

Case report

An integrated approach of psoriasis in the light of *Siddha* and *Ayurveda* – A clinical case report¹Lalitha K., ²Chandrasekar R., ³Muthukumar R., ¹Mathukumar S., ²Christian G. J., ²Elansekarar S., ²Ramamurthy R., ²Srinivasan V., ²Gayatri R.¹Sri Sairam Siddha Medical College and Research Centre, Chennai, Tamil Nadu, India²National Institute of Siddha, Chennai, Tamil Nadu, India³Agasthiya Ayurveda Hospital, Thiruvallur, Tamil Nadu, India

(Received: December 2022 Revised: August 2023 Accepted: August 2023)

Corresponding author: **Lalitha K.** Email: lallu20795@gmail.com**ABSTRACT**

Psoriasis is a chronic autoimmune skin disease in which there is an accelerated turnover of skin cell growth. This is one of the challenging conditions in dermatology where the treatment remains a conundrum. The symptoms get relapsed once the medicine/ treatment is withdrawn. An integrated approach of Siddha and Ayurvedic treatments renders the relapse of this condition deferred. We report an integrated approach in a 31-year-old male patient diagnosed with Psoriasis Vulgaris (PASI -18.3) and suffered for a duration of 20 years. The patient had lesions in the chest, abdomen, back of trunk, shoulder, knees, and scalp. He was treated with integrated Siddha and Ayurvedic modalities of treatment for a period of consecutive 40 days and was followed up without a treatment for a period of 1 year. No recurrence was observed after the complete resolution of lesions which occurred within 41 days of treatment. reported after three months of treatment. The importance of diet is highlighted. This study has unraveled possible effective treatments with long-lasting relief for psoriasis with an integrated approach.

Keywords: *Psoriasis; integrated approach; Siddha; takradhara.***INTRODUCTION**

Psoriasis is a chronic, non-communicable, autoimmune inflammatory skin disease that causes a lot of negative repercussions on a patient's quality of life. It can occur in any age group (1,2). The aetiology remains unclear, but it could be a genetic predisposition superimposed with etiology (3). Other causes include environmental factors such as infections, alcohol misuse, cigarette smoking, medications, psychological stress, sunshine, and physical trauma. It affects men and women equally and girls at an earlier age. Two age groups of incidences are observed that include 16-22 years and 57-62 years (4). Skin lesions include red scaly plaques, well demarcated with sharp delineated edges and more or less symmetrical distribution. Stress is a major contributing and deteriorating factor.

In *Siddha*, it is termed as *venparusethil/ sethyluthirmoi/ kalanjagapadai* (5). Enormous medicines are available to treat this condition whereas in *Ayurveda*, *Takradhara* is a special Panchakarma therapy in which medicated buttermilk is processed with medicinal herbs and is used for external therapy. Buttermilk is poured as a continuous stream over the parts of the body. It is of three types namely, *Sarvanga Takradhara* which deals with the procedure implicated all over the body; *Ekanga Takradhara* is a procedure dealt with a particular region of the body and *Shiro Takradhara* is performed over the head of the body (6,7). *Bashpa Sweda* is the process which produces perspiration in the body and removes stiffness, heaviness, and coldness of the body (8). Due

to the chronic and cyclic nature of psoriasis, an integrated treatment approach has been adopted in this study.

Patient information

A 31-year-old male patient reported on 15th November 2021 with the complaints of erythematous plaques present on chest, abdomen, back of trunk, shoulder, knees, and scalp, itching and scaling. The Psoriasis Area and Severity Index (PASI) score was 18.3 and there was no associated comorbidity. For the past 20 years he was suffering from the above condition and underwent allopathy medications for 15 years with regular follow ups. Topical and immunosuppressive medications provided symptomatic relief. On withdrawal of medicines the symptoms flared up. Due to recurrence patients withdrew the allopathy medication and consulted concomitant *siddha* and *ayurveda* treatment.

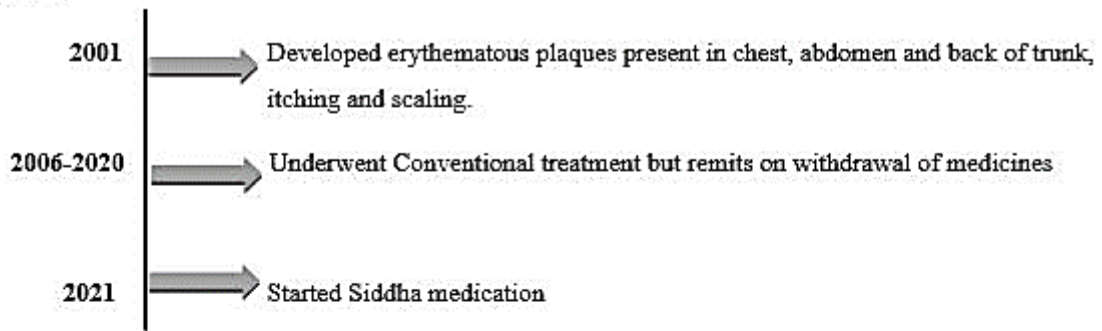
Clinical findings

On examination, the skin lesions were diagnosed as *Kalanjagapadai* (psoriasis). The PASI score was 18.3.

Prognostic characteristics

As per the study conducted by Sharma *et al.*, psoriasis was recovered without a relapse for a period of 60 days by *ayurvedic* treatment (9). In this study, the skin lesions reduced and showed an expeditious recovery in 40 days of integrated treatment. The patient was strictly advised to avoid sour taste foods and non-vegetarian foods till the course of treatment.

TIMELINE



Current information from this episode of care

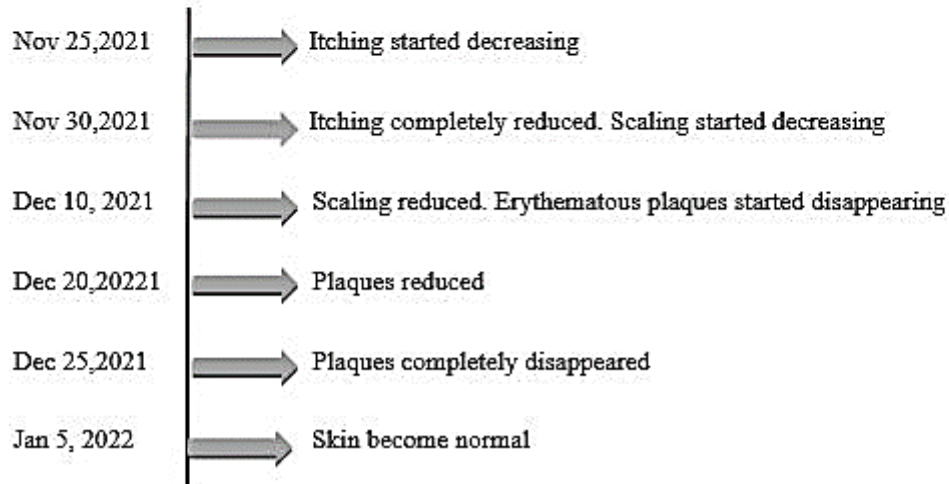


Table 1: Therapeutic interventions

Therapeutic intervention with explanations	Indications	Dose, strength & duration	Manufacturer's details
Vetpalai thailam for oil bath (5)	Psoriasis	50 ml, morning around 6 am on first day	IMPCOPS
Agasthiyar Kuzhambu for Purgation (10)	Skin diseases, anemia, toxicity, syphilis etc.,	200 mg with 10 ml ginger juice around 6 am on second day	IMPCOPS
T. Parangipattai choornam (PPC) (10)	Skin diseases	2 tablets twice a day after food with milk	IMPCOPS
Manjalnoi Kudineer choornam (11)	Anemia, jaundice, anasarca	5 g bd made into decoction, 60 ml twice a day after food	Earth India Naturals
Takradhara using Triphala choornam and Buttermilk (7)	Alleviates the vitiated doshas, heart diseases, prevents urinary disorders, etc	45 mins procedure, 7 sittings for seven days from next day of purgation	IMPCOPS
Baspa Sweda (8)	Facilitates better circulation of the body, analgesic, etc.,	10 mins procedure after Takradhara for 7 days	-
Shaya choornam (11)	Tuberculosis, Tonsillitis	2g twice a day with honey after food	Abdullah Sahib Pharmacy
Vetpalai thailam for external application (5)	Psoriasis	20 ml twice a day	IMPCOPS

Follow up and outcome

Patients diagnosed as having *Kalanjagapadai* (psoriasis) were treated with Siddha medicines both internally and externally (Table 1). Itching was completely reduced after 15 days of treatment. The scaling reduced after 25 days of treatment (Table 2, Fig. 1). Erythematous plaques disappeared after 30

days of treatment. As per Table 3, the PASI score was 0 after the course of treatment. No adverse events occurred during the treatment period. Patient was followed up for about 1 year.

Intervention adherence and tolerability

Since the patient comes weekly once for OPD and through video consultation thrice a day helped in

facilitating intervention adherence and tolerability. No adverse and unanticipated events occurred. The

consent was obtained from the patient for the publication of photographs in scientific articles.

Before treatment



After 15 days of treatment



After 40 days of treatment



Fig. 1: The prognosis of psoriasis

Table 2: Psoriasis Area Severity (PASI) Index before the treatment

Body area	Erythema	Infiltration	Desquamation	Area involvement	Total severity	Area severity
Head	0	0	0	0	0	0
Upper Extremity	1	1	1	1	3	0.6
Trunk	4	3	4	5	11	16.5
Lower Extremity	1	1	1	1	3	1.2
PASI = 18.3						

Table 3: Psoriasis Area Severity Index (PASI) after the treatment

Body area	Erythema	Infiltration	Desquamation	Area involvement	Total severity	Area severity
Head	0	0	0	0	0	0
Upper Extremity	0	0	0	0	0	0
Trunk	0	0	0	0	0	0
Lower Extremity	0	0	0	0	0	0
PASI = 0						

DISCUSSION

Psoriasis is an autoimmune disease where genetic and environmental factors have a significant role. Moreover, cytokines, inflammatory cascade, and

keratinocytes play an important role in the pathogenesis of psoriasis. Being an autoimmune disease and a recurrence in nature, it is quite difficult to treat. So, an integrated approach was adopted to facilitate an expeditious recovery.

The treatment embodied internally, *T.Parangipattai choornam*, *Manjalnoi kudineer choornam*, *Shaya choornam* and seven sittings of *takradhara* with *Baspa Sweda*. The literature evidence clearly stated that the *Parangipattai choornam* is indicated for all types of skin diseases (10). As per the study conducted by Deepa *et al.*, the anti-inflammatory activity of poly herbal ingredients of PPC is highlighted (11, 12). *Manjalnoi kudineer choornam* is also a polyherbal formulation in which each ingredient expresses the anti-inflammatory effect (13-16). Another poly herbal formulation, *Shaya choornam* is known for many vital effects including anti-inflammatory and health promoting effect (17) prevents the recurrence of psoriasis.

Takradhara is a direct indication of psoriasis as it was implicated as an external procedure (4) whereas *Bhaspa Sweda* eliminates the waste product from skin and gives softness to the skin (8). Therefore, these internal and external therapies facilitated a meteoric recovery of chronic psoriasis in 40 days.

The diet plays an important role in psoriasis. As per the study conducted by Garbicz *et al.*, a vegetarian diet balances potassium deficiency. Increased potassium intake may cause an increase in the synthesis of cortisol, which has an anti-inflammatory effect (18). Therefore, non-vegetarian diets are avoided. Maria *et al.*, spelled out that amino acids are increased up-to 20-fold in psoriatic lesions (19,20) while sour-tasting foods contain amino acids. Hence these foods are restricted during treatment.

Limitations of the study

Since this case report is based on a single case which shows a positive outcome and hence it cannot be generalized. Further clinical trials can be conducted on a larger scale to assess the efficacy of this treatment.

CONCLUSION

In this case, the treatment response was observed much earlier when compared to conventional treatment. The importance of diet is accentuated. This integrated approach facilitated an expeditious recovery from chronic psoriasis. Chronic and cyclic nature of psoriasis can be subjected to *Siddha* treatment modality which does not respond to conventional treatment.

CONFLICT OF INTEREST

The authors have no conflicts of interest.

REFERENCES

1. Koo, J. Population-based epidemiologic study of psoriasis with emphasis on quality-of-life assessment. *Dermatol Clin.* 1996;14(3):485-496.
2. Mannangi, N.B., Devaranavadi, B., Jayaram, S., Ankad, B.S., Shankarprasad, D.S. A study of inflammatory markers and their correlation with PASI score in psoriasis – A case control study. *Biomedicine [Internet].* 2022 May 1 [cited 2023 Sep. 20];42(2):230-5. Available from:

<https://biomedicineonline.org/index.php/home/article/view/1391>.

3. Harden, J. L., Krueger, J.G., Bowcock, A.M. The immunogenetics of psoriasis: A comprehensive review. *Journal of Autoimmunity.* 2015; 64:66-73.
4. Griffiths, C., Barker, J., Bleiker, T., Chalmers, R., Creamer, D. *Rook's Textbook of Dermatology.* 9thed. John Wiley & Sons; 2016.
5. Thiagarajan, R. Sirappu Maruthuvam, 1st ed. Directorate of Indian Medicine and Homeopathy; 2008.
6. Suhas, A., Chaudhary, Tewari, V., Tiwari, K. A review on Takradhara: Special panchakarma therapy. *International Journal of Ayurveda and Pharmaceutical Chemistry.* 2018; 8(3):1-9.
7. Chitta Rajan, D. A Textbook of Panchakarma. 1st ed. Chaukhamba Sanskrit Pratishthan; 2022.
8. Sandip Shiwaji, D., Jaykumar Sadashiv, A., Pradeep Ramrao, B., Revenshidh Ramchandra, U. Pharmacodynamics of Bhaspa Sweda: review. *International Ayurvedic Medical Journal.* 2014; 2(4):476-480.
9. Sahu, Shrawan. Ayurvedic management of psoriasis (ek kushtha): A case study. *World Journal of Pharmaceutical Research.* 2021; 5(11): 1030-1037.
10. Kuppasam. *Siddha vaithiyathirattu.* 1st ed. Directorate of Indian Medicine and Homeopathy; 2008
11. The Siddha Formulary of India -Part I. Ministry of Health and Family Welfare -Government of India; 1992.
12. Deepa, R., Mahalakshmi, V., Muthukumar, N.J., Meenakumari, R. A review on therapeutic effectiveness of Parangipattai choornam- A Siddha polyherbal formulation. *World Journal of Pharmaceutical Research.* 2016; 11(5):206-215.
13. Lee, NY., Khoo, WK., Adnan, MA., Mahalingam, TP., Fernandez, AR., Jeevaratnam, K. The Pharmacological potential of *Phyllanthus niruri*. *Journal of Pharmacy and Pharmacology.* 2016; 68(8):953-69.
14. Jahan R, Al-Nahain A, Majumder S, Rahmatullah M. Ethnopharmacological significance of *Eclipta alba* (L.) Hassk. (*Asteraceae*). *International Scholarly Research Notices.* 2014;2014:1-22.
15. Arawwawala, M., Thabrew, I., Arambewela, L., Handunnetti, S. Anti-inflammatory activity of *Trichosanthes cucumerina* Linn. In rats. *Journal of Ethnopharmacology.* 2014; 131(3):538-543.
16. Wang, B., Zhang, Y., Huang, J., Dong, L., Li, T., Fu, X. Anti-inflammatory activity and chemical composition of dichloromethane extract from *Piper nigrum* and *P. longum* on permanent focal cerebral ischemia injury in rats. *Brazilian Journal of Pharmacognosy.* 2017; 27(3):369-374.
17. Subathra, S., Akshaya, A., Sowbarnika, M., Nava Subramiya Bharathi, L., Mathukumar, S. Virtual screening of Siddha formulation Shaya choornam towards identification of potential inhibitor targeting Enoyl-Acyl carrier protein reductase (InhA) in *Mycobacterium tuberculosis*. *International Journal of Botany Studies.* 2021;6(1):207-214.
18. Garbicz, J., Całyniuk, B., Górski, M., Buczkowska, M., Piecuch, M., Kulik, A., Rozentryt, P., *et al.*, Nutritional therapy in patients suffering with psoriasis - A review, *Nutrients.* 2021; 14(1):119.
19. Maria, L., Musumeci, M.R., Nascia, N.S., Micali, G. The role of lifestyle and nutrition in psoriasis: Current status of knowledge and interventions - review. *Dermatologic Therapy.* 2022; 35(9): 1-9.
20. Nille, G.C., Chaudhary, A.K. Potential implications of Ayurveda in Psoriasis: A clinical case study. *Journal of Ayurveda and Integrative Medicine,* 2021; 12:172-177.