



GUTTATE PSORIASIS IS SUCCESSFULLY MANAGED WITH TAKRA DHARA ALONG WITH SHAMANA THERAPY: A CASE STUDY

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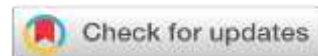
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ABSTRACT

Psoriasis is an immune-mediated chronic inflammatory disease that manifests in a variety of clinical forms. Guttate psoriasis is another variant in which the lesions consist of sudden eruptions of small erythematous and scaly papules or plaques. It negatively affects health and increases health care consumption. Being afraid to appear in front of people in society and losing confidence is a feeling of stigma in oneself. It negatively impacts beauty, quality of life, self-esteem, personality, skills and may also cause psychological problems. Psychological diseases are also increasing along with Psoriasis. This case study intends to evaluate the efficacy of *Takra Dhara* in the management of Guttate psoriasis. A 38 yrs. the old male patient was diagnosed with Guttate psoriasis as *Ek Kushtha* as per *Ayurveda*. The treatment plan was advised for 3 months along with 3 months follow-up. *Takra Dhara* along with *Shamana* therapy was advised to the patient. Symptoms were assessed with PASI score at pre and post-therapy along with 3 months follow-up. Significant improvements were observed after 3 months of treatment which were assessed with a PASI score (reduced from 31.2 to 0.6). No recurrences were observed after follow up period.

Keywords: *Ek Kushtha*, Guttate psoriasis, *Takra Dhara*, PASI score.

INTRODUCTION

Psoriasis is one of the most common Dermatologic diseases. It is a chronic inflammatory skin disorder clinically characterized by erythematous, sharply demarcated papules and rounded plaques covered by silvery micaceous scales¹. Psoriasis may be precipitated by trauma, infection, endocrine factors, climate & emotional stress. It may also be precipitated by drugs like Chloroquine, Lithium carbonate, Salicylate, Steroids, Iodide, Nystatin, Progesterone, and Beta blockers². With a prevalence of 0.44 – 2.8 % in India, it commonly affects individuals in their 3rd or 4th decades with males being affected 2 times more common than females³. Guttate psoriasis (Eruptive psoriasis) is the most common in children and young adults. It develops acutely in individuals without Psoriasis or in those with Chronic plaque psoriasis⁴. It is characterized by erythematous squamous papules that are distributed as droplets over the body. The trunk is the site of predilection. Palm and sole are spared. It is often preceded by the streptococcal infection of the upper respiratory tract. Infection with beta-hemolytic streptococci usually precedes Guttate psoriasis⁵. The clinical co-relation between Guttate psoriasis & streptococcal pharyngitis is well established indicating a bridge between Psoriasis and bacterial infection. Besides, bacteria, viruses & fungal infections have also been confirmed as the key factors that may induce Psoriasis. In addition, changes in the skin's cutaneous microbiota are one of the major features of Psoriasis. Recently, it has been found that gut microbiota may play an equally important role in Psoriasis through the Gut-skin axis. Severe acute respiratory syndrome corona virus 2 (SARS-COV-2) may also induce Psoriasis⁶. This disease can be correlated with *Ek Kushtha* on the basis of signs and symptoms like *Aswedanam*, *Mahavastu*, *Matsya sakalopamam*⁷, and *Krishna Aruna varna*⁸. In *Ek Kushtha*, both *Vata* and *Kapha* are predominant *Doshas*. *Vata* causes *Sankocha*

and *Kapha* causes *Sanga*. Obstruction is due to *Kapha avruta Samana Vata*. *Aswedanam* means the diminished or complete absence of sweating may be due to the blocking of sweat ducts and is termed Anhidrosis which leads to a feeling of dryness of the integument. *Mahavastu* means *Maha sthanam* i.e., the area of involvement of the lesion is vast. *Matsya shakalopamam* means fish-like lesions similar to scaling which is also known as hyperkeratinisation in Psoriasis. In *Ayurveda*, the mechanism of hyperkeratinisation can be understood by the changes in molecular level and the rate of cell division which is a function of *Vayu*⁹.

CASE REPORT :

A 38 yrs. the old male patient complained of severe itching and scaling over the scalp and around the umbilical region since February 2022. Suddenly erythematous lesions appeared over the trunk, back, upper limb, and lower limb since June 2022. The patient has suffered 2 times from COVID – 19 in 2021 & 2022. He had taken corticosteroid medicines for about 15 days. He had recovered from COVID – 19 after that he complained of severe itching over the scalp with scaling. He got depressed and needed some mental support. He consulted the dermatologist and was diagnosed with Psoriasis. Dermatologist prescribed medication and local application. After using a medication, reduced scaling, and mild improvement in itching within 1 month but the scalp became hard and reddish. Suddenly drop-like erythematous papules appeared all over the body with severe itching. After that, he came here for better management. He has advised Panchakarma procedure along with medications for 3 months.

CRITERIA FOR ASSESSMENT: The patient was assessed with Psoriasis area and severity index (PASI) score for the presenting symptoms.

Table no.1: Showing the PASI score¹⁰ calculation & gradings.

Plaque characteristics	Lesion score Lesion score sum (A)	Percentage area affected	Area score	

Erythema	0 – None	Area score (B)	0 – 0%	
Induration/Thickness	1 – Mild	Degree of involvement as a percentage for each body region affected (score each region between 0 - 6)	1 – 1% - 9 %	
Scaling	2 – Moderate		2 – 10% - 29%	
	3 – Severe		3 – 30% - 49%	
	4 – Very severe		4 – 50% - 69%	
			5 – 70% - 89%	
			6 – 90% - 100%	
Multiply lesion score sum (A) by Area score (B) for each body region to give individual subtotals (C)				
Subtotals (C)				
Multiply each of the subtotals (C) by the amount of body surface area represented by that region i.e., × 0.1 for the head, × 0.2 for upper limbs, × 0.3 for the trunk, × 0.4 for lower limbs				
Body surface area	× 0.1	× 0.2	× 0.3	× 0.4
Totals (D)				
Add together each of the scores for each body region to give the final PASI score				

INTERVENTION: *Takra Dhara* was advised for 45 days along with *Shamana* therapy.

Table no. 2: Showing the Panchakarma procedure.

Panchakarma procedure	Aushadh dravya	Duration	Follow up
<i>Takra dhara</i>	1. <i>Takra</i> 2. <i>Amalaki</i> 3. <i>Nagarmotha</i>	45 days	3 months

Table no. 3: Showing the Shamana therapy.

S. No.	Shamana therapy	Vehicle	Duration	Follow up
1.	<i>Talkeshwar ras</i> –250 mg + <i>Abhrak bhasma</i> – 250 mg + <i>Gandhak rasayana</i> – 500 mg	Honey	3 months	3 months
2.	Tab. Impusora 2 BD	Lukewarm water	3 months	3 months
3.	<i>Haridra khanda</i>	Milk	3 months	3 months

Table no. 4: Showing the local application after completing 45 days of Takra Dhara

Local application	Duration	Follow up
777 oils	45 days	3 months

FOLLOW-UP & OUTCOMES: Before & after treatment, the grading of symptoms is shown in table no. 5. After 45 days of completion of *Takra Dhara*, local application of 777 oil was given for 45 days.

Shamana Aushadha was given with *Takra Dhara* & local application of 777 oil for 3 months. Follow-up was done for 3 months.

Table no. 5: Showing the grading of symptoms before & after the treatment.

Scores	Plaque characteristics	Head		Upper limb		Trunk		Lower limb	
		BT	AT	BT	AT	BT	AT	BT	AT
	Erythema	04	00	02	00	04	00	02	00
	Induration/thickness	03	00	02	00	02	00	02	00
	Scaling	03	00	01	00	03	00	01	00
	Area score	10	00	05	00	09	00	05	00
	PASI score	06	0.6	03	00	16.2	00	06	00
	Before treatment, PASI score	31.2							

After treatment, PASI score	0.6							
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RESULT: The patient was assessed with a Psoriasis area severity index (PASI) score. After 3 months of treatment, area distribution-wise grading of Erythema was reduced from 04 to 00 (Head), 02 to 00 (UL), 04 to 00 (Trunk), 02 to 00 (LL), and grading of induration/thickness was reduced from 03 to 0 (Head), 02 to 00 (UL), 02 to 00 (Trunk), 02 to 00 (LL), grading of scaling was reduced from 03 to 00 (Head), 01 to 00 (UL), 03 to 00 (Trunk), 01 to 00 (LL). Therefore, the sum of the score was reduced from 10 to 00 (Head), 05 to 00 (UL), 09 to 00 (Trunk), and 05 to 00 (LL). After treatment, the PASI score was significantly reduced from 31.2 to 0.6. After 3 months of follow-up, there were no symptoms appeared on the patient's body. This case report intended to check the efficacy of *Takra Dhara* in the management of Guttate psoriasis.

DISCUSSION

In *Ayurveda*, it can be considered as *Ek Kushtha* i.e., *Aswedanam*, *Mahavastu*, *Matsya shakalopamam*. So, *Ek Kushtha* appears similar characteristic features of Psoriasis. Stress-induced autonomic response and diminished pituitary-adrenal activity may cause Psoriasis¹¹. Upper respiratory tract infections like bacterial or viral infections can also trigger the development of Guttate psoriasis. Research has shown that Inflammatory skin conditions are often associated with a disturbed skin microbiome. In this study, *Takra dhara* is used as a topical application that contains *Musta*, *Amalaki* & *Takra*. *Takra* has *Pancha rasa* except *Lavana rasa*, *Amla vipaka*, *Ushna veerya* & *Vata-Kaphagna* property. *Takra* contains a large amount of lactic acid which is scientifically proved that lactic acid moistens and lessen the appearance of thickened Psoriatic scales¹². The lactic acid in *Takra* helps in transdermal absorption of the drugs & systemic Anti-inflammatory, Antioxidant effects in Psoriasis. *Takra* (Buttermilk) is prepared by the fermentation process which produces probiotic bacteria. These probiotic bacteria make acidic by-products like lactic acid which can reduce the pH of the skin. Since Skin prefers a naturally acidic environment, these

lactic acids can modulate the skin, limiting the growth of pathogenic bacteria & favouring the growth of bacteria that naturally resides on the skin¹³. Consequently, Lactobacilli-based probiotics are explored as a novel treatment of inflammatory skin conditions through their topical skin application. Lactobacilli have an immunomodulatory capacity associated with a reduction in excessive skin inflammation. Their influence on the immune system is mediated by bacterial metabolites & cell wall-associated or excreted microbes-associated molecular patterns (MAMPs). Lactobacilli can also enhance the skin barrier function which is often disrupted as a result of infection or inflammatory skin diseases¹⁴. There is less documentation regarding the topical application of probiotics in the management of Psoriasis. However, it is evident that topical use of probiotics can improve inflammatory skin conditions. *Musta* has *Tikta*, *Katu*, *Kashaya Rasa*, *Ruksha*, *Laghu Guna* and *Sheeta Veerya*. It has also *Kushthaghna* property. *Musta* has tranquilizing, Anti-histaminic, Anti-inflammatory, and Antioxidant activity¹⁵. *Amalaki* has five *rasas* except *Lavana rasa*, *Guru guna*, *Ruksha guna*, *Sheeta veerya* & *Madhura vipaka*. The cell divides faster than normal producing a scaly appearance in Psoriasis. Research work on *Amalaki* extract showed inhibited cell proliferation, decreased apoptosis, and increased Antioxidant and immunomodulatory effects¹⁶. *Takra dhara* proved as miraculous treatment in the management of Psoriasis. Significant improvements were observed in *Kandu*, *Matsya shakalopamam*, and *Vaivarnya*. *Kandu* is a neurochemical process & physiological phenomenon. Several mediators such as neuropeptides & interleukins 31 are known to provoke itch by direct binding to itch receptors (H1, H4) or indirectly via the release of histamine¹⁷. *Musta* has Anti-pruritic, Anti-inflammatory & Antioxidant properties which have shown significant results in Guttate Psoriasis. The inflammation may be initiated by the central peripheral nervous system in response to psychological stress. *Takra dhara* containing *Amalaki* & *Musta* proved effective in stress-related disorders in the

treatment of many allergic conditions. A highly significant result was found after the treatment which was assessed with a PASI score. This case report proved that *Takra Dhara* is a unique & effective treatment modality in the management of Guttate Psoriasis.

CONCLUSION

In this case study, a highly significant result was found. It may be concluded that *Takra dhara* proves to be effective in the management of Guttate Psoriasis. Need to conduct a randomized clinical trial in a larger sample which will create documentation.

IMAGES: Effects on the skin lesions before and after the treatment



REFERENCES

1. Fauci, Braunwald, Kasper et.al., Harrison's principles of internal medicine, 17th edition, Vol-I, Mc Graw Hill publication, 2008, pg.no. 315-316.
2. Virendra N Sehgal, Textbook of clinical Dermatology, 5th edition, Jaypee publication, 2011, pg.no. 136.
3. Dogra S, Yadav S, Psoriasis in India : Prevalence & pattern, Indian J Dermatol venereal Leprol 2010 ; 76 : 595 – 601 [Pubmed]
4. Fauci, Braunwald, Kasper et.al., Harrison's principles of internal medicine, 17th edition, Vol-I, Mc Graw Hill publication, 2008, pg.no.316.
5. Virendra N Sehgal, Textbook of clinical Dermatology, 5th edition, Jaypee publication, 2011, pg.no. 136 & 139.
6. Shihui Zhou, Zhirong Yao, Review on Roles of infection in Psoriasis, International journal of molecular sciences, 2022, 23, 6955. <https://doi.org/10.3390/ijms23136955>.
7. Kashinath Shastri, Yadavji Trikamji Acharya et.al., Charak samhita, Chaukhambha publication, 2016, ch. chi. 7/21.
8. Kaviraj Ambikadutta Shastri, Sushruta samhita, Part – 1, Chaukhambha publication, 2010, Su. Ni. 5/10.
9. L. Mahadevan, Ayurvedic Dermatology & venereology, Sarada Mahadeva Iyer Ayurvedic Educational & Charitable trust, 2021, pg.no. 125 – 126.
10. British Association of Dermatologists, Psoriasis area and severity index (PASI) worksheet severity of Psoriatic lesions based on area coverage and plaque appearance.
11. Jaykar Thomas, Textbook of Psoriasis, 1st edition, Jaypee publication, The health science publisher, New Delhi, 2016, pg.no. 19.
12. Madhavi Khare, Kamini Soni et.al., A Clinical comparative study on the therapeutic efficacy of Virechana Karma & Takra Dhara in the management of Ek Kushtha w.s.r. to Psoriasis, pg.no. 168-187.
13. <https://www.learnskin.com> visited on 15-02-2023, 9:30 PM.
14. Lize Delanghe, Irina Spacova et.al., The role of lactobacilli in inhibiting skin pathogens, March 2021, Biochemical society, DOI:10.1042/BST20200329.
15. Madhvi Khare, Kamini Soni et.al., A Clinical comparative study on the therapeutic efficacy of Virechana Karma & Takra Dhara in the management of Ek Kushtha w.s.r. to Psoriasis, pg.no. 168-187.
16. Kaur S, Michael H, in vitro cytotoxic & apoptotic activity of triphala – an Indian herbal drug, J Ethnopharmacol. 2005 Feb 10;97 (1): 15 – 20. Epub 2004 Dec 25.
17. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3139917/>

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