

EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

<u>www.ejpmr.com</u>

<u>Research Article</u> ISSN 2394-3211 EJPMR

EFFECT OF KASEESADI TAILA FOR MANAGING POST-OPERATIVE WOUND OF KADARA CHEDANA WITH AGNIKARMA

Pulkita Sharma¹*, Sujata B. Waddar², Sudarshan R. Teradal³ and Ayush Dhankhar⁴

¹PG Scholar Department of Shalya Tantra, ²Associate Professor Department of Shalya Tantra, ^{3,4}PG Scholar Department of Kayachikitsa, ^{1,2,3,4}SDMT AMC & Padma Ayurvedic Hospital Terdal, Karnataka.



*Corresponding Author: Dr. Pulkita Sharma

PG Scholar Department of Shalya Tantra, SDMT AMC & Padma Ayurvedic Hospital Terdal, Karnataka.

Article Received on 04/04/2024

Article Revised on 24/04/2024

Article Accepted on 14/05/2024

ABSTRACT

In this case study, a 27-year-old male patient experienced long-standing pain and hardened skin on the sole of his right foot, diagnosed as Kadara, or a foot corn. This condition, attributed to disruptions in Vata and Kapha doshas, resulted in the formation of hard, painful masses. The patient underwent surgical removal of the foot corn and received Ayurvedic treatment with Kaseesadi Taila dressing for 15 days to aid wound healing. Wound healing is a natural process involving various cellular activities that promote tissue cleansing, regeneration, and strengthening. The effectiveness of the treatment was assessed through clinical signs and photographic evidence, showing promising results in post-operative wound healing. The discussion emphasizes the therapeutic properties of Kaseesadi Taila, particularly its antimicrobial, cleansing, and healing effects, suggesting its potential in managing wounds.

KEYWORDS: Kadara, Kaseesadi Taila, Post-operative wound healing.

INTRODUCTION

Wound healing is a natural response to tissue injury that involves a complex interplay of cellular activities those guide the cleansing, regeneration, reconstruction, and fortification of damaged skin. This systematic journey begins with hemostasis followed by inflammatory, proliferative, maturation or remodeling phases.^[1,2,3] Hemostasis involves clot formation where in aggregated platelets get trapped in fibrin web which serve as provisional matrix for further healing process; Inflammatory phase involves accumulation of neutrophils, monocytes and macrophages for cleansing the wound; Proliferative phase involves epithelization, fibroplasia, angiogenesis, granulation tissue formation and epithelization; Remodeling or Maturation phase involves maturation of granulation tissue into scar for increasing tissue tensile strength, reduction in the number of capillaries via aggregation into larger vessels.

Despite the conventional depiction of distinct phases, the reality is a seamlessly intertwined process where cellular events for scar formation occur simultaneously. Many nuances of this intricate dance in wound healing remain ripe for further exploration and understanding.

Kadara, likened to the size of a Jujube seed (*Badara Kolasthi Sadrasha*), arises from injuries caused by thorn

pricks or stones,^[4] disturbing the equilibrium of *Vata* and Kapha Doshas. This disturbance affects the Medas and Rakta, leading to the formation of the knot like elevated abnormal growth i.e., Granthi.^[5] Kadara manifests as a cone-shaped (Keela Sadarasha) lesion, accompanied by Ruk (Pain) and Srava (Discharge), with the central part exhibiting *Nimna* (Depression) or *Unnata* (Elevation).^[6] In relation to foot corns, footwear plays a significant role, especially in interdigital corns, where specific bony prominences between adjacent toes are influenced by congenital or acquired factors.^[7] Corns and calluses both emerge as a natural physiological response to chronic pressure or friction on the skin, characterized by hyperkeratosis. Calluses initially serve as a protective measure against shearing or compressive forces, but if left untreated, can thicken and becomes painful.^[8]

Managing fresh wounds focuses on preventing infection and promoting swift healing, while minimizing pain, discharge, and post-healing discoloration remain vital considerations. This case study was planned and aimed to evaluate the healing potency of Kaseesadi Taila in the management of post-operative wound of corn i.e., Kadara.

CASE HISTORY

A male patient aged about 27 years having yearlong pain & hardness of skin at sole of right foot visited OPD of Shalya Tantra, Padma Hospital; SDMT AMC, Terdal.

CLINICAL FINDINGS

Inspection: Two small masses at planter aspect of 2^{nd} metatarsal, Right foot with dry flaky superficial skin, approximately the size 0.5cm x 1cm and 0.5cm x 0.5cm. Palpation: Masses were non movable and tender and hard in consistency. This condition was provisionally diagnosed as Foot Corn (*Kadara*). BP was 126/80mm of Hg & Pulse Rate was 78 beats per minute. Hematological values were found within normal limit. The case was finally diagnosed as Foot corn (*Kadara*).

TREATMENT PROTOCOL

Patient was subjected to *Chedana* (Excision) with *Agnikarma (Cautery)*, accordingly, both deep seated corns were excised under local anesthesia followed by Cauterization. The postsurgical wounds were left opened for healing by secondary intention. Instead of conventional dressing with antiseptic, *Kaseesadi Taila* was applied daily as dressing material for optimizing healing by secondary intention.

POST-OPERATIVE MANAGEMENT OF WOUNDS

Each wound was cleaned with normal saline (NS), thereafter; sterilized cotton gauze dipped & saturated with *Kaseesadi Taila* was carefully placed to completely fill the wound cavity, ensuring that no areas of wounds remained exposed. Subsequently, wounds were dressed with sterile gauze and securely bandaged. This routine was diligently repeated each morning under sterile conditions for 15 days.

RESULTS

The sizes of wounds measured after *Chedana* with *Agnikarma* were 0.5 cm x 1.0 cm & 0.5 cm x 0.5 cm. The wounds were dressed daily with *Kaseesadi Taila* soaked gauze, preceded by cleaning of the wounds with normal saline (NS). Each wound was meticulously examined for size, slough, discharge, edges, and margins, with observations meticulously documented for a week. Throughout this period, both the wounds exhibited signs of healthy granulation tissue, indicating progressive healing from the base. Notable reduction in wound size and contraction of margins without any complication were observed. Remarkably, by the fifteenth day, complete wound healing was achieved, leaving no discernible scar.



Fig. 1.1: Post-op wounds of Kadara.



Fig. 1.3: Day 1.

DISCUSSION

In this case, *Kaseesadi Taila* was applied for wound dressing to evaluate its efficacy in fostering wound healing. The ingredients of *Kaseesadi Taila*,



Day 0

Fig. 1.4: Day 7. Post-Op Wounds Healing



Fig. 1.2: Dressing with Kaseesadi Taila



Fig. 1.5: Day. 15

characterized by their *Ushna* (Warmth), *Tikshna* (Sharpness), *Lekhana* (Scraping), and *Shodhana* (Cleansing) properties, played a pivotal role.

Kaseesa (Ferrous sulfate - FeSo4) demonstrated *Krumighana* (Antimicrobial) properties, aiding in infection control and wound contraction.^[9]

Manhashila (Arsenic Disulphide) exhibited Katu-Tikta and Snigdha-Usna-Guru Gunas, facilitating the removal of portion from the wound base.^[10]

Kaseesa, Kushta (Saussurea Lappa), and Chitraka(Plumbago Zeylanica) contributed to the debridement process, eliminating slough, pus, and unhealthy granulation tissue, thereby fostering vascularization and normal granulation.^[11]

*Karvira (Nerium Indicum) re*duce pain, inflammation, and promote tissue repair with its *Vranalaghavakar* property.^[12]

Vidang's Krumigna and *Jantunashaka* (Antibacterial) properties reduced the risk of wound infection, promoting healing.^[13]

Chitraka and *Danti* also possessed Krumighna properties.^[14,15]

Altogether, the synergistic effects of *Kaseesadi Taila* ingredients, characterized by *Shodhana* (Purification), *Lekhana* (Scraping), and *Ropana* (Healing) activities, facilitated wound healing without recurrence.

CONCLUSION

It is concluded that *Kaseesadi Taila* bears qualities of cleansing, debriding, and fostering healing as revealed from uneventful healing of post-operative *Kadara* wounds. Yet, given its limited scope, validation through controlled trials in the future is essential to substantiate its effectiveness.

REFERENCES

- 1. Bennett NT, Schultz GS. Growth factors and wound healing: Part II. Role in normal and chronic wound healing. Am J Surg, 1993; 166: 74–81.
- Bennett NT, Schultz GS. Growth factors and wound healing: Biochemical properties of growth factors and their receptors. Am J Surg, 1995; 165: 728–37.
- 3. Lawrence WT. Physiology of the acute wound. Clin Plast Surg, 1998; 25: 321–340.
- 4. Vaidya Yadavji Trikamji Acharya. Sushrutha Samhitha with Nibandha sangraha Commentary. Varanasi. Krishnadas Academy, 1998; 322.
- Vaidya Yadavji Trikamji Acharya. Sushrutha Samhitha with Nibandha sangraha Commentary. Reprint 1998.Varanasi. Krishnadas Academy, 1998; 322.
- Vaidya Yadavji Trikamji Acharya. Sushrutha Samhitha with Nibandha sangraha Commentary. Reprint 1998.Varanasi. Krishnadas Academy, 1998; 322.
- 7. Gillet HG. Interdigital clavus: predisposition is the key factor of soft corns. Clinical Orthopaedics and

Related Research, 1979; (142): 103-109. PMID: 159151

- 8. Decker W, Albert SB. Contemporary pedorthics. Elton-Wolf, 2002.
- 9. Sadananda Sharmna, Rasatarangini, Kashinathsha Shtrina Sampadita, Dilhi, 1971; 564, 11: 21-232.
- 10. Sadananda Sharmna, Rasatarangini, Kashinathsha Shtrina Sampadita, Dilhi, 1971; 263, 11: 11-115.
- 11. Charak Charak Samhita Sutrasthan, Chaukhambha Bharati Academy, Varanasi, 2017; 72, 1: 4-3.
- 12. Krushna Chandrakar, Bhavprakash Nighantu, Guduchyadivarga Chaukhambha Bharati Academy, Varanasi, 2010; 300: 2-84.
- 13. Krushna Chandrakar, Bhavprakash Nighantu, Haritakyadi varga Chaukhambha Bharati academy, Varanasi, 2010; 50: 1-111.
- 14. Krushna Chandrakar, Bhavprakash Nighantu, Haritakyadivarga Chaukhambha Bharati academy, Varanasi, 2010; 21: 1-71.
- 15. Krushna Chandrakar, Bhavprakash Nighantu, Guduchyadivarga Chaukhambha Bharati academy, Varanasi, 2010; 385: 3-200.