



Modest Ayurvedic interventions in the management of Ekakustha w.s.r to Psoriasis: A Case Series

Tiwari S^{1*}, Biswas A², Tiwari S³, Barik S⁴, Mukherjee P⁵

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- ^{1*} Swadha Tiwari, Post Graduate Scholar, Department of Panchakarma, Institute of Post Graduate Ayurvedic Education and Research at SVSP Hospital, Kolkata, West Bengal, India.
- ² Anupam Biswas, Post Graduate Scholar, Department of Kayachikitsa, Institute of Post Graduate Ayurvedic Education and Research at SVSP Hospital, Kolkata, West Bengal, India.
- ³ Shomya Tiwari, Post Graduate Scholar, Department of Roga Nidan Evam Vikriti Vijnana, Institute of Post Graduate Ayurvedic Education and Research at SVSP Hospital, Kolkata, West Bengal, India.
- ⁴ Shawan Barik, Assistant Professor, Department of Panchakarma, Institute of Post Graduate Ayurvedic Education and Research at SVSP Hospital, Kolkata, West Bengal, India.
- ⁵ Pallabi Mukherjee, Associate Professor and HOD, Department of Panchakarma, Institute of Post Graduate Ayurvedic Education and Research at SVSP Hospital, Kolkata, West Bengal, India.

Psoriasis is a non-contagious, long-lasting autoimmune and chronic inflammatory skin disorder clinically characterised by erythematous, sharply demarcated papules and rounded plaques, covered by silvery micaceous scale. As per Ayurvedic texts, Psoriasis can be co-related with Ekakustha which is Vata-Kapha transcendent Kshudra Kustha. The prevalence of Psoriasis is between 0.44% and 2.8% in India and affecting up to 1% of world's population, with men twice as likely to be affected as women. It is most common in people in their 3rd or 4th decade of life. Ayurveda offers wide range of treatment option for this chronic disease under the broad heading Kustha. 5 patients of Ekakustha were selected from Panchakarma OPD. Classical Virechana Karma followed by Shamana Aushadhi (Mahamanjisthadi Kashayam, Arogyavardhini Vati, Gandhak Rasayan and Panchatiktaghrita Guggulu Vati), external application (Siddharthak Snan Churna and Brihat Marichyadi Taila) and lifestyle modification were prescribed for one month. After completion of treatment, marked improvement were noticed in subjective criteria, PASI score and pictorial representation. Follow up suggested no further progression of disease. Panchakarma therapy and Shamana Aushadhi along with lifestyle modification provides a safe and effective treatment option for Psoriasis, highlighting the potential of multi modal Ayurvedic interventions in Psoriasis.

Keywords: Psoriasis, Ekakustha, Twak-Vikar, Skin disorder, Autoimmune disease, Chronic skin condition, Virechana Karma, PASI Score

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Swadha Tiwari, Post Graduate Scholar, Department of Panchakarma, Institute of Post Graduate Ayurvedic Education and Research at SVSP Hospital, Kolkata, West Bengal, India. Email: swadhatiwari21@gmail.com	Tiwari S, Biswas A, Tiwari S, Barik S, Mukherjee P, Modest Ayurvedic interventions in the management of Ekakustha w.s.r to Psoriasis: A Case Series. J Ayu Int Med Sci. 2025;10(2):332-339. Available From https://jaims.in/jaims/article/view/4017/	

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Introduction

Skin, the largest organ of human body, protects the body against external factors, regulates body temperature, aids in the production of vitamin D, and facilitates the sensation of touch. It acts as a visible barrier, readily displaying signs of underlined health issues and serving as a key indicator for the diagnoses of various diseases through observable changes in its appearance, texture, colour, and lustre.

Ekakustha, a type of *Kshudra Kustha* is a *Vata-Kapha* predominant *Tridoshaja Vyadhi* primarily manifested in *Twacha* i.e., skin. Due to intake of *Nidan* such as *Viruddha Ahara-Vihara* (incompatible diet and regimen), *Vegadharana* (suppression of natural urges), *Divaswapna* (daytime sleep), disrespecting elders and teachers, *Pap karma* (sinful activity) etc., all the three *Dosha* (*Vata, Pitta and Kapha*) gets aggravated and vitiates *Tvak, Rakta, Mamsa and Lasika dhatus*. It is characterised by the appearance of well demarcated, erythematous plaques with silvery scales (*Matsya Sakalopamam*) and loss of perspiration (*Aswedanam*).

It tends to spread in a large surface area and is termed as '*Mahavastu*' by *Acharya Charak*.^[1] On the basis of clinical presentation it can be correlated to Psoriasis in contemporary science. Psoriasis is a chronic dermatitis with unpredictable remissions and relapses. It is characterised by well defined, erythematous, indurated papilla and plaques, surmounted by large, silvery scales.^[2]

Psoriasis, affecting approximately 1% of global population and between 0.44 to 2.8% of Indian population, is a significant health concern.^[3] Despite advances in contemporary medicine, many patients with psoriasis seek alternative treatments due to the limitations and side-effects of conventional treatments.

Materials and Methods

Case Reports

5 patients of *Ekakustha* were selected from Panchakarma OPD of I.P.G.A.E & R at S.V.S.P Hospital with complaint of Scaly lesions over different parts of the body mainly over the extremities.

Table 1: Inclusion and Exclusion Criteria

Inclusive criteria	Exclusive criteria
Age between 18 to 70 years	Age <18 years and >70 years
Subjects presenting with classical features of Ekakustha	Immuno-compromised patients - HIV, HBV
Both male and female	Diabetes mellitus, Congestive cardiac failure, Chronic kidney disease
History less than 3 years of origin	Pregnant and Lactating mother

Patient's information

	Case 1	Case 2	Case 3	Case 4	Case 5
OPD No.	36974	37241	37865	39471	40251
Name	JB	SL	RL	BD	BS
Age	57 Yr	35 Yr	25 Yr	42 Yr	52 Yr
Sex	Female	Male	Male	Female	Male
Religion	Islam	Hinduism	Hinduism	Hinduism	Hinduism
Occupation	Housewife	Businessman	Businessman	Housewife	Driver
Socio-economic status	Lower Middle	Lower Middle	Lower Middle	Middle	Lower Middle
Marital status	Married	Married	Unmarried	Married	Married
Past History					
Medical	N.S	N.S	N.S	N.S	N.S
Surgical	N.S	N.S	N.S	N.S	N.S
Family	N.S	N.S	N.S	N.S	N.S

Personal history

	Case 1	Case 2	Case 3	Case 4	Case 5
Appetite	Poor	Poor	Normal	Normal	Poor
Bowel	Constipated	Constipated	Unsatisfactory	Normal	Constipated
Bladder	Normal	Normal	Normal	Normal	Normal
Sleep	Disturbed	Disturbed	Normal	Disturbed	Disturbed
Addiction	No such	Tobacco	No such	No such	No such
Dietary	Mix	Mix	Mix	Mix	Mix
Rasa	Amla, Lavan, Katu	Amla, Lavan	Amla, Lavan	Amla, Katu	Amla, Lavan
Guna	Ushna, Snigdha	Snigdha	Snigdha	Ushna	Ushna, Snigdha
Agni	Mandagni	Vishamagni	Vishamagni	Mandagni	Mandagni
Kostha	Krura	Krura	Madhyam	Mridu	Krura

Clinical Findings

Baseline findings

	Case 1	Case 2	Case 3	Case 4	Case 5
Aswedanam (no/reduce sweating)	++	++	+	++	+
Mahavastu (Area)	+++	+++	+++	+++	+++
Matsya Sakalopam (scaling over patches)	+++	+++	+++	+++	+++
Kandu (Itching)	+++	+++	++	+++	+++
Rukshata (Dryness)	+++	+++	+++	+++	+++
Twak Vaivarnyam (Skin Discolouration)	+++	+++	++	++	+++
PASI Score	19.6	22.3	24.5	16.8	30.2

Treatment Assessment Parameters

- Improvements in symptoms grading
- Psoriasis Area and Severity Index (PASI) Score
- Pictorial Changes

Timeline of therapeutic intervention

Shodhan Karma	Drug & Dose	Duration
1. Deepana and Pachana	Panchakola Churna 5 gm twice daily before meal with luke warm water (L.W.W)	5 days
2. Snehapana	Panchatikta Ghrita (D1-30, D2-60, D3-90, D4-120, D5-150)	5 days
3. Sarvanga Abhyanga	Neem Taila (Q.S)	3 days
4. Sarvanga Bashpa Swedana	Aragwadhadi Kwath for 10 minutes	3 days
5. Virechana Karma	Trivritavaleha 100 gm with L.W.W No. of Vega	1 day
6. Samsarjana Krama	As per Classics, 12 Anna Kala	5 days
Shamana Aushadhi		
7. a. Kwatha	Mahamanjishthadi Kashaya 20 ml twice daily after meal with L.W.W	30 days
b. Vati	Gandhak Rasayan 250 mg twice daily after meal with L.W.W	30 days
	Panchatikta Ghrita Guggulu 500 mg twice daily after meal with L.W.W	30 days
	Arogyavardhini Vati 250 gm twice daily after meal	30 days
c. External application	Brihat Marichyadi Taila twice daily	30 days
	Siddharthak Snan Churna once daily	30 days

Observation and Results

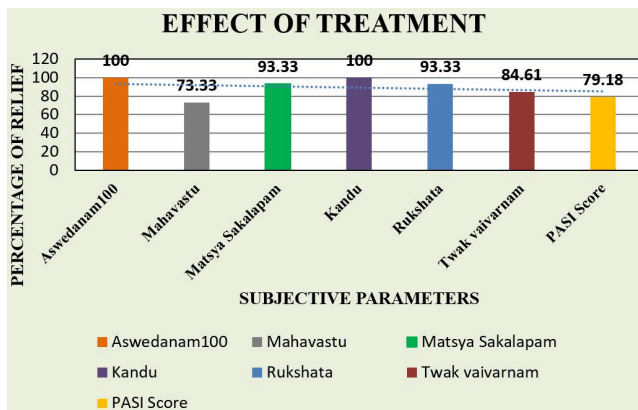
	No. of Vega
Case 1	17
Case 2	19
Case 3	18
Case 4	16
Case 5	13

	Aswedanam		Mahavastu		Matsya Sakalapam		Kandu		Rukshata		Twak Vaivarnam		PASI Score	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
Case 1	2	0	3	0	3	0	3	0	3	0	3	1	19.6	2.8
Case 2	2	0	3	1	3	0	3	0	3	0	3	0	22.3	2.6
Case 3	1	0	3	0	3	0	2	0	3	0	2	0	24.5	5.7
Case 4	2	0	3	0	3	0	3	0	3	0	2	0	16.8	2.7
Case 5	1	0	3	1	3	1	3	0	3	1	3	1	30.2	9.8

Parameter	n	Mean score		Mean difference	S.D	S.E	t value	% of relief	p value
		BT	AT						
Aswedanam	5	1.6	0	1.6	0.54	0.24	6.66	100 %	0.001
Mahavastu	5	3	0.4	2.6	0.54	0.24	10.83	73.33 %	0.001
Matsya Sakalapam	5	3	0.2	2.8	0.44	0.20	14	93.33 %	0.001
Kandu	5	2.8	0	2.8	0.44	0.20	14	100 %	0.001
Rukshata	5	3	0.2	2.8	0.44	0.20	14	93.33 %	0.001
Twak Vaivarnam	5	2.6	0.4	2.2	0.44	0.19	11.57	84.61 %	0.001
PASI Score	5	22.6	4.7	17.9	2.54	1.13	15.89	79.18 %	0.001



Figure 1: Pictorial Assessment of the Study



Graph Showing effect of treatment on Subjective parameters in Patients

Follow-Up and Outcome

After completion of treatment marked improvement were noticed in subjective criteria, PASI score and Pictorial representation. Follow up after one month showed no further disease progression. No ADR or symptom aggravation was found during and after treatment.

Discussion

Ekakustha is described as a *Tridoshaja Vyadhi*, resulting from the imbalance of *Vata*, *Pitta* and *Kapha Doshas*. *Ayurveda* offers a unique perspective on *Ekakustha*, emphasising the importance of diet, lifestyle, *Shodhan Karma* (purification therapy) and *Shamana Karma* (palliative treatment) in managing the condition. *Acharya Charak* has recommended repeated *Shodhan Karma* for the management of *Kustha*.^[4]

In this case series, 5 cases fulfilling the inclusion criteria were randomly selected from the *Panchakarma* OPD. Percentage of relief for *Aswedanam* was 100%, for *Mahavastu* was 73.33%, for *Matsya Saklopamam* was 93.33%, for *Kandu* was 100%, fir *Rukshata* was 93.33% and for *Twak Vaivarnata* was 84.61%. PASI score before treatment was 22.6 and after treatment, it reduces to 4.6. The p values of all the symptoms were 0.001, which shows highly significant result. Here, classical *Virechana Karma* was conducted before the administration of *Shamana Aushadhi* for the purpose of achieving *Srotoshuddhi* (cleansing the channel of circulation), nourishment of senses, lightness of body, rekindling of digestive fire and elimination of toxins from body.^[5] Also, in absence of *Srotarodha* (obstruction of channel) optimum benefit of *Shaman Aushadhi* can be achieved.

Deepana-Pachana with *Panchakola* insures *Kostha Laghuta* (lightness of GI tract), proper functioning of *Agni* and digestion of *ama* (undigested product) with the help of *Laghu*, *Ushna*, *Tikshna*, *Vishada*, *Ruksha*, *Suksma*, *Khara*, *Sara* and *Kathin* properties. It also helps in mobilisation of *Dosha* from *Sakha* to *Kostha*.^[6]

Snehapana with *Mahatikta Ghrita* was done in ascending dose. *Mahatikta Ghrita* contain ingredients like *Chandana*, *Yasthimadhu*, *Sariba* [drugs included in *Varniya Mahakasaya*]; *Kharida*, *Abhaya*, *Amlaki*, *Haridra*, *Saptaparna*, *Aragvadha* [drugs included in *Kusthaghna Mahakashaya*]; *Usheera*, *Sariva*, *Guduchi* [drugs included in *Dahaprasaman Mahakashaya*]; *Daruharidra*, *Musta* [included in *Kandughna Mahakashaya*]. It is indicated in the management of *Kustha*, *Visphota*, *Kandu*, *Pidaka* etc.^[7,8]

Snehapana insures *Vata Anulomana* (pacification of aggravated *Vayu*) and imparts *Mriduta* (softening of body). By breaking the *Mala-Sanga* (accumulation of excretory products), it helps in removing the *Srotarodha* (obstruction in the channel of circulation).^[9] *Sneha* increases *Apyma* (watery part) in the body due to *Kledakarak Guna* which ultimately leads to *Klinnata* or *Utkleshavastha* needed for *Sodhan Karma*.^[10] *Sarvanga Abhyanga* and *Svedana* done during *Vishram Kala* and on the day of *Virechana Karma* helped in the liquefaction of *Dosha* and movement of *Dosha* from *Sakha* to *Kostha*.

Virechan Karma was done with the administration of *Trivrit Avaleham*. *Trivrit* being the main ingredient is included in the *Bhedaniya*, *Vishaghna*, and *Asthanapaga Mahakashaya*.^[8] This *Virechan* yoga by the virtue of its *Ushna*, *Tikshna*, *Sukshma*, *Vyavayi*, *Vikasi Guna* and *Swavirya* property reaches the *Hridaya*. From there, by means of *Dhamanis* (channel of circulation) it entered *Suksma* and *Sthula Shrota* (micro and macro channel of circulation) and acted over the vitiated *Dosha*. By virtue of *Agniya Guna*, it liquified the *Dosha* and by *Tikshna Guna* it disintegrated the *Doshas* which ultimately passed down to *Kostha* (GI tract). Due to predominance of *Apa Mahabhuta*, *Prithvi Mahabhuta* and *Adhobhagahara Guna* the vitiated *Dosha* were eliminated through the *Gudabhaga* (anus) by means of *Virechana*. And by this, it breaks the pathology of the disease by bringing the vitiated *dosha* and *dhatus* back to equilibrium state.^[11]

Since *Madhyam Suddhi* was observed in all the cases, *Samsarjana Krama* for 12 Anna Kala was adopted. *Samsarjan Krama* helped in restoration of *Agni*.^[12]

After *Samsarjana Krama*, *Shamana Aushadis* (palliative medicines) were administered. *Mahamanjisthadi Kashayam* is indicated in the management of *Kustha Roga*. It contains several ingredients such as *Manjistha*, *Musta*, *Kutaja*, *Guduchi*, *Kustha*, *Nimba*, *Katuki*, *Vidanga*, *Abhaya*, *Amlaki*, *Daruharidra*, *Khadira*, *Chandana* etc., which are categorised under *Kusthagna*, *Kandughna*, *Varnya*, *Deepaniya*, *Dahaprasamana* and *Vayasthana Mahakashaya*. By the virtue of the above property *Mahamanjisthadi Kashayam* exerts its effect in pacifying the aggravated *Dosha* and also in improving the quality of the skin.^[13]

Gandhak Rasayan consist of *Suddha Gandhak*, *Tvak*, *Ela*, *Patra*, *Nagkesara*, *Haritaki*, *Amlaki*, *Vibhitaki*, *Sunthi* etc. its chief ingredient *Gandhak* is *Agnideepak*, *Amanasak*, *Vishahara*, *Soshaka* and *Kriminasak*. *Gandhak* along with other ingredients ensures restoration of normal skin colour and pacifies the symptoms of *Ekakustha*.^[14]

Panchatiktaghrita Guggulu mentioned in the management of *Kustha Roga* consist of ingredients belonging to *Panchatikta Gana* i.e., *Neem*, *Guduchi*, *Vasa*, *Patol*, *Nidigdhka* along with *Ghrita* and *Guggulu*. It has a dominance of *Tikta Rasa*, *Laghu* and *Ruksha Guna*. It possesses *Kledhagna*, *Kandugna*, *Vranashodhak* properties. It thereby rectifies the vitiation of *Tvak*, *Rakta*, *Mamsa* and *Lasika Dhatu* by exerting anti-inflammatory, anti-oxidative, anti-histaminic properties.^[15]

Arogyavardhini Vati is indicated in the treatment of *Kustha Roga* due to the presence of Ingredients like *Kutki*, *Shuddha Parada*, *Gandhak*, *Loha Bhasma*, *Abhrak Bhasma*, *Tamra Bhasma* along with *Triphala*, *Shilajita*, *Guggulu*, *Tikta*, *Chitrakamula* and *Neem Swaras Bhavana*. *Kutki* being the main ingredient of *Arogyavardhini* consist of phyto active compounds like kutkin, kutkosides and picrosides etc. exhibiting anti-inflammatory, hyaluronidase inhibitory, anti-oxidative, immunomodulatory, anti-microbial etc. properties. The *Lekhaniya* and *Bhedaniya* property of the drug prohibits the accumulation of vitiated *dosha* whereas by means of *Rechani Guna*, it expels the vitiated *Dosha* and thereby minimises the symptoms of *Ekakustha*.^[16]

Along with *Shaman Aushadhi*, topical application of *Siddhartaka Snan Churna* and *Brihat Marichyadi Taila* were advocated.

Siddhartaka Snan Churna is indicated in the management of *Tvak Vikar*, *Kustha* etc. and consist of ingredients such as *Mustak*, *Madanaphala*, *Triphala*, *Karanja*, *Aragvadha*, *Indrayava*, *Daruharidra* and *Saptaparni*. *Musta* exhibits anti-inflammatory and anti-hyperlipidemic activities. It relieves the symptoms of *Ekakustha* by its *Kusthagna*, *Krimighna*, *Lekhaniya Gunas*.^[17] *Madanaphala* acts on *Tvak Vikar* by exerting its anti-inflammatory, anti-helminthic, antibacterial, antifungal, carminative etc. properties.^[18] The other ingredients of the drug is mentioned in *Kandughna* and *Kusthagna Mahakashaya* which aides them to act against the pathology of *Ekakustha*.

Topical application of *Brihat Marichyadi Taila* increases the flow of circulation of the area it is applied on, restores the mobility of soft tissues and also facilitates the drainage of the fluid into the lymph vessels.^[19] The ingredients of the *Tailam* such as *Chandana* (*Kandughna*, *Vishaghna*, *Varniya Mahakashaya*), *Haridra* (*Kusthagna*, *Vishaghna Mahakashaya*), *Saptaparna* (*Kusthagna Mahakashaya*), *Khadira* (*Kusthagna Mahakashaya*), *Guduchi* (*Dahaprasamana Mahakashaya*), *Daruharidra* (*Kandughna Mahakashaya*), *Sirish* (*Vishaghna Mahakashaya*) etc.^[8] have anti-inflammatory, anti-fungal, antiseptic properties and is used in the treatment of eczema, psoriasis and other dermatological conditions.^[20] *Katu Taila* used as the base oil possesses *Kusthagna* property.^[21] *Gomutra* exhibits anti-oxidative, anti-fungal, anti-pruritic, antimicrobial etc. properties and is indicated in the management of skin diseases.^[22] Other component such as *Haritala* and *Manashila* exerts antimicrobial action attributed to its arsenic content and is helpful in relieving the symptoms of skin disease such as *Ekakustha*.

Conclusion

Ekakustha is a chronic and debilitating skin condition with significant challenges in contemporary medicine. This study provides evidence for the effectiveness of the multimodal Ayurvedic treatment approaches in managing *Ekakustha*.

The incorporation of *Sodhana*, *Shamana* and *Bahir Parimarjana Chikitsa* offers a promising outcome in reducing symptoms, improving quality of life and promoting overall well-being in the patients with *Ekakustha*.

Limitation

- Small sample size
- Short follow-up period

Future direction

- Large scale clinical trials
- Comparative studies with conventional treatments

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