Plagiarism Checker X - Report

Originality Assessment

0%

Overall Similarity

Date: May 6, 2026 (12:52 PM)
Matches: 0 / 2187 words
Sources: 0

Remarks: No similarity found, your document looks healthy.

Verify Report:
Scan this QR Code

Ayurvedic management of Plantar Keratoderma (Vipadika Kushtha): A case report

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.

Keywords: Jatyadi Ghrita, Leech therapy, Plantar keratoderma, Vipadika Kushtha

Introduction:

Dermatosis refers to integumentary system disease which includes disease 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 sole 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 manifests in diffuse, punctate and focal pattern. It can lead to pain, difficulty in walking, and sometimes secondary infections. Acquired keratoderma has diverse aetiologies including:[2] Keratoderma climectericum, drug-associated, malnutrition associated, systemic disease associated, malignancy-

associated, infectious and idiopathic cause. Conventional management mainly include, Emollients, retinoids and corticosteroids. Ayurveda covers the 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 Kushtha-closely corelates with plantar keratoderma which is characterized by painful fissures in palm and soles.[3]

Case description:

A 72-year-old female presented with complaints of gradually progressing thickening of plantar aspect of both feet and toes, associated with extreme pain from the past 2 years. She is a house wife 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: 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/habituation), 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 the 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 (Acitrecin 25 mg once daily) along with topical urea (20%). However, the response remained unsatisfactory,

following which she visited 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 symptoms progression was made which is presented in the 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, 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 warm water

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.

A. Hyperkeratosis Thickness

 0- None

 1- Mild roughness

□ 2- Obvious thickening

□ 3- Thick dense keratoderma

□ 4- Massive plate-like hyperkeratosis

B. Fissuring / Skin Integrity

□ 0- None

□ 1- Superficial cracks

□ 2- Painful fissures

□ 3- Deep fissures ± bleeding

□ 4- Hemorrhagic fissures / ulceration / infection

C. Area of Involvement

□ 0- None

□ 1- Pressure points only

□ 2- <50% of sole

□ 3- >50% of sole

□ 4- Entire sole ± transgrediens

D. 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

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

I

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—features that were consistent with this case.[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 helps 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 for washing the feet 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. The Kaishore guggulu is a polyherbal formulation containing purified resin Guggulu indicated in all skin diseases and wounds.[9] Its anti-inflammatory and Pitta-Rakta alleviating properties helps to control erythema here. Mahamanjishthadi Kashaya helps to control Pitta and Rakta Dosha, 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.

Reference:

? Hongal AA, Rajashekhar N, Gejje S. Palmoplantar dermatoses: A clinical study of 300 cases. J Clin Diagn Res. 2016;10(8):WC04–WC07.

2 Patel S, Zirwas M, English JC. Acquired palmoplantar keratoderma. Am J Clin Dermatol. 2007;8(1):1–11. doi:10.2165/00128071-200708010-00001.

3Charak. Charaka Samhita with Vaidyamanorama Hindi commentary, Chikitsa Sthana, Chapter 7, Verse 22. Shukla V, Tripathi R. editor. Reprint ed. Varanasi: Chaukhamba Sanskrit Pratishthan; 2017. p. 184.

4 Champion RH, Burton JL, Burns DA, Breathnach SM. Rook’s textbook of dermatology. 7th ed. Malden (MA): Blackwell Science Ltd; 2004. p. 34, 79–107.

5Charak. Charaka Samhita with Vaidyamanorama Hindi commentary, Chikitsa Sthana, Chapter 7, Verse 31. Shukla V, Tripathi R editor. Varanasi: Chaukhamba Sanskrit Pratishthan; 2017. p. 185.

6 Govind Das Sen. Bhaishajya Ratnavali with Siddhiprada Hindi commentary, Kushtharogadhikara, Chapter 54, Verses 228–231. Mishra SN, editor. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; 2007. p. 882.

7 Ibid. Bhaishajya Ratnavali. Chapter 54, Verses 356–358. p. 895.

8 Mane KD, Walandkar A. The role of Triphala Kwatha in the management of non-healing ulcers. Int J Pharm Res Appl. 2025;10(3):1849–1852.

9 Sharangadhara. Sharangadhara Samhita. Dipika Hindi commentary. Madhyama Khanda, Chapter 7, Verses 70–81. Tripathi B, editor. Reprint ed. Varanasi: Chaukhamba Sanskrit Pratishthan; 2001. p. 205.

10Nair HKR, Ahmad NW, Lee HL, Ahmad N, Othamn S, Mokhtar NSHM, Chong SSY. Hirudotherapy in Wound Healing. Int J Low Extrem Wounds. 2022 Dec;21(4):425-431.

11 Joshi R, Vaidya R. Ayurved Sarsangraha. 1st ed. Reprint. Nagpur: Shree Baidyanath Ayurved Bhavan Pvt Ltd; 2004. Rasa-Rasayana Prakarana. p. 292.

12 Vagbhatta. Ashtanga Hridaya Vidyotini Hindi commentary. Uttar Sthana, Chapter 25, Verse 67. Gupta A. editor. Reprint ed. Varanasi: Chaukhamba Prakashan; 2014. p. 741.

13 Jamadagni PS, Jamadagni S, Mukherjee K, Upadhyay S, Gaidhani S, Hazra J. Experimental and histopathological observation scoring methods for evaluation of wound healing properties of Jatyadi Ghrita. Ayu. 2016;37(3–4):222–229.

EXCLUDE CUSTOM MATCHES	ON
EXCLUDE QUOTES	OFF
EXCLUDE BIBLIOGRAPHY	OFF