

# International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

# Effect of Ayurvedic Modalities in the Management of Palmoplantar Psoriasis (Kitibha) – A Case Study

### Rahul Kumar Burolia\*

\* P.G Scholar, Department of Samhita & Siddhant, All India Institute of Ayurveda, New Delhi-110076 Email- <a href="mailto:drburolia303@gmail.com">drburolia303@gmail.com</a>

#### ABSTRACT

Palmoplantar psoriasis is a subtype of psoriasis which is a chronic autoimmune disease with the rapid-over production of skin scaling. Inflammatory scales, discolouration and severe itching are common symptoms. In this case report, management of palmoplantar psoriasis (Kitibha kustha) is presented. Patient was treated with ayurvedic multimodal approach of Shaman chikitsa (pacifying treatment) including internal oral administration and external applications. Significant relief was noticed with no relapsing ad development of new scars and no side effect was noticed during treatment duration as well.

KEY WORDS:- Palmo-plantar psoriasis, Kitibha, Shaman chikitsa

#### INTRODUCTION

Skin is the largest organ of the body which comprising almost 16 % of the total body weight. Any change in its colour, complexion, texture and altered tactile perception is studied under *Kustha* (skin disease). *Kiţibha* of Ayurvedic literature is compared and accepted with Psoriasis in modern medical diagnosis. Psoriasis (*Kiţibha*) is well known disease in Ayurvedic fraternity from the time immemorial. As per conventional system of medicine, psoriasis comes under papulo-squamous disorder with a morphological feature of scaly papules and plaques. Psoriasis is an autoimmune disorder of the skin results in hyper proliferation of the skin [1]. Palmoplantar psoriasis is a chronic variant of psoriasis that characteristically affects the skin of the palms and soles. It features hyperkeratotic, pustular, or mixed morphologies [2]. A clear disease description of *Kitibha* is available in ancient texts along with its pathogenesis, treatment etc.. Kitibha is described under the eleven *kshudrkustha* as - It is blackish brown, rough similar to scar tissue and hard to touch (touch similar to the granulation process in wound) with secretion [3] [4].

#### AIM & OBJECTIVES

To study the effect of ayurvedic modalities in the management of Palmoplantar psoriasis (Kitibha).

#### **CASE REPORT**

A 45 year old male patient with good body built presented on 13 October 2021 in O.P.D at All India Institute of Ayurved (Registration no. 520429), with complaints of dry scars over his bilateral palm with severe itching, secretion and pain since 3 months. Sometimes bleeding can occur on itching. He is taking conventional treatment since 3 months. During his treatment, his scars are cured and after sometime, they relapse on the same site. Patient did not produce any previous record of his treatment he has gone through. After taking his brief history, he is a non-working since last 4 months and having no family history with any kind of skin disease (*Kustha*). He occasionally consume alcohol and consume curd on daily basis.

#### **CLINICAL EXAMINATION**

Patients was fair and afebrile. Vitals were normal. Pallor, icterus, clubbing, lymphadenopathy and cyanosis was absent. Cardiovascular and respiratory system revealed as no abnormality found. Bala Pramana was assessed by Dashvidha Atur Prakisha. Prakarti (constitution) of patients was Pitta-Kaphaj. Sara (proper nourishment of body), Satva (physiologoical strength), Pramana (body proportion), Samhanana (body built), Vaya (age), Satmya (compatibility) Jaran Shakti (digestive power) were Madhyama (medium) while Vyayama Shakti (strength) is Avar (low). Dominancy of Dosha in disease is Kapha-Vata. On examination hyperkeratotic, scaly papules and plaques with the hyper proliferation of the skin was observed.

#### SAMPRAPTI GHATAKA

Doshaja dominancy was Kapha- Vata and Dushya (vitiated Dhatu) was Twaka (Skin), Mansa (Muscle) and Ambu (Blood Plasma). Srotas (channels) involved were Raktvaha (channels carrying blood) and Mansavaha (channels carrying nutrition to muscles). Svabhava of the disease was Chirkari (chronic) in nature.

#### DIAGNOSIS CRITERIA

Diagnosis was made on the clinical sign and symptoms as palmoplantar psoriasis (Kitibha).

#### TIMELINE

When the morbid *Dosha* are more potent *Sodhana* (purification) treatment was administered first, but due to lack of sources considering this patient was given Shamana *Chikitsa* (pacifying treatment) along with some dietary restriction. He was prescribed medicines for internal and topical application. The assessment was made before treatment, after treatment and on follow-up.

### FOLLOW-UP AND OUTCOMES

Marked improvement was noted in the patient after starting Ayurvedic treatment. Almost all the symptoms that persist at the time of visit got improved and the inhibition of new scars were noticed as mentioned in table 1.1.

Days	Treatment	Symptoms before treatment	Symptoms cured after treatment	Pictures
0-7 days	Panchwalkal kwath (prakshalan)      Lepa (Triphala + Yasthimadhu) in Shatdhauta Ghrit	Severe Itching  Secretion Pain Relapsing of scar over palm	No Secretion     Scars less in size, no new scar develop during 7 days	
8- 15 days	1. Panchwalkal kwath (prakshalan) 2. Lepa (Triphala + Yasthimadhu) in Jatyadi tail 3. Khadiraristha	Mild itching     Mild pain	<ul> <li>No new scars develop</li> <li>Improvement in pain</li> <li>No Itching</li> </ul>	

16 - 22 days	<ol> <li>Panchwalkal kwath (prakshalan)</li> <li>Lepa (Triphala + Yasthimadhu) in Jatyadi tail</li> <li>Khadiraristha</li> <li>Arogyavardhani vati</li> <li>Kaishore guggulu</li> </ol>	Mild pain	<ul> <li>No new scars develop</li> <li>No pain in pain</li> <li>No itching</li> <li>Scars size decreased</li> </ul>	

Table 1.1 – use of ayurvedic medicines with the improvement on every follow-up.

#### DISCUSSION

The term *Kustha* is derived from the Sanskrit phrase *Kushnati Vapuh*, meaning "that which alters the complexion of the body by extracting. All the types of *Kustha* (skin diseases) are caused by vitiation of *Tridosha* with the involvement of four *Dushya* likely skin, blood, lymph and muscular tissues <sup>[5]</sup>. The involvement of these tissues leads to chronic conditions, making them challenging to treat. Although *Kustha* is primarily classified as *Tridoshaja* (caused by an imbalance of the three doshas), its manifestation varies depending on the dominance of a particular dosha, resulting in different colors, complexions, pain sensitivity, texture, deformities, discharge, and tactile perception. In the context of *Kustha Chikitsa* (the treatment of skin diseases), four important aspects of the skin need to be carefully examined: -

- a) Layers of the Skin: The skin consists of six distinct layers, each playing a vital role in determining the type and progression of various skin diseases. The health and condition of these layers significantly impact the severity and chronicity of the skin disease condition.
- b) **Sensory Function**: Skin acts as a sensory organ, serving as the *Ashrya* (primary site for the manifestation) of *Vata Dosha*. Imbalance in *Vata Dosha* can lead to symptoms such as numbness and a loss of tactile perception, affecting the patient's ability to feel and respond to touch.
- c) **Sub-tissue Role**: The skin is considered an *Upadhatu* (a secondary or supporting tissue) of *Mansa Dhatu* (muscle tissue). The texture and characteristics of skin lesions can be influenced by the underlying muscle tissues condition.
- d) **Deep Skin Affliction**: Damage to the deeper layers of the skin impairs the body healing ability and weakens its defense mechanisms against pathogenic invasions. This deeper involvement exacerbates the condition and prolongs recovery from skin disease.

#### PROBABLE MODE OF ACTION OF DRUGS

Panchwalkal kwath: referring to ayurvedic texts panchwlkal kwath shown its Vranaropan (wound healing) activities. It refers to the combination of five plants bark as Vata (Ficus bengalensis Linn.), Udumbara (Ficus glomerata Roxb.), Ashwatha (Ficus religiosa Linn.), Parisha (Thespesia populnea Soland. Ex Correa.), Plaksha (Ficus lecor Buch. Ham.). it has activity of Vranaprakshalana, Vranaropana, Shothahar, Upadanshahar, Visarpahara and Vranapaha. It has proven as having anti-microbial activities, anti-bacterial activities, anti-inflammatory properties and wound healing properties [6].

Shata-Dhauta- ghrita:- it is an ayurvedic preparation which is 100 times washed ghrita which is used to manage conditions like burns, chicken pox, scars, herpes, wound, leprosy and other skin diseases. It also act as vehicle for drugs to be applied external use such lepa [7].

*Triphala churna*: -*Triphala* is well recognized drugs in ayurvedic medicines consisting Emblica officinalis (*Amalaki*), Terminalia bellerica (*Bibhitaki*), and Terminalia chebula (*Haritaki*) as ingredients and classified as *Tridoshaghna*. In addition, it has potentially effective in in numerous conditions such as appetite stimulation, reduction of hyperacidity, antioxidant, anti-inflammatory, immunomodulating, antibacterial, antimutagenic, adaptogenic, hypoglycemic, antineoplastic, chemoprotective, and radioprotective effects, prevention of dental caries [8] and anti-microbial activity [9].

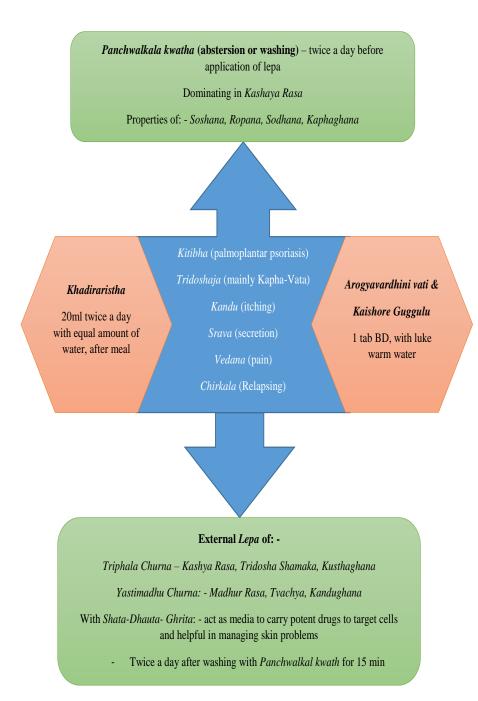
Yasthimadhu churna (Glycyrrhiza glabra Linn.): - In ancient Ayurved more than 1250 preparation are described containing Yasthimadhu as an ingredient. It shows various properties as regulation of gastrointestinal motility, anti-obesity action, anti-oxidant, anti-inflammatory activity, immunostimulatig, enhancing learning and memory ability, accelerating metabolism process of the marrow stem cells, anti-viral, anti-fibrotic effect, anti-allergic, cholinesterase-inhibiting activity, immunomodulatory, anti-depressant, anti-mutagenic, increased resistance to stress, anti-ulcerogenic, hepato-protective, anti-thrombotic effect, anti-convulsant, reduce ocular hypertension, anti-tumor and anti-androgenic activity [10].

**Khadiraristha:** - it is a fermented ayurvedic proprietary medicine which has great pharmacological importance mentioned in *Ayurveda*. It's a poly-herbal medicines containing various drugs widely using various diseases including skin diseases such as psoriasis, vitiligo and eczema. Besides, it is effective in gastric disorders and acts as an anthelmintic agent [11].

*kaishoreguggulu*: - is an herbal remedy based on purified *Guggulu* in Ayurvedic medicine. antiallergic, antibacterial and blood purifying properties found in this herbal preparation [12].

Arogyavardhini vati:- as its name symbolize it promote good health. According to Ayurvedic texts (Rasaratnasamucchaya, Bhaisajyaratnavali) the drug Arogyavardhini Vati possess the pharmacological action like Kusthanasaka (can alleviate all types of skin disorder).

As involvement of *Tridosha* and four *Dushya* this management protocol is followed (table 1.1). *Panchwalkal kwath's* ingredient are *Kashaya* in nature hence helping is reducing *Kapha* from the affected site also *Kashaya Rasa* has properties of *Soshana*, so that excessive *Kapha* will be alleviate. External application of *Triphala Churna+Yasthimadhu Churna* with *Shata-Dhauta- Ghrita* is used as their properties of *Kusthghana* and *Kandughana* and beneficial in skin diseases. Internal medicines were used as indicated in *Kustha Chikitsa* (skin disorder treatment).



This case study can be a documented evidence for effective management for Kitibha kustha (palmoplantar psoriasis) with repetitive use of internal and external treatment all together effectively. Kitibha kustha has relapsing tendency, followed treatment protocol in this case significantly controlled the symptoms of palmoplantar psoriasis with no relapsing and development of new scars. No untoward effect were noticed with medicines during treatment period, inferring their safety aspect I given condition. Ayurveda has fruitful resources to counteract this nature of the disease with use of ayurvedic formulations along with dietary regimen.

## DECLARATION OF PATIENT CONSENT

Author certify that they have obtained patient consent form, where the patient /caregiver has given his/her consent for reporting the case along with the images and other clinical information in the journal. The patient/caregiver understand that his/her name and initials will not be published and due efforts will be made to conceal his/her identity, but anonymity cannot be guaranteed.

#### CONFLICT OF INTEREST

#### REFERENCE

- 1. Psoriasis.pdf [Internet]. [cited 2021 Dec 28]. Available from: http://www.ccras.nic.in/sites/default/files/viewpdf/faq/PSORIASIS.pdf
- Charaka samhita with Chakrpaani Teeka Ayurvedipika, edited by Vd. Yadavji TrikamJi Acharya, Prolouged by Prof. R.H Singh, Chaukhamba Surbharti Publication, Varanasi, chikitsa Sathan 7/21, page no. - 451
- Sushruta Samhita with Dalhana- Nibandh Sanghraya & Gayadasa- Nyaya Chandrika, Edited by Vd. Yadavji TrikamJi Acharya & Narayan Ram Acharya Kavyatirtha, Chaukhamba Sanskrit Sansthan, Nidana Sthan 5/14, pg-286
- 4. Miceli A, Schmieder G. Palmoplantar Psoriasis. StatPearls [Internet]. 2021 Aug 22 [cited 2021 Dec 28]; Available from: <a href="https://www.statpearls.com/ArticleLibrary/viewarticle/34002">https://www.statpearls.com/ArticleLibrary/viewarticle/34002</a>
- Charaka samhita with Chakrpaani Teeka Ayurvedipika, edited by Vd. Yadavji TrikamJi Acharya, Prolouged by Prof. R.H Singh, Chaukhamba Surbharti Publication, Varanasi, chikitsa Sathan 7/9, page no. - 450
- 6. Yogesh Badwe. Review Study of Potential Wound Healing Properties of Panchavalkala International Journal of Ayurveda and Pharma Research. 2019;7(8):53-57
- 7. Agnihotri S, Agnihotri A, Tupkari S. Shata Dhauta Ghrita A Case Study. Indian J Tradit Knowl. 2009 May 1;8.
- 8. Peterson CT, Denniston K, Chopra D. Therapeutic Uses of Triphala in Ayurvedic Medicine. J Altern Complement Med. 2017 Aug 1;23(8):607–14.
- Omran Z, Bader A, Porta A, Vandamme T, Anton N, Alehaideb Z, et al. Evaluation of Antimicrobial Activity of Triphala Constituents and Nanoformulation. Evid Based Complement Alternat Med. 2020 Aug 3;2020:e6976973.
- 10. Korhalkar A, Deshpande DrM, Meera M. Pharmacological studies of Yashtimadhu (Glycyrrhiza glabra l.) in various animal models. Glob J Res Med Plants Indig. 2013 Jan 1;2:152–64.
- 11. Balkrishna A, Gupta AK, Gupta A, Singh P, Singh K, Tomar M, et al. Antibacterial Activity and Mechanism of Action of an Ayurvedic formulation Khadirarishta. J Herb Med. 2021 Aug 26;100509.
- 12. Lather A, Gupta V, Bansal P, Sahu M, Sachdeva K, Ghaiye P. An ayurvedic polyherbal formulation Kaishore Guggulu. Int J Pharm Biol Arch. 2011 Jan 1;2:497–503.