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RESEARCH ARTICLE

AYURVEDIC MANAGEMENT OF PLANTAR KERATODERMA (VIPADIKA KUSHTHA): A CASE REPORT

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Abstract

Skin diseases are among the leading causes of non-fatal disease burden worldwide. In Ayurveda, all skin disorders are classified under Kushtha Roga. Vipadika Kushtha, one of its types, is characterized by fissuring of palms and soles associated with pain, dryness, and thickening of skin. An elderly female presented with gradually progressive thickening of the plantar skin over both soles for 2 years, associated with deep fissures and severe pain. There was no family history of similar illness. The patient had not responded to conventional treatment including methotrexate, retinoids, and topical steroids. Based on clinical features, the condition was diagnosed as Vipadika Kushtha. The treatment protocol included internal medications along with external therapies such as Triphala decoction wash, leech application, and local application of Jatyadi Ghrita. After 12 weeks of Ayurvedic management, marked improvement was observed in hyperkeratosis, fissuring, area of involvement, and pain, with grading reduced from 3, 3, 3, 4 to 1, 0, 0, 0 respectively. This case highlights the potential of Ayurvedic interventions in managing chronic, conventional treatment resistant plantar keratoderma, offering a safe and effective alternative approach for symptom relief and improved quality of life.

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Introduction:-

Dermatosis refers to integumentary system disease which includes diseases affecting skin, nail, and hair. The dermatoses affecting the palm and sole are one of the most difficult to treat.[1] Various dermatoses affect the skin of palms and soles only; Palmoplantar Keratoderma is one such type. Keratoderma is characterized by thickening of skin which may be hereditary or acquired. Plantar keratoderma presents as thickened, hard skin over the soles appearing yellowish, red, or flaky, and may manifest in diffuse, punctate, and focal patterns. It can lead to pain, difficulty in walking, and sometimes secondary infections. Acquired keratoderma has diverse aetiologies including:[2] Keratoderma climactericum, drug-associated, malnutrition-associated, systemic disease-associated, malignancy-associated, infectious, and idiopathic causes. Conventional management mainly includes emollients, retinoids, and corticosteroids. Ayurveda covers most skin diseases under Kushtha Roga, which are further classified into Mahakushtha and Kshudra Kushtha, depending on the prognosis. Among these, Vipadika—a type of Kshudra

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Kushtha—closely correlates with plantar keratoderma, which is characterized by painful fissures in palms and soles.[3]

Case description:

A 72-year-old female presented with complaints of gradually progressing thickening of the plantar aspect of both feet and toes, associated with extreme pain for the past 2 years. She is a housewife by occupation. The patient is non-diabetic and non-hypertensive with no history of any chronic illness. There was no family history of similar illness. Her dietary habits include frequent intake of spicy and unctuous food. She was involved in prolonged standing and habitual squatting during household activities. Clinical findings: On examination, marked hyperkeratosis was observed over bilateral soles with yellowish scaling. Deep fissures with surrounding erythema were present. The patient reported severe pain while walking, leading to significant functional limitation. Ten-fold Ayurveda clinical examination revealed that the patient had Vata-Pitta Prakriti (Vata-Pitta body constitution), Vata-Kapha Vikriti (Vata-Kapha dosha imbalance), Madhyama Sara (moderate tissue excellence), Madhyama Samhanana (moderate body build/compactness), Madhyama Satmya (moderate adaptability/habituations), Madhyama Satva (moderate psychological strength), Madhyama Ahara Shakti (moderate digestive capacity), Madhyama Vyayama Shakti (moderate physical capacity for exercise), Avara Bala (low strength/immunity), and Vaya: Vriddha (old age/geriatric stage).

Treatment history: Initially, the patient received treatment from nearby primary health care centres, where she was given methotrexate and topical steroids, but she got no relief. She later consulted higher centres where a diagnosis of gradually progressive plantar keratoderma was made. There, she was prescribed a systemic retinoid (Acitretin 25 mg once daily) along with topical urea (20%). However, the response remained unsatisfactory, following which she visited an Ayurvedic hospital for further treatment. Timeline of development of symptoms: The patient presented to the outpatient department in October 2025. A detailed history was obtained, and a chronological timeline of symptom progression was made, which is presented in Table No. 1.

Table No. 1- Timeline of symptom progression

Date	Symptoms
June 2023 (2.5 years prior)	Mild roughness over plantar surface of bilateral soles
October 2023 (3-4 months later)	Gradual thickening of plantar skin of bilateral soles
March 2024 (5 months later)	Extension of thickening of skin to the toes
July 2024 (4 months later)	Development of yellowish colour over thickened areas
November 2024 (4 months later)	Development of superficial fissures over thickened skin
February 2025 (3 months later)	Deep fissures associated with pain and difficulty in walking
October 2025 (OPD visit)	Deep painful fissures, thickened yellow skin over bilateral plantar and toes with difficulty walking.

Diagnostic assessment:

The clinical diagnosis was established based on dermatological examination, which revealed marked hyperkeratosis with yellowish scaling over pressure points below the toes and plantar surfaces of both feet, along with deep painful fissures and a gradually progressive course. Investigations: Complete blood count, erythrocyte sedimentation rate, liver function test, kidney function test, lipid profile, and blood sugar were assessed. All reports were within normal range. Therapeutic intervention: The treatment aimed at softening the hyperkeratotic skin, reducing thickness, promoting fissure healing, relieving pain, and improving functional mobility. During the initial 4 weeks, the patient was administered oral medications along with local washing of the feet using lukewarm Triphala decoction. The decoction was applied gently using a syringe (without needle) for approximately 10 minutes daily.

In the subsequent 4 weeks, oral medications were continued along with two sittings of Jalaukavacharana (leech therapy) at an interval of 7 days. Two leeches were applied to each foot and allowed to detach spontaneously after approximately 12–15 minutes. Post-procedure, the wound was cleaned with Lodhra powder and bandaged. The same procedure was followed in the second sitting also. In the final 4 weeks, oral medications were continued along with local application of Jatyadi Ghrita. The medicated ghee was applied once daily, and the feet were wrapped with a soft cotton cloth for 3–4 hours. The patient was advised to minimize movement during this period. The detailed therapeutic intervention planned is described in Table No. 2.

Table No.2: Intervention schedule

Time	Intervention	Dose	Frequency	Anupana (vehicle)
Day 0 (First visit)	Panchatikta Ghrita Guggulu	500 mg.	twice daily after meal	luke warm water
	Khadirarishta	15 ml.	twice a day after meal	luke warmwater
	Avipattikar Churna	10gm.	After meal in night	Hot water
	Triphala decoction	External wash		
Week 4	Kaishore Guggulu	500mg.	twice daily after meal	luke warm water
	Manjishthadi Kashaya	15 ml.	twice daily before meal	luke warm water
	Arogyavardhini Vati	500mg.	twice daily after meal	luke warm water
	Leech application (twice with a gap of 7days)			
Week 8	Gandhak Rasayana	250mg.	twice daily after meal	luke warm water
	Arogyavardhini Vati	500mg	twice daily after meal	luke warm water
	Jatyadi Ghrita	Local application		

Assessment criteria: An assessment scale was developed to assess changes before and after treatment:-

Hyperkeratosis Thickness:-

- 0- None
- 1- Mild roughness
- 2- Obvious thickening
- 3- Thick dense keratoderma
- 4- Massive plate-like hyperkeratosis

Fissuring / Skin Integrity:-

- 0- None
- 1- Superficial cracks
- 2- Painful fissures

- 3- Deep fissures ± bleeding
- 4- Hemorrhagic fissures / ulceration / infection

Area of Involvement:-

- 0- None
- 1- Pressure points only
- 2- <50% of sole
- 3->50% of sole
- 4- Entire sole ± transgrediens

Symptoms / Functional Impact:-

- 0- None
- 1- Mild discomfort
- 2- Pain with prolonged walking
- 3- Gait/footwear affected
- 4- Daily activities limited

The patient showed significant improvement in hyperkeratosis, scaling, fissures, and pain during walking over a period of 12 weeks of Ayurvedic treatment. Progressive clinical improvement was observed at each follow-up visit. The detailed outcomes are presented in Table 3.

Table No.3: Follow-up and outcome assessment

Time	Hyperkeratosis	Fissuring/ skin integrity	Area of involvement	Pain/Functional impact
Day 0 (First visit)	3	3	3	4
Week 4 (first follow up)	2	1	1	2
Week 8 (second follow up)	1	0	0	0



Figure No.1: Before treatment images of both feet



Figure No. 2: After treatment images of both feet

Discussion:-

The clinical presentation in this case suggests a probable diagnosis of keratoderma climactericum (Haxthausen disease), which typically occurs after menopause and is associated with hormonal changes, although its exact pathogenesis remains unclear. The lesions characteristically begin over pressure-bearing areas of the soles and progress to erythema, hyperkeratosis, and fissuring.[4] In Ayurveda, the condition can be correlated with Vipadika, a type of Kshudra Kushtha, characterized by painful fissures over the palms and soles, primarily due to vitiation of Vata and Kapha Dosha. Although all the three Doshas are involved in Kushtha, treatment in Ayurveda is guided by predominant Dosha involvement.[5] In this case, a multimodal Ayurvedic approach was adopted to correct Dosha imbalance, enhance wound healing, and address chronic skin pathology. Panchatikta Ghrita Guggulu is classically indicated in Kushtha and chronic skin disorders.[6] Its Tikta Rasa (bitter taste) and Ghrita base help in pacification of vitiated Pitta and Kapha, while Guggulu contributes due to its anti-inflammatory and wound-healing properties. Khadirarishta is a fermented Ayurvedic formulation that is indicated in skin disorders[7] and is utilised in the treatment of various skin diseases.

Avipattikar Churna was given here to control the Pitta Dosha as well as to produce mild laxation and improve digestion, as impaired digestion may aggravate skin pathology. For local wound care, Triphala decoction was used because of its well-known wound-healing, anti-inflammatory, and astringent properties.[8] The cleansing action of Triphala supported improved granulation and helped maintain hygiene of the wound surface. Kaishore Guggulu is a polyherbal formulation which is indicated in skin diseases and wounds.[9] Its anti-inflammatory and Pitta-Rakta alleviating properties help to control erythema here. Mahamanjishthadi Kashaya helps to control Pitta and Rakta Dosha, and promotes healing of wounds. Manjishtha is classically known for its blood-purifying and skin complexion-enhancing effects, which are beneficial in chronic skin conditions with associated ulceration.

Arogyavardhini Vati is a herbo-mineral preparation that is indicated in skin diseases and is used to eliminate excessive deranged Pitta and Rakta. Leech therapy is well known for its wound healing properties. [10] The local removal of vitiated blood and bioactive substances released by leech saliva may have contributed to reduction in congestion, pain, and inflammation at the wound site. Gandhak Rasayana is a rejuvenation agent which is indicated for all types of skin diseases.[11] Jatyadi Ghrita for local application is indicated in painful ulcers.[12] Its antibacterial and anti-inflammatory properties support wound cleansing and epithelialization. The wound-healing potential of Jatyadi Ghrita has been found comparable to mupirocin hydrochloride in experimental studies, supporting its role as an effective topical agent in chronic wounds. [13] Overall, the combined internal and external therapies addressed both systemic imbalance and local wound pathology. The observed clinical improvement suggests that an integrative Ayurvedic approach may be beneficial in chronic skin diseases with ulcerative lesions. However, further controlled clinical studies are required to validate these findings and establish standardized treatment protocols

Conclusion:-

This case demonstrates that plantar keratoderma can be effectively managed using an Ayurvedic approach based on Dosha involvement. The patient, who was unresponsive to conventional therapies including retinoids, methotrexate, and topical corticosteroids, showed significant clinical improvement within three months of treatment. These findings suggest the potential role of Ayurvedic management in chronic and treatment-resistant cases; however, further controlled studies are required to substantiate these results.

Declaration of patient consent:

A written informed consent was obtained from the patient for publication of clinical details and photographs of feet for academic purposes. The patient's identity and other personal details have been kept confidential.

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