

## Management of Plaque Psoriasis Through Agadatantra Principles: A Case Report

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#### Abstract

Psoriasis is a chronic, relapsing dermatological disorder characterized by the presence of pink to erythematous plaques with overlying silver hyperkeratotic plaques, distributed on the scalp, postauricular skin, elbows, gluteal cleft etc. Plaque psoriasis is one among the common variety of psoriasis. Though it is manageable with difficulty, its relapsing nature remains a threat to the present management strategies. On the contrary in Ayurveda, a thorough analysis of condition, purification, rasayana and samana medicines proves to be effective in such conditions. A single case report of 42 year old male consulted in the Vaidyaratnam Ayurveda College OPD with presenting complaints as dry itchy and scaly silvery white lesions on chest, lower back, scalp and beard upon reddish patches with duration of two years. He was allergic to dantappala (Wrightia tinctoria) also. On examination the case was having positive candle grease and Auspitz sign with PASI score as 20.8 and DLQI as 21. The case was doignosed as ekakushta associated with severe pitta dushti and poor satva bala. The Doosheevisha chikitsa along with snehapana, svedana, vamana, virechana, takradhara, Shashtika annalepa and rasayana was done with proper medicines. The condition of the patient improved considerably by reducing the symptoms like erythema, dryness, itching, scaling and pain. The PASI score reduced to 2.3 and DLQI reduced to almost zero at the time of discharge. The further follow up has not reported any recurrence of the disease since two years. The proper understanding of the pathology through dasa vidha pareeksha and tracing out the vishaja nidanas can lead to a proper treatment plan. This will give successful management of similar conditions along with the enhancement of immunity to prevent or reduce the recurrence of the disease through principles of Agadatantra.

Keywords: Plaque psoriasis, Agadatantra, Doosheevisha, Rasayana

#### Introduction

Psoriasis is a chronic, inflammatory and hyper proliferative skin disease with a genetic basis that affects an estimated 125 million people worldwide. Plaque psoriasis is the most common variant, accounting for more than 80% of the psoriasis case.<sup>1</sup> According to World Health Organization (WHO), the worldwide prevalence of psoriasis is 2%–3%. In India, the prevalence of psoriasis varies from 0.44% to 2.88%. Psoriasis first appears during two peak age ranges, the first peak occurs in persons aged 16–22 years, and the second occurs in persons aged 57–60 years.

The recent outcomes suggest about the genetic and immunological mechanisms underlying the pathogenesis of psoriasis. Based upon this idea new biological treatments are also evolved for the management of psoriasis. The latest researches are suggesting that the psoriasis is not just associated



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with skin disease. Clinically relevant psychological and psychiatric comorbidity are also common and potentially need to be included as therapeutic intervention.<sup>2</sup> The risk factors of psoriasis can be both extrinsic as well as intrinsic. The extrinsic factors can be mechanical stress, air pollution, drugs, vaccination, infection smoking alcohol etc. whereas intrinsic factors may include metabolic syndrome, obesity, diabetes mellitus, dyslipidaemia, hypertension, mental stress etc.<sup>3</sup>

In Ayurveda the skin diseases are described under kushta roga prakarana, though other chapters like visarpa, kshudra roga etc. are also dealing with skin diseases. The symptoms of plaque psoriasis gives more resemblance with eka kushta mentioned among Kushta rogas.<sup>4</sup> While describing about the aetiology of kushta roga, Ayurveda emphasise on the psychosomatic and immunological involvement in pathology of skin diseases. So the Ayurvedic management may be more relevant in the cure of relapsing nature of psoriasis. Considering the latest research outcomes the role of exotoxins and endotoxins in the pathology of psoriasis can also be considered while managing through Ayurveda via dosheevisha and garavisha mentioned in Agadatantra.<sup>5</sup> This case report describes about one such management using Ayurveda especially Agadatantra principles.

#### **Case description**

A 42 year old male consulted in the OPD with presenting complaints as dry, itchy and scaly silvery white lesions upon reddish patches located on chest, lower back, scalp and beard with duration of two years. He had developed dandruff like white powdery lesions on his head seven years back. He consulted an allopathic physician and started using ointments and internal medicines which gave him temporary relief and he continued it for five years. Two years back bigger plaques appeared on scalp and beard and gradually new lesions started appearing on chest, lower back, inguinal regions, left thigh and both knees. Then he has undergone Ayurveda treatment. During the treatment the lesions got aggravated initially and later subsided considerably. But the lesions reappeared in the winter season. When it reappeared it was worse than the previous. The size of the lesions, itching, scaling and redness increased than previous.

#### Materials and methods

It is a single case study and the informed consent was collected from the patient in his own language. **Personal history:** 

- Diet: Non-vegetarian
- Addiction: Alcohol consumption occasionally
- Sleep: Normal
- Bowel: Normal

#### Examination

Inspection:

- Type of lesion silvery plaque lesions upon erythematous skin with scaling
- Location chest, lower back, inguinal regions, left thigh and both knees
- Local temperature slightly present
- Texture rough

#### Palpation

• Candle grease sign—Positive



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- Auspitz sign—Positive
- Koebner phenomenon-Positive
- Other examinations
- PASI Score 20.8
- DLQI 21

Table:1 Demographic details			
Name of patient	ABC		
Age	48		
Gender	Male		
IPD no.	200216		
Nationality	Indian		
Address	Thrissur		
Socioeconomic status	Upper Middle class		
Occupation	Manager		
-			

Sl. No.	Chief Complaints	Grade	Duration	
1	Dryness	4+	7 years	
2	Itching	3+	7 years	
3	Silvery scale skin	3+	7 years	
4	Redness	4+	7 years	
5	Plaques	3+	2 years	
6	Burning sensation	4+	2 years	

#### Samprapti

The patient was carrying out various kushta nidanas like excessive use of hot, sour and spicy foods, virudhaharas like chicken and curd, dry fast foods, fried foods, bakery items, drinking alcohol etc. for a long period of time (15-20 years). These food habits will vitiate pitta and produce rookshata in the body. This will in turn produce rasa and rakta dushti in the body. Moreover he was working abroad in a place where there are chances for vata pitta aggravation. Gradually the cells get deteriorated and symptoms of plaque psoriasis started. On due course of time certain less potent toxins in the form of food additives and environmental pollution got accumulated in the body. This can be considered as gara visha in Ayurveda. This may in turn get converted to dooshivisha. After the detection of this disease, though he has taken many treatments, none of them was focused on the detoxification of the doosheevisha present in the body.

#### **Treatment Advised**

As discussed in the samprapti, the case requires a detoxification followed by samana and rasayana chikitsa. As a part of purification the poorvakarmas like snehana and svedana should be carried out. Prior to snehana, proper rookshana has been done as described in the table 3.



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	Table:3 Treatment Plan Phase – 1				
<b>External Therapies</b>	Medicines	Dose	Duration		
Udwarthana	Triphala Choorna		3 days		
Takrapana (2 Litre)	Panchakola Choorna (40 3 days gm)				
Internal Medications	Dose	Time	Duration		
Chandanadi Kashayam	15ml+45ml lukewarm water	before food, bd	3 days		
Amrutha Guggulu	1-0-1 with kashayam	before food, bd	3 days		
Aragvadhasavam+	30ml after food, tds 3		3 days		
Panchakolasavam					

After attaining proper rookshana, snehapana with Mahatiktaka ghrta has been adviced (table 4).

Table:4 Snehapana with Mahatiktaka Ghrta		
Days	Dose	
Day 1	50ml	
Day 2	100ml	
Day 3	150ml	
Day 4	150ml	
Day 5	150ml	
Day 6	175ml	
Day 7	175ml	

After attaining samyak snigdha lakshana, snehapana has been stopped and vamana has been planned. The day before vamana, abhyanga and mild ooshma sveda has given. Vamana done with Kashaya mentioned in Ashtanga Hrdaya, kushta chikitsa. The vamana completed with madhyama vega and proper samsarjana krama has been adviced. After that, next phase of the treatment started with sarvanga takradhara for 7 days (table 5). Along with the sarvanga takradhara, snehapana continued with reduced dose. After the completion of 7 days, a virechana has given with Avipathi choorna.

Table:5 Treatment Plan Phase – 2					
External Therapies	Medicines	Dose	Duration		
Sarvanga Takradhara	Nimbadi choorna + Eladi choorna	Quantity sufficient	7 days		
Abhyanga	Gopatmajadi kerataila	Quantity sufficient	7 days		
Internal Medications	Dose	Time	Duration		
Mahatiktaka Ghrta	50ml	Before food, morning	7 days		
Chandanadi Kashayam	15ml+45ml lukewarm water	before food, bd	7 days		
Amrutha Guggulu	1-0-1 with kashayam	before food, bd	7 days		
Aragvadhasavam	30ml	after food, tds	7 days		

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Dushivishari Gutika	1-0-1	After food, bd	7 days

After the virechana, next phase of the treatment has been started with shashtika lepa boiled with mahatiktakam kashayam for 7 days (table 6). Along with the shashtika lepa, snehapana continued with reduced dose. After the completion of 7 days, another virechana has given with Avipathi choorna.

Table:6 Treatment Plan Phase – 3				
External Therapies	Medicines	Dose	Duration	
Shashtika lepa	Mahatiktaka kashaya	Quantity sufficient	7 days	
Abhyanga	Gopatmajadi kerataila	Quantity sufficient	7 days	
Internal Medications	Dose	Time	Duration	
Mahatiktaka Ghrta	50ml	Before food, morning	7 days	
Chandanadi Kashayam	15ml+45ml lukewarm	before food, bd	7 days	
	water			
Amrutha Guggulu	1-0-1 with kashayam	before food, bd	7 days	
Aragvadhasavam	30ml	after food, tds	7 days	
Dushivishari Gutika	1-0-1	After food, bd	7 days	

After the completion of three phases of treatment, rasayana chikitsa has been planned with tuvaraka rasayana. The medicine is in the form of taila which has been prepared as per the reference from Ashtanga Hrdaya, Uttarasthana, Rasayana chikitsa. The tuvaraka taila was administered to the patient in empty stomach in the morning in alternative days as described in the table 7. While administering the rasayana there will be vomiting and purgation for a while. The pathya followed was seeta yavagu and mudga yusha and rest was given in the alternate days. This rasayana chikitsa lasted for 10 days with a total of 5 doses in alternate days. While taking rasayana, all other medication was stopped.

	Table:7 Rasayana Chikitsa with Tuvaraka Taila			
Days	Dose	Remarks		
Day 1	5ml	Vamana - 1, Virechana - 0		
Day 3	10ml	Vamana - 2, Virechana - 2		
Day 5	15ml	Vamana - 3, Virechana - 0		
Day 7	15ml	Vamana - 2, Virechana - 1		
Day 9	15ml	Vamana - 2, Virechana - 2		

#### **Observation and Results**

After the completion of IPD treatment for one month the condition of patient was improved very well. The comparison of symptom analysis and PASI score assessment are given the tables 8 and 9. The quality of life was also improved with this treatment. The discharge medicines are given in table 10. Regular follow ups have been taken since 1 year. There is no relapsing of the symptoms since 1 year.



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Table:8 Symptoms Analysis						
Chief	Grade					
Complaints						
	Before After					
	treatment	Treatment				
Dryness	4+	1+				
Itching	3+	0				
Silvery scale skin	3+	0				
Redness	4+	1+				
Plaques	3+	0				
Burning	4+	0				
sensation						
Candle grease	Positive	Negative				
sign						
Auspitz sign	Positive	Negative				

 Table:9 PASI (Psoriasis Area Severity Index) Score

Characteristics								
		Before Ti	reatment			After t	reatment	
	Head	Arms	Trunks	Legs	Head	Arms	Trunks	Legs
Area	50-69%	10-29%	50-69%	30-49%	<10%	0%	30-49%	<10%
Erythema	1	1	3	2	1	0	1	0
Induration	1	1	3	2	0	0	1	1
Desquamation	2	1	3	2	0	0	0	0
PASI score		20	.8				2.3	

Table:10 Discharge medicines				
External Therapies	Medicines	Dose		
Abhyanga	Gopatmajadi kerataila	Quantity sufficient		
<b>Internal Medications</b>	Dose	Time		
Mahatiktaka Ghrta	1 tsp	Before food, morning		
Mahatiktaka Kashayam	15ml+45ml lukewarm	before food, bd		
	water			
Dushivishari Gutika	1-0-1	before food, bd		

#### Discussion

The plaque psoriasis is an autoimmune condition with a disorder of hyperkeratinization. The basic defect is rapid displacement of epidermis in psoriatic lesion.<sup>6</sup> Excessive intake of yogurt, non-vegetarian (fish, chicken), salty and sour foods acts as an aggravating factor in this disease.<sup>7</sup> The disease has become chronic due to the accumulation of various toxins (gara visha) entered into the body in the form of food, drinks, alcohol, pollution etc. These toxins when accumulated in the body will get converted into doosheevisha.<sup>8</sup> So the detoxification followed by vishahara drugs is inevitable in this case. As per the



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treatment principle of doosheevisha there should be vamana and virechana followed by doosheevishari agada.<sup>9</sup> Prior to poorvakarma such as snehana and svedana, rookshana karma has been given internally as takrapana and externally as udvarthana. The takrapana has done with panchakola choorna to improve the agni and udvarthana has been done with triphala choorna to bring more rookshata to body externally. For snehapana Mahatiktaka ghrta has been selected since the patient is having excessive pitta prakopa rather than itching. After snehana, vamana completed with samyak vega, followed by sarvanga takradhara has been given. The takradhara is a proven treatment modality to remove the psychological comorbidities in such cases.<sup>10</sup> The sarvanga takradhara mixed with nimbadi and eladi choorna will remove the dosha sesha present in the body. The snehapana was continued in a reduced dose in the view of doing virechana after 7 days. After the virechana sashtika lepa was adviced to improve the immunity of skin as rejuvenation. The shashtika for lepa was prepared with Mahatiktaka Kashaya so that this will give more rasayana effect on the tvak. The internal medications are selected to remove the residual doshas present in the body. The Chandanadi Kashaya mentioned in Bhaishajya ratnavali has been selected to pacify the excess paittika dushti in the form of erythema, burning sensation present in the body. Though the Kashaya is indicated for the mastishka vikaras, this medicine is having a good effect in severe pitta prakopa. The probable action will be upon the heat regulating centers in the higher level of CNS. Various scientific reports reveal the promising effects of Guggulu (Commiphora mukul Hook ex Stocks.) against different chronic diseases such as psoriasis, dermatitis, skin diseases, infectious diseases, arthritis, etc.<sup>11</sup> It is due to its anti-inflammatory and anti-oxidant effects by targeting multiple signaling pathways.<sup>12</sup> The Amruta guggulu will improvise the anti-inflammatory and raktasodhana effect of guggulu. The dooshivishari gutika has been selected to remove the dooshivisha from the body ater sodhana. This is based upon the treatment principle of doosheevisha. The Aragvadhasava was administered to remove the remaining kleda from the body there by kapha dushti can be controlled and the itching will subside. After the completion of all sodhana chikitsa, rasayana chikitsa need to be done. Among the rasayanas mentioned in Ashtanga Hrdaya, tuvaraka rasayana has been taken in this case. Tuvaraka taila is considered as one among the best rasayana for kushta roga.<sup>13</sup> The patient may vomit and purgate for multiple times while administering tuvaraka taila. That may be the reason the Acharya has advised to give the medication in empty stomach. The ideal dose for a day is 15ml. In order to avoid the complications, in this case the dose has started with 5ml and then increased in the coming days to 15ml. This methodology helped to assess the action of medicine and the tolerability of the patient. The PASI score at the time of discharge was reduced to 2.3 from 20.8. The follow up of the patient was done after one month and the patient has improved the quality of life. Only the scars in few areas are remaining in the body. The follow ups are continued for two years and there is no relapsing reported. This may be due to the proper detoxification and neutralisation of dosheevishas present in the body.

#### Conclusion

Though the plaque psoriasis is the most common type of psoriasis, the available management is not satisfactory. The recurrence of the disease is a huge concern among the medical fraternity. Since the psoriasis is having an autoimmune and psychosomatic nature, Ayurveda and its principle may give better results in the management. The purification therapies mentioned in Ayurveda can help to remove the morbidities accumulated in the body. The therapies like takradhara and shashtika lepa has given rejuvenation to the brain and the skin, so that this will bring the psychosomatic balance in the patient.



The tuvaraka rasayana along with the adoption of principles of doosheevisha into the treatment helped to remove the recurrence of the disease since two years.

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#### **Conflicts of interest**

There are no conflicts of interest.

#### **Photographs**

**Date of Admission** 



**Date of Admission** 





**Date of Discharge** 



After One month



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