Ayurvedic Management of Post Burn Sequel

Sathish HS*, Rashmi TM**, Mithun B***, Narmada MG****, Nilesh J*****

Indian Institute of Ayurveda Research and Hospital, Rajkot, Gujarat

Abstract

Burn wounds are distressing to patient and their relatives as it has negative impact on psychological wellbeing. Disfigurement, wound contraction, restricted movements are the common post burn sequel and are best managed by employing Ayurvedic management such as Chedana [surgical excision], Lekhana [debridement], Ropana [wound healing therapies], Snehana [oleation] and Swedana [sudation]. Administration of wound cleansing and healing medications along with Ayurvedic rehabilitative regimen corrects the pathology and restores the normalcy.

Key word: Burn wound, Ayurveda

Introduction

Wounds are inseparable topic in surgical science, as proper healing of wound has become goal of all surgeons. Every human being from birth to death will experience wound and its repairing process many times. Since antiquity, scientists and medical professionals are thriving hard to master the art of healing. Voluminous details of wound are traceable in Ayurvedic treatises denoting the earliest records of Medical Science in Ancient India.

Dagdha Vrana [burn wound] caused by dry or moist heat is well managed by Ayurvedic surgical management.¹ An ocean of wound healing methods and formulations are cited in Ayurvedic Treatises inspiring many aspirants to carry out research studies on it.² Research studies have proved exquisite potentials of various wound healing formulations of Ayurveda³,⁴,⁵.
Burn wound causes serious health consequences to mortality, the burn survivors usually pass through various physical and psychological disturbances.\(^6,7,8\) Physical disturbances mainly include disfigurement, non-healing, post burn contracture and pain. Apart from these factors, a significant impact applies to socio-economic life of an individual and quality of life.\(^9,10\)

**Case Presentation**

A male patient aged 52 years had some chemical burn injury 3 months back [details of the chemical burn are not reported] presented with non-healing wound over right forearm and palm with mild pain, watery discharge. Patient didn’t had any other medical or surgical illness history and he was not on any medications. Clinical examination revealed 2.5 × 4 cm sized wound over palmar surface of right hand. The surrounding skin had blackish discoloration with sloping wound edge and regular margin. Floor of the wound was covered with thick Escher. Base of the wound slightly indurated. Movements of forearm was unaffected while movements of hand had some restrictions. On palpation slight tenderness at the wound edges was present. Peripheral vessels were assessed for circulation and drainage, it was found to be functioning normally. Haematological and biochemical investigations were within the normal limits.

**Treatment planned**

*Chedana* [Excision] and *Lekhana* [debridement] was planned followed by topical application of medicated ghee for healing. Under aseptic precautions, unhealthy tissue was surgically excised and debridement was done wherever necessary. Wound was freshened and cleaned thoroughly through wound lavage using *Panchavalkala Kashaya*. After cleaning, the *Panchatikta ghrita* was applied on the wound surface and dressed. On the consecutive days, wound was cleaned with *kashaya* and dressed by using the medicated ghee till complete healing. The wound over the forearm healed in 14 days whereas the wound on palm took 30 days to heal. On complete healing, slight wound contracture was observed in palmar surface restricting the movements of hand. To restore the normal functioning of the hand, topical application of *Tila taila* followed by immersion hand in Luke warm water was advised to the patient. Patient was also told to carry out active finger and hand movements. The gradual improvement in the functioning of hand was observed. Reduction of blackish discoloration in surrounding skin was easily perceivable feature.

**Discussion**

Post burn sequel presents with disfigurement due to wound contracture, ugly scar, restriction of the movements of the part affected and imbalance in psychological wellbeing of an individual. The magnitude of socio-economic burden on patient and his relatives is profound. Post burn wound should be treated by following guidelines elaborated for *dushtavrana* [infective ulcer].\(^11,12,13\) The principle management of burn wound is to correct the local pathology and improve the general nourishment to promote early healing. In this post burn case, the unhealthy tissue has to be severed to pave way for the granulation tissue formation. *Chedana* is first and foremost procedure among the eight surgical procedures specified by *Sushruta*.\(^14,15\) Unhealthy
tissues and tumors are eligible for excision based on this principle; unhealthy tissue on the wound surface was excised. The procedure is followed by wound management with Medicated ghee formulation, *Panchatikta Ghrita*. The reason behind this is many ghee formulations have been cited in the treatises and are found to possess significant wound healing potentials especially in burn wounds.\(^{16,17}\) Subsequent to healing Ayurvedic rehabilitation methods like *snehana* and *swedana* gives beneficial results in restricted movements. The degree of wound contraction is minimal in wounds healed by employing Ayurvedic principles and medications. The discoloration in the surrounding skin has profoundly reduced.

**Conclusion**

Ayurveda contains an ocean of information on wound and its management. Disfigurement and wound contraction poised to affect the burn survivors. Application of Ayurvedic surgical principles in such cases yields significant results. In Post healing phase utilizing snehana and swedana karma facilitate restoration of normal functioning of the part.

![Fig 1. Dagdha Vrana [Burnt wound]](image1)

![Fig 2. Wound after Chedana](image2)
*Associate Professor, Dept. of Shalya Tantra, Indian Institute of Ayurveda Research and Hospital, Rajkot.
**Assistant Professor, Dept. of Kayachikitsa, Indian Institute of Ayurveda Research and Hospital, Rajkot.
***Associate Professor, Dept of Shalakya Tantra, ALN Rao Memorial Ayurvedic Medical College, Koppa.
****Professor & Head, Dept of Shalya Tantra, Govt Ayurvedic Medical College, Bangalore.
*****Associate Professor, Dept. of Shalya Tantra, Parul Institute of Ayurved, Vadodara.

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