasis. This paper reports the efficacy of *Ayurvedic* management in Psoriasis. Further advanced researches has to be brought to light and the possibilities of the *Ayurvedic* treatment modalities in such cases has to be studied and reported for the benefit of the society, so as to improve the quality of life of the affected.

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