Ayurvedic Management of Dushta Vrana (Diabetic Wound): A Case Study

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Abstract—Diabetic foot ulcers are a severe complication of Prameha (Diabetes Mellitus) and present significant challenges, including delayed wound healing, secondary infections, and high recurrence rates.A diabetic foot ulcer is the outcome of peripheral neuropathy and peripheral arterial disease among individuals with diabetes. Out of 62 million diabetics in India, 25% are people affected with Diabetic foot ulcers (DFUs).^[1] Ayurveda, an ancient system of medicine, categorizes such chronic wounds under Dushta Vrana, attributing the impaired healing to vitiated Doshas (bodily energies that govern physiological and psychological functions). This case study delves into the effective Avurvedic management of a diabetic ulcer in a 59-year-old male patient over a three-month period. The patient's treatment regimen involved Trivalkal Kashay Dhara, a herbal decoction therapy applied externally, and Phaltrikadi Kashay, an internal herbal formulation. Trivalkal Kashay Dhara is known for its wound-healing properties, reducing inflammation, and promoting tissue regeneration, while Phaltrikadi Kashay helps in detoxifying the body and balancing the Doshas. Over the course of three months, the patient showed significant improvement in wound healing, reduction in infection, and overall better management of diabetes.

Index Terms—Dushta Vrana, Prameha, Trivalkal Kashay, Phaltrikadi Kashay, Ayurveda, DiabeticWound

I. INTRODUCTION

Chronic wounds represent a formidable healthcare challenge, particularly among individuals with Diabetes Mellitus (Prameha). Diabetic foot ulcers emerge due to microvascular and macrovascular complications, which culminate in impaired blood circulation, neuropathy, and secondary infections. Conventional treatments typically encompass antibiotics, wound dressings, and surgical interventions. However, Avurveda offers a holistic paradigm for wound management, focusing on *Dosha* balance, detoxification, and natural healing methods. *Sushruta* stated *Shashti Upkrama* for treating different types of wounds on the basis of their clinical presentation.²

In the realm of *Ayurvedic* literature, chronic nonhealing ulcers are designated as *Dushta Vrana*. These ulcers are attributed to the prolonged vitiation of *Kapha-Pitta Dosha*, resulting in tissue necrosis, pus formation, foul odor, and delayed healing. *Trivalkal Kashay Dhara*³ and *Phaltrikadi Kashay*⁴ are classical *Ayurvedic* formulations renowned for their woundhealing (*Vrana Ropana*), cleansing (*Shodhana*), and blood-purifying (*Rakta Prasadana*) properties. Elaborate description of Vrana (wound or ulcer) is available in Ayurvedic texts. Vrana means break in the surface of body.⁵Sushruta has described two types of Vrana, Shuddha (Non-infected) and Dushta (infected).⁶

Case Presentation

- Patient Profile
- Age/Sex: 59-year-old male
- Medical History: Known case of *Type 2* Diabetes Mellitus (*Prameha*) for 12 years
- Chief Complaint:
- Achronicnon-healingulcer on the heel persisting for the past 4 months
- Persistent pain, foul odour, pus discharge, and discoloration
- Difficulty in walking due to ulceration and associated neuropathy
- Clinical Examination
- Size of Ulcer:4 cm × 3 cm with exposed granulation tissue
- Signs of Infection: Yellowish pus discharge, surrounding hyperpigmentation, and tenderness
- Neuropathy Test: Decreased sensation around the ulcer site

- Blood Sugar Levels:
- o Fasting Blood Sugar (FBS):180 mg/dL
- o Postprandial Blood Sugar (PPBS):260 mg/dL
- o HbA1c:8.5%

Diagnosis (Ayurvedic Perspective)

In the *Ayurvedic* framework, the patient's condition is classified as *Prameha Upadrava* (Diabetic Complication) specifically manifesting as *Dushta Vrana* or infected chronic ulcer. The diagnostic process involves understanding the *Dosha* involvement, which in this case includes:

- Kapha-Pitta Pradhan Dushti: This refers to the dominance of *Kapha* leading to tissue swelling and *Pitta* causing inflammation.
- MedaDhatuDushti: An imbalance in the fat metabolism which is indicated by slow healing.
- VranaLakshanas (Wound Characteristics):
- o Nirama Vrana: An infected wound with pus
- Pooti Gandha: Foul smell
- Kandu (itching) and Daha (burning sensation)

Treatment Plan

The treatment plan was meticulously designed to address both the local wound environment and the systemic imbalance caused by *Diabetes Mellitus* (*Prameha*). This holistic approach involved both external and internal treatments.

External Treatment - Trivalkal Kashay Dhara

A decoction made from *Trivalkal* (which includes Vata, Udumbara, Ashwattha) was employed for wound washing and healing therapy (*Dhara Kalpana*).

- Ingredients:
- Vata (Ficus benghalensis)
- Udumbara (Ficus racemosa)
- Ashwattha (Ficus religiosa)
- Mode of Action:
- Shodhana (cleansing)
- Stambhana (astringent action)
- *Ropana (healing acceleration)*

This external treatment focused on cleansing the wound, reducing infection, and accelerating the healing process by promoting granulation and epithelialization.

Internal Treatment - Phaltrikadi Kashay

An internal herbal formulation was used to achieve *Kapha-Pitta balance*, purify the blood, minimize the *Kleda* formation and facilitate wound healing.

Ingredients:

- Patha, Triphala, Katuki, Guduchi.
- Dosage:
- 0 40 ml twice daily for three months

This internal treatment aimed at correcting the metabolic imbalances and purifying the blood, which is essential for comprehensive healing of the wound.

II. RESULTS & OBSERVATIONS



The patient's progress was monitored over the course of three months, and notable improvements were observed in the wound healing process.

- 1st Month:
- There was a reduction in pus formation.
- Granulation tissue formation began, indicating the start of the healing process.
- 2nd Month:
- The wound size decreased noticeably.
- Epithelialization, or the formation of new skin cells, was observed.
- 3rd Month:
- Complete wound healing was achieved.
- Scar formation indicated the final stage of the healing process.

These observations underscore the efficacy of the combined Ayurvedic treatments in promoting wound healing and skin regeneration.

III. DISCUSSION

The use of *Trivalkal Kashay Dhara* and *Phaltrikadi Kashay* played a pivotal role in the wound healing process. Here's how each component contributed to the overall therapeutic outcome:

- TrivalkalKashayDhara:
- Acted as an antiseptic wound cleanser.
- Promoted faster granulation and reduced infection due to its *Shodhana* (*cleansing*) properties.
- The astringent action (*Stambhana*) helped in reducing swelling and controlling the discharge.

- The healing properties (*Ropana*) accelerated the formation of new tissue.
- PhaltrikadiKashay:
- Facilitated metabolic correction and blood purification.
- Helped in balancing *Kapha* and *Pitta*, which are crucial for the healing process.
- Accelerated natural wound healing through its systemic action on the body.

This holistic approach ensured that both the local wound care and the systemic pathology of *Prameha* were addressed, leading to successful healing. The integration of both external and internal treatments provided a comprehensive strategy that went beyond mere symptomatic relief.

IV. CONCLUSION

This case study illustrates the potential of Ayurvedic therapies in managing chronic wounds, particularly in patients with *Diabetes Mellitus (Prameha)*. The combination of *Trivalkal Kashay Dhara* and *Phaltrikadi Kashay* resulted in significant wound healing, infection control and complete resolution within three months. The therapy demonstrated a marked reduction in wound size, effective management of infection, and ultimately, complete healing.

The success of these treatments highlights the potential of Ayurveda in chronic wound management. By reducing the reliance on antibiotics and surgical interventions, these therapies provide a natural and holistic alternative for patients. The principles of *Dosha* balance, detoxification, and natural healing inherent in *Ayurvedic* medicine offer a promising approach to addressing the complex challenges posed by chronic wounds, particularly in diabetic patients.

In conclusion, the management of chronic wounds through Ayurvedic therapies not only aligns with the body's natural healing mechanisms but also addresses the underlying systemic imbalances that contribute to the chronicity of such conditions. This case study underscores the importance of integrating traditional knowledge with modern medical practices to achieve optimal health outcomes.

REFERENCES

- Sorber R, Abularrage CJ. Diabetic foot ulcers: Epidemiology and the role of Multidisciplinary Care Teams. Seminars in Vascular Surgery. 2021;34 (1):47–53. Available from: doi: 10.1053/j. semvascsurg.2021.02.006
- [2] Acharya Y.T., editor. Sushruta Samhita Varanasi: Chaukhamba Surbharati Prakashana; 2005. p. 99
- [3] Bhava Prakasha Nighantu, Bhava Mishra, Edited by Dr. K.C. Chunekar, X Edition Chaukhambha Bharati Academy, Varansi 2006. VataadiVarga 15.
- [4] Chakradutt, "Vaidyprabha" with Hindi Commentary, Commented by Dr. Inderdeo Tripathi, Chapter No.8/7, Page No. 79, published by Chaukhambha Sanskrit sansthan, Varanasi, 4th edn, 2002.
- [5] Sushruta, Sushruta Samhita, Sri Dalhanaacharya, Nibandhasangraha commentary, Sri Gayadaasacharya, Nyaayachandrika Panjika of on Nidaansthana, Vaidya Yadvji Trikamji Acharya & Narayan Ram Acharya Kavyatirtha, Chaukhamba Sanskrit Sansthan, Varanasi, 2010, 824pp: 107.
- [6] Sushruta, SushrutaSamhita, Sri Dalhanaacharya, Nibandhasangraha commentary, Sri Gayadaasacharya, Nyaayachandrika Panjika of on Nidaansthana, Vaidya Jadvji Trikamji Acharya & Narayan Ram Acharya Kavyatirtha, Chaukhamba Sanskrit Sansthan, Varanasi, 2010, 824 pp:397.