



Management of Palmoplantar Keratoderma through Ayurveda: a case Report

Dr. Vidya Shivram Boinwad¹, Dr. Sarika Patil², Dr. Dipali Sherekar

¹Asst. Professor, Kaychikitsa, Govt. Ayurved College, Nanded, Maharashtra.

²Professor, Shalakya Tantra, Yashwantrao chavhan Ayurveda medical college, Nipani Bhalgaon, Aurangabad, Maharashtra.

³Asso. Professor, Panchakarma Dept, Govt. Ayurved College Nanded, Maharashtra.

Date of Submission: 13 Nov. 2022

Date of Acceptance: 10 Dec. 2022

ABSTRACT

Palmoplantar keratoderma are abnormal thickening of the skin on the palms and soles. There is contiguous extension of hyperkeratosis beyond palmoplantar keratodermas. Palmo planter keratoderma may be hereditary or acquired. Acquired palmoplantar keratoderma can be correlate with the *vataj kushtha* mentioned in Ayurveda. In this case study patient of Palmoplantar Keratoderma was managed through Ayurveda using Ayurveda principles and *chikitsasutra* given by Acharya *charak* for *vataj kushtha* and we found better results without any side effect.

Keywords: *Palmoplantar, Keratoderma.*

INTRODUCTION

Palmoplantar keratoderma are abnormal thickening of the skin on the palms and soles. There is contiguous extension of hyperkeratosis beyond palmo planter Keratodermas. Palmo planter keratoderma may be hereditary or acquired.

Acquired palmoplantar keratoderma non hereditary, non frictional hyperkeratosis of palms and soles that involves fifty percent or more than fifty percent of the surface .¹

The causes of acquired palmoplantar keratodermas including malignancies, systemic conditions like thyroid disease, circulatory disorders, malnutrition, skin conditions (psoriasis, eczema, pityriasis) and infectious causes e.g. syphilis, tuberculosis, human papilloma virus.

Palmoplantar keratoderma is diagnosed by detailed medical history and physical examination

Management of acquired palmoplantar keratoderma includes firstly identifying the cause of it and treating the underline cause of palmoplantar keratoderma. Conservative treatment options are topical retinoid, corticosteroids.²

Palmoplantar keratoderma can be correlated with *Vatajkushtha*. It also called as *Kapalkushtha*. *Kapal* refers to broken pieces of earthen pot. It is characterized by *Krishna Arun Kapalabham* (skin looks like broken pieces of earthen pot). Skin *haveruksha* (dry) *Parush* (rough and thick to touch), *Todbahul* (pain). This ailment is difficult to cure .It is caused due to *Vatadosha*.³ *Acharya charak* advised *Ghritpana* internally for the management of *Vatajkushtha*.⁴

So we planned firstly *Deepen karma* for *deepen karma* we used *Shunthichurna* 3g 2 times with lukewarm water for 8 days.

After *deepen karma* start internal *Ghritapana* with *Panchatiktaghrit* 20 ml internally For 1 month as a *shaman Snehapan*.

Sthanik (local) *chikitsa* with *Shatadhautghrita* two times for 1 month

And *Mahamanjishtadi kwath* 15 ml twice a day given for 1 month and advised local hygiene daily.

After 1 month we found effective results on *Kandu* (itching), *Ruja* (pain) and *Rukshata* (dryness). Skin texture of patient also improved by *Ayurvedic* management based on *Ayurved siddhant*.

CASE REPORT

37 year old female patients come to our OPD with symptoms both sole excessive dryness with scaling blackish discoloration, difficulty in walking. Cracked palms with painful condition also had both pedal oedemas.

Personal history:

She was married but divorced before 3 years after that she start any labour work

Medical history: pt had history of tuberculosis and completed her AKT before 2 months.

Physical examination:

General condition was moderate, pallor, a febrile. Pulse was 80 per minute. Blood pressure was 110/70 mm of hg

On respiratory examination mild basal crept was found.

Circulatory system examination was found normal.

On Central nervous system, patient was well oriented .patient had burning sensation on both palm and soles

Local examination:

Pitting oedema was found on both legs.

Both soles had black discolouration with excessive scaling. Difficulty in walking was found.

Both palms shows cracked lesion.

Haematological investigation:

Complete blood count report was normal but haemoglobin was 8gm, blood sugar was normal, erythrocyte sedimentation rate was 20.

Samprapti (pathophysiology)

Hetu- Ruksha, Paryushit Aahar, Abhojan, Vyadhihetu (rajyakkshma) , history of tuberculosis, malnutrition.

Purvarupa- Harden the skin of sole and crakes on palm.

Rupa- Swlloen foot, skin become more harden, Rukshata, Parushata, Arunata increased .Difficulty in walking, crakes on both palms, burning sensation of sole and palm.

Samprapti- Due to *hetusevanvata*, *pitta* Kapha allivated but *vata* dosha allivated predominantly get *Sthansnshraya* in *Ubhay* hasta pada and develop above symptoms.

(Dosh – vata pitta kapha Dushya-rasa rakta, twacha)

Upashay- Patient had relief to given treatment specially by *Abhyantar* (internal) and *Bahya* (external) snehan.

Vyadhivinishay- *vatajkushth* (*kapalkushtha*)

After detailed history taking, clinical examination we plan *Ayurvedic* management on the basis of *Siddhant*.

Treatment given:

Sr. No.	Drug	Dose	Duration
1	Shunthi churna	3 gm	Twice a day for 8 days
2	Panchatikta ghrita	30ml	At morning with lukewarm water For 1 month
3	Mahamanjishthadi kwath	15ml	Twice a day for 1 month
4	Sitopaladi churna	2 gm	3 to 4 times with madhu for 15 days
5	Shatadhaut ghrita		local application for 1 month



Assessment criteria:

Assessment of the patient with following

1. Skin images before and after treatment
2. Symptom score before and after treatment ⁵

Sr. No	Symptom		Score
1	Kandu	No itching	0
		Momentary itching(not disturbing normal activity)	1
		Episodic itching(disturbing normal activity)	2
		Continuous itching	3
		Continuously and even disturbing sleep	4
2	Ruja	No pain	1
		Mild pain of low density causing no disturbance in routine work	2
		Moderate pain hampers the daily routine work	3
		Severe pain causing definite interruption in routine work	4
3	Rukshata(dryness)	No dryness	0
		Dryness with rough skin	1
		Dryness with scaling	2
		Dryness with craking	3

OBSERVATIONS AND RESULTS

BEFORE TREATMENT	AFTER TREATMENT
	



Subjective parameter /Symptom score:

Sr. No.	Symptom score	Before treatment	After treatment
1	Kandu	2	0
2	Ruja	4	0
3	Rukshata	3	0

DISCUSSION

In Ayurveda all skin disorder comes under *Kushta Vyadhi*. On considering above signs and symptoms, clinical and local examination in this case we diagnosed it as *KapalKushtha (VatajKushtha)*. Acharya Charak mentioned the symptoms of *KapalKushtha* as *Rukshata* (dryness), *Parusha*, *Arun*, *Khara* (rough), *Todabahul* (painful) *Daha* (burning) *Kandu* (itching) etc. Are found in this case.

Sarpipan are advised for the management of *KapalKushtha (Vatajkushtha)* in *Kushtha Chikitsasthan* by Acharya Charak. So we select the *PanchatiktaGhrita* 30 ml at morning with lukewarm water for 1 month. Before that we give *ShunthiChurna* 3gm twice a day for 8 days. *Sunthi* acts as a *Deepan* and *Amapachana* due to its *UshnaGuna* which is necessary before *Snehapana*⁶

Panchtikta ghrita contains *Vasa* (*Adhatoda vasika*) *Nimb* (*Azadirachta indica*) *Guduchi* (*Tinospora cordifolia*) *Patol* (*Trichosanthes dioica*) and *Kantakari* (*Solanum xanthocarpum*) and *Ghrita*. All these drugs have *Katu*, *Tikta*, *KashayRas* and *Ushna* property helps to pacify the alleviated *Vata*, *Pitta* and *KaphaDosha*. Due to pacification of *VataDosha* it subsides *KharaSparsha*, *Kina* scaling *parushata* as well as *Shyav Varna*. All contain of *Panchatiktaghrita* has anti inflammatory, anti oxidant, immune potentiating antihistaminic property⁷

Pt had a history of Koch's she taken AKT but on examination still basal crepts had present and she also had cough hence we given *Sitopaladi Churna* 2 gm for 3 to 4 times aday with *Madhu*. After 15 days these symptomssubsides because it have *Rasayan* property and told as a *Rogadhikar* of *Rajyakshma* then we stop *Sitopaladi Churna* after 15 days.

Mahamanijisthikwath having *Kushthagana*, *Kandunashak*, *Pachak* and *Srotoshodhak* and *VranaRopak* property and it is best *Raktashodhak* (blood purifier) so it gives better results in this case.⁹

Application of *Shatadhaut Ghrita* locally helpful in removal of scars and it acts as a anti inflammatory agent.¹⁰ it also used as a permeation enhancer so increases the permeation rate.¹¹

Overall results seen in this case can be made out by summation of effects of drugs and therapies which helps to *Samprapti Vighatana* (breakdown the pathogenesis) of the disease.

CONCLUSION

Acquired Plantopalmar Keratoderma which we can correlate with the *Vatajkushtha*. Treatment given on the basis of *Chikitsa Sutra* of *Vataj Kushtha* and *Ayurvedic Chikitsa Siddhant* found effective results in this case but further clinical trial with large sample size will confirm the significance of this management.

REFERENCES

1. Patel s.a cquired palmoplantar keratoderma .Am J clinical dermatol 2007;8:1-11
2. Somani sp et al.int J Res Dermatol.2022 jan 8(1)101-109
3. Bramhanand tripathi charaksamhita vol1.nidan sthana 5/8 page no.513 chaukhamba prakashan. ISBN 978-93-81484-75-3
4. Bramhanand tripathi charak samhita vol 2 chikitsa sthan Chaukhamba prakashan.
5. MS Baghel developing guidelines for clinical research methodology in ayurveda gujrat ayurved univercity2011
6. Ahastri JLN Dravyaguna vigyana .vol 2 .varanasi; chaukhamba prakashan; 2014 page no 9
7. Smita Lokhande et al/Int.J.res.Ayurveddapharm.7 (supple 3), Jul-Aug 2016
8. Sitopaladi churana
9. Shailaja shrivastav, sharangdhar samhita madhyam khand 2/137-142 chaukhamba prakashan 2011
10. Vaidya ss and Dole VV, Bhaishajyakalpana (anmol prakashan), pune2001, 106-112,130
11. Pande vishal v et al / J pharm, sci and res. Vol 12 (7), 2020; 948-956