



**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**

'A Bridge Between Laboratory and Reader'

www.ijbpas.com

EFFECT OF LEKHANA KARMA AND GOMUTRA ARKA PARISHEKA IN THE MANAGEMENT OF DUSTA VRANA VIS-A-VIS NONHEALING ULCER – A CASE REPORT

KUMAR SIDDAYYA KANTHIMATH^{1*} AND THYAGARAJ C²

1: PhD Scholar, Ayurveda Mahavidhyalaya Hubballi. & Associate Professor Department of Shalya
Tantra, DGM Ayurvedic Medical College, Gadag

2: Prof and H.O.D. Dept of Shalya Tantra, Ayurveda Mahavidhyalaya Hubballi

***Corresponding Author: Dr. Kanthimath Kumar Siddayya: E Mail: kumar.kanthimath@gmail.com**

Received 9th Nov. 2023; Revised 8th Dec. 2023; Accepted 5th May 2024; Available online 1st Feb. 2025

<https://doi.org/10.31032/IJBPAS/2025/14.2.8714>

ABSTRACT

Vranam gatra vichurnane Vrana [wound] is the term for the breakdown, rupture or discontinuity of bodily tissue or a portion thereof. One of the *vran avastha* that is commonly encountered in surgical practice is *Dusta Vrana* [non-healing ulcer]. *Dushta Vrana* puts a patient under a great deal of stress, which can lead to a number of consequences or even death. The presence of foreign bodies, recurrent inflammation, underlying co-morbidities and necrotic tissue can all hinder the healing process of wounds. An infected wound takes longer time to heal than a healthy wound. The surgeon's challenge is to transform *dusta Vrana* into *shuddhavrana* (tidy wound) and speed up the healing process of wounds. Early wound healing, excellent scarring and a reduction in complications are the objectives. *Lekhana karma* (scraping) and *Gomutra arka* (distillate of cow's urine) *parisheka* (pouring) are used in the current study to treat non-healing ulcer. A case report of a 54-year-old man who had a painful, pus-filled, non-healing ulcer on the dorsum of his left foot with an unpleasant stench. Clinically symptoms like pain, swelling, pus discharge completely reduced with *Gomutra Ark Parishek* and *Lekahana Karma* successfully.

Keywords: *Dusta Vrana*, Non healing ulcer, *Gomutra Arka*, *Lekhana*, *Parisheka*, *Wound*

INTRODUCTION:

Vrana[wound] is a phenomenon that damages the tissue and when it heals, leaves behind permanent scarring [1]. The term wound does not just apply to skin lesions; any tissue damage that develops in bodily tissues is also regarded as *vrana*. The body needs this phenomenon, along with inflammation and healing, to survive. Following any injury, healing is a normal occurrence that proceeds step-by-step until a healthy scar is formed.

DushtaVrana (non-healing ulcer), which is difficult to heal. *Dushta* is one in which there is localization of *Dosha* [humours] *vata*, *pitta* and *kaph*, [2] *Vrana*, which smells bad, has abnormal color, with profuse discharge, intense pain and takes a long period to heal. *DushtaVrana* is a long standing ulcer where removing debris enabling drug to reach healthy tissue is more important. In this context we can understand it as a non-healing or contaminated wound.

Non-healing ulcer is a major health problem and is estimated to affect approximately 4.48 per 1000 population [3]. The incidence of chronic ulcers is expected to increase as the population ages and due to increased risk factors like atherosclerotic occlusion such as smoking, obesity and diabetes. It is estimated that almost 10% of the population would develop a chronic wound in the course of a lifetime, with wound related mortality rate of

2.5%. These types of ulcers not only affect the quality of life and productivity of the patient but also become a substantial financial burden for the patient and the healthcare system.

Management of *vrana* mainly has two components. Management of *vrana* and management of *vranita* (wounded). In *shasti upakrama* [4] (sixty types of surgical principles) Out of sixty procedures nearly 40 procedures deals with converting *DushtaVrana* into *ShuddhaVrana*. These include measures to control vitiated *doshas*, controlling inflammation, surgical measures, and measures for non-healing wounds.

Even though *Vrana ropana* (wound healing) is a natural process due to the interference of vitiated *Doshas*, *Apathya* (incompatible), *upadrava* (complications), *Vrana* becomes *Dushta* and normal healing process gets delayed or hampered. Achieving better wound healing with minimal scar is the prime motto of every surgeon. Necrosed tissue, repeated Wound infection are most important factors which delays healing and is also responsible for the formation of *Dushta Vrana*. In order to accomplish satisfactory healing of *Dushta Vrana*, it is necessary to do debridement. *Sushruta* was well aware about this type of complications. In the sixty principles [5] of *Vrana* management (*Shashti Upakramas*), *Vrana Shodhana* which includes debridement,

dressing and *Vrana Ropana* principle enhances wound healing process.

Case study:

Patient information and clinical findings

History:

A male patient, 56 years old, showed in with a non-healing lesion over the dorsum of his left foot. Two years prior, the patient had a history of cellulites. The wound had a bad odour, pus discharge, and no indications of healing. The patient has been diagnosed with type 2 diabetes.

Time line:

For two years, the subject complained of pain, a wound, and pus discharge in the dorsum of his left leg. The patient had prompt debridement and dressing changes, but the wound was not healing—rather, it was getting bigger and releasing pus and smelling bad. Patient consulted the Shalya Tantra OPD, DGM Ayurvedic Medical College, Hospital, Post graduate and Ph.D. studies and research center, Gadag.

Clinical examination: 7/7/2023

On Inspection: Site of the wound- left leg dorsum. Floor of the ulcer covered with the slough, its edges are edematous and crimson. Margin of the ulcer is reddish and irregular. Purulent discharge is visible from an ulcer floor. Foul smell was evident. On Palpation local raised temperature with the surrounding indurations. Moderate tenderness present. No

lymph nodes in the area were affected. No immunological disorder exists. Values of routine investigations for urine and hematology were within normal limits.

Diagnosis:

On clinical examination wound with slough, edematous and irregular edges, foul smell, visible blood mixed pus discharge and chronicity of the wound condition diagnosed as *Dusta Vrana*.

Therapeutic intervention:

1. Subject posted for *lekhana karma* on 7/7/2023. Every alternate day debridement done to excise necrosed tissue (slough). *Lekhana karma* performed with *vrudhipatra shastra*.
2. After the debridement *Gomutra Arka parisheka* 5 min every alternate day.
3. After attaining granulation (27/8/2023) on floor *lekhana karma* stopped and *Gomutra Arka parisheka* continued until wound healing.

Follow up and outcome:

In follow up every alternate day bandaging was changed. *Lekhana karma* is done every follow up to excise all slough. After 10 days pain and discomfort reduced. Granulation starts appearing on the floor. There was good granulation observed on 2nd week on floor of the ulcer. Complete wound healing observed on 40th day of treatment. Assessment of wound healing done every 10th day.

Follow up	Wound description
Follow up 1 7/7/2023	Floor: Slough. Edges: Edematous margin: Reddish discharge: Pus +++, Smell: Foul smell
Follow up 2 17/7/2023	Floor : Partially granulation Edges: Sloping Margin: Blakish, Pus discharge: +, Smell: Foul smell reduced
Follow up 3 27/7/2023	Floor : Good granulation Edges: Sloping Margin: Blakish, Discharge: Serous Smell: foul smell reduced.
Follow up 4 7/8/2023	Floor: granulation Edges: sloping Margin: regular. Discharge: serous, scanty. Smell: foul smell absent
Follow up 5 17/8/2023	Wound covered with scar.

Photo documentation



Figure 1: Clinical examination 7/7/2023



Figure 2: After 10 days of treatment 17/7/23



Figure 3: After 20 days of treatment 27/7/23



Figure 4: After 30 days of treatment 7/8/23

Figure 5: 40th day of after treatment 17/8/23Figure 6: 50th day of after treatment 27/8/23

DISCUSSION

Management of wound description available in the classics since ages. Olden days several techniques were used in war fields. As a result of research and contribution of experienced surgeons many newer concepts and models were developed. In spite of the advances in the medical field that have been made, the management of chronic wounds is still a challenge for the surgeon. In *ayurveda* Acharya Sushruta explained 60 types of treatment principles were explained for

wound management. Among these by using *yukti*, *vaidhya* has to select appropriate treatment model for successful management. Wound healing with minimal scar formation and pain management effectively are the prime motto of every surgeon. Quite a Number of conditions and types of wounds are responsible for early healing, delay healing or incurable stages.

Dusta vrana [Non-healing ulcers], also known as chronic ulcers, are defined as spontaneous or traumatic lesions, usually in the lower

extremities, that do not heal within a specified time frame or that do not respond to initial therapy. They may have an underlying etiology that is related to systemic. An ulcer that is not healing, even after attempts to stop it have been made, and takes 5-8 weeks to heal. According to a study, the leading causes of lower extremity wounds in India are trauma, venous disease (11%) leprosy (40%) and diabetes (23%). Venous ulcerations, which are most frequently encountered in the lower extremities, account for 70%–90% of all chronic wounds [6].

A chronic wound is one that does not heal in the usual sequence of events and within a predictable time frame; wounds that do not heal in three months are frequently classified as chronic. Wounds that are chronic appear to be stuck in one or more of the healing phases. For instance, chronic wounds frequently spend too much time in the inflammatory phase. Numerous elements, including the amount of germs present, the amount of necrotic tissue, and the overall moisture balance of the wound, must be taken care of in order to go past that stage and accelerate the healing process. A precise balance exists between the creation and breakdown of components like collagen in acute wounds; in chronic wounds, this balance is lost and degradation occurs [7].

This is a *dust vrana* case. Because of its chronic nature, deeper tissue involvement, fibrosed margins, and changed or decreased peripheral blood circulation, management becomes more complicated. The dorsum portion of the lower limb always takes longer to heal from wounds because of strain from standing or walking.

The wound in this instance did not heal, and the likely causes include neuropathy and persistent diabetes mellitus. The patient was overweight. Prolonged and irrational use of antibiotics. Regarding wound care: the patient was not healing despite using hydrogen peroxide and bitadine solution to clean the wound on a daily basis, as advised by the doctor. On consultation to our hospital we oral medications Wound care: *Lekhana karma* and *Gomutra arka parisheka*. *Punarnavadi kashaya (shoth hara)* 3 tea spoon two times a day before food

The patient's use of hydrogen peroxide and Betadine solution to clean the wound for over a year resulted in fibrosed margins and a hardened ulcer floor. Debridement was planned here from the start, which assisted in removing apparent dead tissue and improved blood flow to the wound floor. Moreover, pus discharge decreased the amount of bacteria present. Debridement increases the rate of epithelialization and granulation. To avoid more tissue injury, it becomes sense to remove

damaged and dead tissue from the *Dushta vrana*.

Gomutra arka is a medication made by distilling the urine of cows. It has the ability to cleave wounds and contains kshara [8]. *Shodhana* action of *Gomutra Arka* can be understood as follows, *Rasa -Katu, Tikta, Kashaya, Lavana*. *Kashaya Rasa* is *Vrana Ropana, Lekhana*. *TiktaRasa* does *Lekhana Karma* and *Shodhana*. It scrapes the slough from the wound. *Katu Rasa - Shodhana* and *Vranaavasaadana* property. It might help in cleansing the wound. *Guna-Tikshna*. Penetrating property of *Gomutra* might help in reaching deeper tissues. *Karma - Malashodhaka*. This property shows the cleansing nature of *Gomutra Arka* [9]. *Parisheka* of *Gomutra Arka* is helpful in speeding up the healing process of wounds and in removing small foreign bodies and deeply ingrained slough (*sookshma srotogata shalya*). The purpose of treating *dusta vrana* is to transform it into *shudha vrana* and measures for better scar formation and appropriate wound healing. *Lekshan* and *Gomutra* were extremely successful in helping this patient achieve wound healing. Due to his obesity and pedal edema, *Punarnavadi Kashaya* was administered orally as *mutra virechaka*.

Advantages and Disadvantages: *Lekhana karma* and *Gomutra arka parisheka* are

minimally invasive day care procedures in this study. Less painful, less bleeding, and more cost-effective for the patient. *Gomutra Arka parisheka* accelerates the healing of wounds by doing *vrana shodhana*.

CONCLUSION:

Dusta vrana is a complex condition that always needs the surgeon's attention to prevent complications. Converting *dusta vrana* into *shudha vrana* is always a prime motto. *Lekhana karma* is one that helps to remove all necrosed tissue, reduce pain, pus discharge, and the progression of the condition. *Parisheka* is a unique procedure that helps to remove the deep-seated necrosed tissue. To conclude, the combined effect of *lekhana karma* and *Gomutra Arka parisheka* improves the wound healing of *dusta vrana*.

Patient consent:

Informed consent was obtained from the patient for documentation and publication of case history

Financial support and sponsorship- nil

Conflict of interest: None

Acknowledgement:

Dr. Santosh Belavadi M.D. Ph.D. Principal
DGMAMC Gadag.

Dr M.D. Samudri Professor and H.O.D. Dept
of Shalya tantra DGMAMC Gadag

Dr Prakash Meti Associate Professor
Department of Panchakarma.

REFERENCES:

- [1] Acharya Sushruta, Sushruta Samhita; Dalhana, Nibandasangraha commentary; Edited by Jadavji Trikamji Acharya and Naarayan Ram Acharya; Chowkhambha Surabhaarati Prakaashana, Varanasi, 8ED; chikitsasthana 1/6, Pp397
- [2] Acharya Sushruta, Sushruta Samhita; Dalhana, Nibandasangraha commentary; Edited by Jadavji Trikamji Acharya and Naarayan Ram Acharya; Chowkhambha Surabhaarati Prakaashana, Varanasi, 8ED; sutra sthana 22 chapter 7nt shloka.Pp109
- [3] <https://woundsinternational.com/journal-articles/assessment-of-chronic-wound-patients-journey-in-india-a-survey-of-the-perspectives-of-healthcare-professionals-and-patients/>
- [4] Acharya Sushruta, Sushruta Samhita; Dalhana, Nibandasangraha commentary; Edited by Jadavji Trikamji Acharya and Naarayan Ram Acharya; Chowkhambha Surabhaarati Prakaashana, Varanasi, 8ED; chikitsasthana 1/7, Pp397
- [5] Acharya Sushruta, Sushruta Samhita; Dalhana, Nibandasangraha commentary; Edited by Jadavji Trikamji Acharya and Naarayan Ram Acharya; Chowkhambha Surabhaarati Prakaashana, Varanasi, 8ED; chikitsasthana 1/7, Pp397
- [6] Kanavi Dr. Smitha C., Venkatesh. Dr. Padmavati; A case study on Dusta Vrana (Non-Healing Varicose Ulcer), *Journal of Ayurveda and Integrated Medical Sciences*, 6(3), 2021, 196 - 200.
- [7] https://en.wikipedia.org/wiki/Chronic_wound
- [8] Dr. Mohan Mrudul, Sharma Sanjay, Prasad Shyam M, Giri Rajneesh V, & Gururaja D. A Clinical Study on Vrana Shodhana Action of Gomutra Arka in Dushtavrana w.s.r. to Diabetic Foot Ulcer. *Journal of Ayurveda and Integrated Medical Sciences*, 2(06), (2017)1-10.
- [9] Dr. Mohan Mrudul, Sharma Sanjay, Prasad Shyam M, Giri Rajneesh V, & Gururaja D. A Clinical Study on Vrana Shodhana Action of Gomutra Arka in Dushtavrana w.s.r. to Diabetic Foot Ulcer. *Journal of Ayurveda and Integrated Medical Sciences*, 2(06), (2017)1-10.
- [10] <https://woundsinternational.com/journal-articles/assessment-of-chronic-wound-patients-journey-in-india-a-survey-of-the-perspectives-of-healthcare-professionals-and-patients/>