



## TOPICAL MANAGEMENT OF NON-HEALING WOUND WITH PROPRIETARY AYURVEDIC CREAM FORMULATION: A CASE STUDY

Pranav Prakash Redkar

Associate professor, Shalyatantra Department, Eva College of Ayurved, Supedi, Gujarat.

Corresponding Author: [drpranav213@gmail.com](mailto:drpranav213@gmail.com)

<https://doi.org/10.46607/iamj4411072023>

(Published Online: July 2023)

### Open Access

© International Ayurvedic Medical Journal, India 2023

Article Received: 10/05/2023 - Peer Reviewed: 18/06/2023 - Accepted for Publication: 12/07/2023.



### ABSTRACT

A chronic non-healing wound is a wound that does not heal in an orderly set of stages and in a predictable amount of time the way most wounds do; wounds that do not heal within three months are often considered chronic. Chronic wounds are difficult to heal and take their own time to do so. These wounds cause patients severe emotional and physical stress and create a significant financial burden on patients and the whole healthcare system. Non-healing ulcers i.e., *Dushta vrana* mentioned in Ayurveda can be treated effectively with the help of Ayurvedic formulations. Based on the line of treatment prescribed in the *Samhitas*, a proprietary Ayurvedic formulation Heal+ Cream was developed that includes- *Jatyadi Tail*, *Vrana Ropan Tail*, *Panchavalkala*, *Mandukaparni* (*Centella asiatica*), *Yashtimadhu* (*Glycyrrhiza glabra*), *Nimb* (*Azadirachta Indica*), *Lodhra* (*Symplocos racemosa*), *Lajjalu* (*Mimosa pudica*), *Shala* (*Shorea robusta*), *Yashada bhasma* (Zinc oxide) and used to treat such a patient of non-healing Wound in this case study. A case study revealed that Heal+ cream is having mode of action collaborated with *Vrana shodhan*, *Vrana ropan*, anti-inflammatory, analgesic, and antibacterial. After the use of Heal+ Cream, the patients with non-healing wounds showed significant improvement regarding the healing of the Wound without any adverse local effects with the restoration of skin structures and health.

**Keywords:** non healing Wound, chronic Wound, *Dushta vrana*, heal + cream.

## INTRODUCTION

A chronic non-healing wound is a wound that does not heal in an orderly set of stages and in a predictable amount of time the way most wounds do; wounds that do not heal within three months are often considered chronic. Chronic wounds are difficult to heal and take their own time to do so. Many factors affect the process of Wound healing like contamination of wounds, vascular insufficiency, foreign bodies, infection, malnutrition, Immune deficiency diseases like diabetes mellitus, and excessive use of steroids etc. These wounds cause patients severe emotional and physical stress and create a significant financial burden on patients and the whole healthcare system. *Acharya Sushruta* has explained *Vrana* (Wound) in detail in "*Sushruta Samhita*" where he explained 60 therapeutic measures for the comprehensive management of *Vrana* including local as well as the systematic use of different drugs and procedures. *Dushta Vrana* (chronic non healing Wound) is one where there is vitiation of Dosha vata, pita and kapha locally. Wound which is contaminated and the healing process is very slow is known as *Dushta Vrana*. HEAL + is an Ayurvedic proprietary topical cream for treating a variety of wounds including non-healing wounds. This medicine is a combination of various harbo-mineral ingredients includes- *Jatyadi Tail*, *Vrana Ropan Tail*, *Panchavalkala*, *Mandukaparni* (*Centella asiatica*), *Yashtimadhu* (*Glycyrrhiza glabra*), *Nimb* (*Azadirachta Indica*), *Lodhra* (*Symplocos racemosa*), *Lajjalu* (*Mimosa pudica*), *Shala* (*Shorea robusta*), *Yashada bhasma* (Zinc oxide).

A present Case study includes a 65-year male patient with a known case of diabetes mellitus and hypertension who has developed a wound that did not heal for 6 months in spite of taking allopathic treatment and was successfully treated by a local application of heal + ayurvedic cream. A case study revealed that Heal+ cream is having a mode of action collaborated with *Vrana shodhan*, *Vrana ropan*, anti-inflammatory, analgesic, and antibacterial. After the use of Heal+ Cream, the patients with non-healing wounds showed significant improvement regarding the healing of the

Wound without any adverse local effects with the restoration of skin structures and health.

### Case study

A 65-year male patient came to Kamakshi Arogya Dham, Shiroda, Shalya OPD with complaints of boil on right foot over the second toe and third toe with swelling of the foot, fever and pain. He is a known case of diabetes mellitus and hypertension on regular allopathic medication for the same. History of present illness revealed that the patient had taken treatment from an allopathic hospital where they drained the pus with debridement of the Wound 6 months back. Till then he was dressing the Wound with povidone-iodine solution. The Wound was chronic and not healing with uncontrolled blood sugar levels. So, he came to Kamakshi Arogya Dham Shiroda Shalya OPD for wound management.

### Examination of patient

On local inspection of Wound, it was found that Wound of irregular size and shape was there on the dorsum of the right foot above the third and fourth toe, the slough was present at the floor of a wound, edges were inflamed, underneath tendons was exposed, the Wound was deep-reaching up to the bone, swelling over second third and fourth toes and around the wound Redness and blackish discoloration of the skin present around the Wound and serosanguinous discharge was seen from the Wound.

### Wound healing management

Management of Wound healing is done by *Vrana karma* with the action of *Dushta vrana shodhana*, *Vrana ropan chikitsa upkrama* locally by *Vrana dhavan* with *Panchavalkal kashayam* once a day, *Vrana dhupana* with *Vacha Haridra varti* once a day and application of *Dviija heal + cream* over the Wound for 1 month. In the course of treatment, internal medicine was given for the action of *Langhana*, *Aama pachana*, *Srotoshodhana*. *Aragwadhadi kashayam* tablet- 2 tablets twice a day, *Patolakaturohinyadi kashayam* tablet- 2 tablets twice a day, *Kaishor guggulu*- 2 tablets twice a day were given to the patient. *Guduchi siddha jala* was given for drinking in place of regular water.

## Result and discussion

After 1 month of treatment, it is observed that wound contraction is gradually achieved with the formation of healthy granulation tissue and Restoration of skin.

Most all the clinical features of *Dushta vrana* were cured by the end of 1 month.



Figure 1; Wound before treatment.



Figure 2; Wound after treatment.

## Probable mode of action of drugs

*Jatyadi Tail* is recommended for topical application in the treatment of wounds, cuts and burns. *Jatyadi Taila* contains flavonoids, essential oils, tannins, glycosides, steroids and alkaloids, which help in faster healing of wounds. This oil promotes both wound cleansing by reducing and eliminating the dead tissue debris from the Wound and Wound healing with no or minimal scarring. *Vrana Ropana Tail* is formulated for wound healing. It encourages angiogenesis and granulation. It improves blood vasculature and provides micronutrition to the growing tissues. Drugs like *Manjishtha* and *Sariva* in *Vranaropan tail* remove toxic impurities from the blood which speeds up

Wound repairing. *Panchavalkala* is a combination of barks of five trees - *Pareesha*, *Vata*, *Ashwatha*, *Udumbar* and *Plaksha*. *Panchavalkala* are rich in tannins, phytosterols and flavonoids. Tannins are known antioxidants and blood purifiers with anti-inflammatory actions. Flavonoids and phytosterols are anti-inflammatory, thereby they reduce pain, tenderness, redness, and swelling. Tannins and phytosterols further promote the healing process by increasing the collagen content that connects and supports the new tissue framework. *Mandukaparni* (*Centella asiatica*) enhances generation of new blood capillaries, connecting tissues, fibers that help in contraction and closure of wounds. *Nimba* (*Azadirachta*

*indica*) is a well-known broad spectrum natural anti-microbial and thus protects wounds from getting infected. It also has anti-inflammatory, antioxidant and astringent potential that facilitates wound healing. *Yashtimadhu* (*Glycyrrhiza glabra*) and *Shala* (*Shorea robusta*) have anti-inflammatory, antioxidant properties. These drugs soothe the Wound and reduce pain, burning, itching, and irritation. *Lodhra* (*Symplocos racemosa*) has astringent potential. It reduces over-secretions, oozing and excess moisture from the Wound further helping in contraction of Wound. Like *Nimba*, it is also effective in diabetic wounds. *Lajjalu* (*Mimosa pudica*) is classified as “*Sandhankar*” which means the one which binds or brings together as it supports knitting of connective tissue matrices and encourages closure of Wound. The essential micro-nutrient zinc present in the *Yashad bhasma* plays a major role in wound healing. Zinc shortage has been considered responsible for delays in wound healing. Zinc deficiency causes inflammation that damages host tissue. Zinc is observed to be beneficial in post-neurosurgical wounds, severe burn injury, diabetic wounds and pressure ulcers.

## CONCLUSION

Wound healing can be scientifically achieved by applying the principles of *vrana chikitsa*. A case study revealed that Heal+ cream is having mode of action collaborated with *Vrana shodhan*, *Vrana ropan*, anti-inflammatory, analgesic, and antibacterial. After the use of Heal+ Cream, the patients with non-healing wounds showed significant improvement regarding the healing of the Wound without any adverse local effects with the restoration of skin structures and health.

## REFERENCES

1. Koju P, Shah B, Shah RK, Prasad SM, Management of Dushtavrana (Non healing Wound) by Ayurveda Medicine, The Healer Journal, 2021;2(1):123-125.
2. The Ayurvedic Pharmacopoeia of India PART –I VOLUME- VI First Edition. Government Of India Ministry of Health & Family Welfare Department of Ayush New Delhi 2008
3. Vanita Gupta, et al. Topical application of Jatyadi Ghrita and Jatyadi Taila accelerates Wound healing in Sprague-Dawley rats: a study in a gamma-radiation-induced skin wound model. International Journal of Radiation Biology. 2021
4. Pradeep Shahjirao Shindhe, et al. Evaluation of Wound healing activity of Jatyadi Ointment and Jatyadi taila in the management of clean Wound (Shuddhavrana)- A Randomised Controlled Trial. Annals Ayurvedic Med. 2020; 9 (2) 98-107
5. Dwivedi Amarprakash, et al. Management of Varicose Ulcer with Jatyadi Taila and Sarivadi ghana Vati: A case Report. European Journal of Molecular & Clinical Medicine. Volume 05, Issue 1, 2018
6. Sunita Shailajan, et al. Wound healing efficacy of Jatyadi Taila: In vivo evaluation in rat using excision wound model. Journal of Ethnopharmacology 138 (2011) 99– 104
7. Dhande Priti P, et al. Burn Wound Healing Potential of Jatyadi Formulations in Rats. RJPBCS. October – December 2012 Volume 3 Issue 4 Page No. 747
8. Dr. Sanghamitra Samantaray, et al. Clinical Efficacy of Jatyadi Taila in Parikartika (Fissure-In-Ano). WJPMR, 2017,3(8), 250-254
9. S A Surale-Patil, et al. The study of Wound healing potential of Ropan Tail in Rats. Med Pulse – International Medical Journal, ISSN: 2348-2516, EISSN: 2348-1897, Volume 4, Issue 3, March 2017 pp 384-386
10. Pharmacopoeia of India, Ministry of Health, New Delhi, page no. 205 1995
11. K. Shobha Bhat, et al. A clinical study on the efficacy of Panchavalkala cream in Vrana Shodhana w.s.r to its action on microbial load and wound infection. AYU |Apr-Jun 2014 | Vol 35 | Issue 2
12. Rakesh Kumar Meena, et al. Wound healing potential of Panchavalkala formulations in a post fistulectomy wound. Anc Sci Life. 2015 Oct-Dec; 35(2): 118–121.
13. VED PRAKASH, et al. A Review of Medicinal Properties of Centella asiatica. Asian J Pharm Clin Res, Vol 10, Issue 10, 2017, 69-74
14. Arribas-López, E.; Zand, N.; Ojo, O.; Snowden, M.J.; Kochhar, T. A Systematic Review of the Effect of Centella asiatica on Wound Healing. Int. J. Environ. Res. Public Health 2022, 19, 3266
15. Hanafi N, Talebpour Amiri F, Shahani S, Enayatifard R, Ghasemi M, Karimpour AA. Licorice cream promotes full thickness wound healing in Guinea pigs. Marmara Pharm J. 2018; 22 (3): 411-421.

16. . Alsayed, A. Zaki, et al. Effect of Licorice on Wound Healing in Rabbits. The Egyptian Journal of Hospital Medicine. 2005, Vol., 20: 58 – 65
17. A Trivedi, et al. An Update on the Therapeutic Potential of Neem and Its Active Constituents: A Panacea for All Diseases. Era's Journal of Medical Research, Vol.6 No.1
18. Rudra Prasad Giri, et al. Neem the Wonder Herb: A Short Review. IJTSRD. Volume – 3 | Issue – 3 | Mar-Apr 2019
19. N. Sreejit, et al. Wound Healing Properties of Symlocos Racemosa. IJIRMS. Volume 01 Issue 01 February 2016 page no.28 to 33
20. Mimosa pudica information from NPGS/GRIN". www.arsgrin.gov. <http://www.arsgrin.gov/cgi-bin/npgs/html/taxon.pl?24405>. Retrieved 2008; 03- 27.
21. Sanjay Kumar, et al. Evaluation of Burn Wound Healing and Tissue Repair Activity of Extracts of Shorea Robusta Roots. Journal of Tianjin University Science and Technology. Vol:54 Issue:08:2021
22. Mohammad Yaseen Khan, et al. Wound healing activity of extracts derived from Shorea robusta resin. Pharm Biol, 2015; 54(3): 542–548.
23. Devang Praful Shah, et al. Pharmacological Evaluation of Wound Healing Potential of Jasad Bhasma Using Wistar Rats: A Mechanistic Approach. Pharmacologyonline 2: 1269-1277 (2009)

**Source of Support: Nil**

**Conflict of Interest: None Declared**

How to cite this URL: Pranav Prakash Redkar: Topical management of non-healing wound with Proprietary Ayurvedic Cream Formulation: A case study. International Ayurvedic Medical Journal {online} 2023 {cited July 2023} Available from: [http://www.iamj.in/posts/images/upload/1730\\_1734.pdf](http://www.iamj.in/posts/images/upload/1730_1734.pdf)