

## SHALYANTANTRA'S APPROACH TO WOUND HEALING: A REVIEW

<sup>1\*</sup> Dr. Dhiraj Govind Jangale and <sup>2</sup>Shubhangi Dnyaneshwar Karanje

<sup>1</sup>MS Shalyatantra, Associate Professor; Department of Shalyatantra, Shivajirao Pawar Ayurvedic Medical College and Research Centre at Pachegaon; Taluka -Newasa; Dist – Ahmednagar.

<sup>2</sup>MD Agadtantra; Associate Professor; Department of Agadtantra; Siddhakala Ayurved Mahavidyalaya, Sangamner.

Article Received on  
01 January 2025,

Revised on 21 Jan. 2025,  
Accepted on 10 Feb. 2025

DOI: 10.20959/wjpr20254-35512



\*Corresponding Author

Dr. Dhiraj Govind Jangale

MS Shalyatantra, Associate  
Professor; Department of  
Shalyatantra, Shivajirao  
Pawar Ayurvedic Medical  
College and Research  
Centre at Pachegaon; Taluka  
-Newasa; Dist –  
Ahmednagar.

## ABSTRACT

A branch of Ayurveda called *Shalya Tantra* is associated with Ayurvedic surgery and offers a variety of therapeutic regimens for the treatment of surgical disorders. Many pathological disorders can be cured using Ayurvedic surgery, which is founded on the theories and principles of *Shalya tantra*. *Arsha*, *Bhagna*, *Vrana*, *Bhagandara*, *Arbuda*, are a few illnesses that can be successfully treated with different *Shalya Tantra* techniques. The terminology used in Ayurveda *Vrana* is similar to the modern scientific wound. *Vrana's* pathological state could start as a result of an injury. Several *upakrama*, including *shashtiupakram*, were described by Ayurveda for the management of *Vrana*. *Parisheka*, *Abhyanga*, *Sweda*, *Vimlapana*, *Sneha*, *Vamana*, *Virecana*, *Apatarpana*, and *Aalepa* are several additional strategies for *Vrana's* management. When bodily tissue is destroyed, scars emerge because *Vrana* caused harm. Major *Vrana shtanas* include the *Twaka*, *Mamsa*, *Sira*, *Snayu*, *Asthi*, *Sandhi*, and *Koshta*. *Vrana* is primarily caused by the vitiation of the *doshas* (*pitta*, *kapha*, *rakta*, and *vata*) as well as external sources such cuts, punctures, lacerations, poisoned cuts, and bruising, among others. The various kinds of *Vranas*, their *lakshanas*, *shtanas*, and management were discussed in this article.

**KEYWORDS:** Shalaytantra; Wound healing; *Vrana*; *Ayurveda*; *Vranaopchar*.

## INTRODUCTION

Great old knowledge regarding surgery, surgical procedures, and their application for therapeutic purposes is included in Ayurveda. In this context Ayurveda places a strong emphasis on using surgery to treat a variety of medical disorders. *Shalya Tantra* is a branch of Ayurveda specifically designed for surgical applications. *Shalya Tantra* discussed surgical and para-surgical methods for illness treatment and regaining optimal health. Diseases such as cysts, haemorrhoids, abscesses, urinary retention, wounds, urinary stones, anorectal issues, fractures, etc., can be cured by this branch.<sup>[1,2]</sup>

According to Ayurveda, *Vranas* are pathological conditions that can be roughly divided into two groups: *Agantuja Vrana* and *Nija Vrana*. *Nija vrana* happens as a result of the internal causes, while exterior causes include burns, accidents, trauma, and animal bites might result in *Agantuja vrana*. The primary clinical signs of *vrana* are *Vedana*, *Varna*, *Strava*, and *Gandha*.<sup>[3,4]</sup> Pathologically, it is thought because etiological variables cause *mamsa dhatu* to be destroyed, which results in *rakta dushti* and *Dushtavrana*. The pathophysiology of *vrana* is also influenced by vitiated doshas and outside variables. *Vrana* first appeared on the skin and then spread to deeper locations such as the *meda*, *mamsa*, and *asthi*, among others. Depending on the patient's age, strength, and degree of *vrana*, Ayurveda classified *Vrana* as either *Kritya* or *Akritya*. When body tissue has the capacity to renew more quickly than *Vrana*, it heals more quickly, but elderly patients recover more slowly because of delayed cell division and degenerative processes. It is challenging to treat *vrana* that has discharged such fatty tissue, CSF, and bone marrow since it penetrates deeper bodily tissue. Complications of *vrana* include *gandha*, *strava*, *vedana*, *jwara*, *atisara*, *hikka*, *aruchi*, *kasaavipaka*, and *trishana*.<sup>[5, 6]</sup>

## DISCUSSION

### ***Vranachikitsa:*** (Wound healing)

Converting *Dushta Vrana* into *Shuddha Vrana* is the fundamental treatment for severe forms of *Vrana*, and this involves a number of steps include controlling vitiated *dosha*, inflammatory disease control, surgery, and regulating the etiological variables that lead to wound development. Traditional methods for managing Ayurveda provides a detailed description of how to cure *Vrana* based on its types, *Awastha*, and *Dosha*. Sushrut has elaborated on it by taking into account minute details of the *Vrana*. Additionally, he brought up *Vranitagar*, *Vranitopasana*, and *Pathya–Apathya*. By living in an *Agara* where *rakshakarma*

and Dhoopana may be performed, the Vranita will not experience physical, mental, or traumatic illnesses.<sup>[7]</sup>

Sushrut has listed sixty different ways to treat Vrana. When Vranashotha is treated as "Sapta Upakramas," these sixty come from "seven upakrama" (as shown in Table 1)<sup>[8]</sup>

**Table 1: Vranaupakrama: shashthi upkrama can be included under sapta upakrama.**

Sr. No.	Sapta Upakrama	Shashthi Upkrama Included
1.	Vimplapana	Apatarpana, Aalepa, Parisheka, Abhyanga, Swedana, Vimlapana.
2.	Avasechan	Visravana, Sneha, Vamana, Virechana, Basti, Uttarbasti, Shirovirechan, Nasya, Kawal, Dhoom
3.	Upanaha	Upanaha, pachan, Utkarika
4.	Patan	Chedana, Bhedana, Dharana, Lekhana, Eshana, Aharana, Vyadhana, Visravana, Seevana, Sandhan, Yantra.
5.	Shodhana	Peedan, Shonitasthapana, Nirvapana, Shodhan Kashaya, varti, Kalka, Sarpi Taila, Raskriya, Avachurnan, Vranadhoopan, Avasadan, Mrudukarma, kshar karma, Agnikarma, Krumighna, Vishaghna.
6.	Ropana	Ropan Kashay, varti, kalka, sarpi, taila, Raskriya, Avachurnan, Utsadana, Darunakrma, Bandha, Patradan, Bruhana, Madhu-sarpi, Aahar, Rakshavidhan
7.	Vaikrutapaham	Krushnakarma, Pandukarma, Pratisaran, Romsanjanan, Romapaharan.

Ayurveda also recommends drug use in vranachikitsa. They provide properties like *Vishahara*, *Krimihara*, *Tridosahara*, and *Amapachaka*. Additionally, Ayurveda suggested that *Sodhana Chikitsa* and *Ropana Cikitsa* work together to fully heal *Vrana*. In *Vranachikitsa*, drugs that provide *Katu*, *Tikta*, *Madhura*, and *Kashaya Rasa* have positive benefits.<sup>[9,10,11]</sup>

**Ropana:** In Ayurveda, *vrana* is managed by curing it, which is referred to as *Ropana* at different At *Dushtaawastha*, *Shuddhaawastha*, *Ruhyamanaawastha*, and *Rudhaawastha*, for example, there are several stages of *vrana ropana*. At each stage of growth, the *ropana* process aids in the healing of *vrana*. Age, position, place, sex, the existence of other illnesses (diabetes, skin ailments, and tuberculosis), the environment, diet, and the presence of other toxic bodies are some of the variables that influence the healing process.

#### **Abhyantara Shodhana**

**Vamana:** Applied to the *Vrana*, which are connected to *Kapha Pradhana Lakshana* and situated above *Nabhi Pradesha*.

**Virechana:** This treatment is effective for wounds with a *Pitta Dosha* and a longer length of persistence.

**Basti Chikitsa:** It is possible to treat lower extremity *Vata Pradhana* and *Margavarana* using *Basti Chikitsa*.

**Shirovirechana:** *Shirovirechana* may be used to treat *Urdvajatrugata Vrana* problems related to *Kaphapradhana dosha*.

### **Bhahya Shodhana**

**Raktamokshana:** The *Margavarana Vrana* that predominates in *Pitta* and *Rakta doshas* could be worked alongside *Raktamokshana*.

**Vrana Prakshalana:** To handle the first stage of *Vrana*, one may employ *Aragwadhati Kashaya*, *Sursadigana Kashaya*, *Lakshadigana Kashaya*, and *Panchavalkala Kashaya*.

**Vrana Pichu:** *Kshara taila*, *Nimbadi taila*, *Sursadi taila*, *Doorvadi ghrita*, and *Jatyaditaila/ghrita* may also provide comfort in *Vrana* when applied as a medicated soaked cotton or swab.

**Vrana Lepa:** *Vrana's lepa* provides relief from *Tilakalkadi* symptoms.<sup>[12,13,14]</sup>

### **Different formulation for vrana**

**Panchavalkala tail:** An Ayurvedic composition for *vrana*, is made up of *Vata*, *Udumbara*, *Plaksha*, *Til Tail*, and *Parish*. It has positive benefits on *varana*. Because of its *Shodhana* and *Ropana* qualities, it eliminates discharge, debris, and slough. Additionally, it has the qualities of *vrana*prakashalana, *vrana*ropana, and *shothahar*, which greatly aid in wound healing.

**Hingulamrutadi Malahara:** *Hingulamrutadi Hingula*, *Siktha*, *Tankana*, *Rasa Karpura*, and *Sphatika* are all found in *Malahara*. It considerably reduces symptoms including pain, edema, inflammation, and *daha*.

**Jatyadi Ghrita:** *Ropana*, *Jatyadi Ghrita*, and *sodhana karma* aid in the full healing of wounds.

**Durvatail Varnabasti:** The local application of *Durva Taila* as *Vrana basti* offers healthy granulation and completely reduces slough.

***Dvi-Avartita Bhringaraja Taila***: Applying *Dvi-avartita Bhringaraja taila* locally has a major impact on edema, discomfort, pus discharge, and an unpleasant odor. Additionally, it has antiseptic, antibacterial, and anti-inflammatory qualities.<sup>[15]</sup>

### **Dietary considerations for wound healing**

The traditional Ayurvedic texts highlight Shaak, Shuk-Shimbi Dhanya, Jangal Mansa Rasa, Ghrita, Yusha, and Vipeli as Pathya Dravya for the appropriate treatment of wound, with Tila, Masha, Ksheera, Ikshu-Vikriti, and Nava Dhanya representing Apathya aahar. As Apathya Vihara, Nitanta Chankraman, Shoka, and Ucca-Paribhashan.

Green leafy vegetables with mutravirechniya, deepana, and pachana qualities include tanduleeyaka, vastuka, jeevanti, and sunnishnnaka. These are abundant in micronutrients, carotenoids, and high fibers. Antioxidant and immunomodulatory qualities that aid in providing nutritional support for the advancement of healing. Vegetable fruits with Agnideepana, Pachana, and Kaphapittahara qualities include Vartaka, Patol, Karvellaka, and Karkotak. These are also a great source of amino acids and fiber. Balya, Kapha-Vatahara, and Ruchya qualities are possessed by Yava, Godhuma, and Sashtika Shali. The fruits dadima and aamlaka are also Ruchya and Deepana, and they contain a lot of vitamin C, which is essential for the production of collagen and the healing of wounds.

The properties of the Yusha of Masura, Tuvare, and Mudag include Laghu, Ruksha, Madhura, Grahi, and Kapha-Pittahara. Srita Jala is also Deepana and Laghu. The properties of the Yusha of Masura, Tuvare, and Mudag include Laghu, Ruksha, Madhura, Grahi, and Kapha-Pittahara.

Srita Jala is also Deepana and Laghu. Protein, which is abundant in Jangala Mansa Rasa, is essential for the creation of collagen and the development of wounds. The vitamins A and D needed for collagen production are found in ghrita. Nava Dhanya, Tila, Masha, Ksheera, and Ikshu Vikriti are contraindicated in wounded individuals because they are Guru, Snigdha, and Kapha-Pitta Vardhaka, Kleda Vardhaka.

### **CONCLUSION**

The Vrana needs to be shielded from Dosha Dusthi and other microorganisms that could harm it and impede its natural healing process. Treatment is required for Vrana's early and uncomplicated healing. The management of vrana, which might be a clean wound, an

ulcerated wound, or any surgical wound, is the subject of several ayurvedic treatments. Assessing the type of Vrana, Dusthi level, Dosha predominance, Dhatu involvement, Vrana place and size, and Sadhyaasadyata of Vrana is necessary before beginning treatment. Delayed recovery, Common side effects that are effectively treated by shashtiupakarma include non-healing wounds, such as diabetic wounds, infections, and aberrant scarring after healing. Healing can be accomplished extremely effectively when the wound is totally free of discharge, slough, odor, burning, and itching. More beneficial drugs include katu, tikta, and kashaya rasa.

## REFERENCES

1. Acharya JT. Sushruta Samhita, Reprint. Sutra Sthana, 33/4. In: Sushruta, editor. Varanasi: Chowkhambha Surabharati Prakashan, 1994; 120.
2. Acharya JT. Sushruta Samhita, Reprint. Shareera Sthana, 6/10. In: Sushruta, editor. Varanasi: Chowkhambha Surabharati Prakashan, 1994; 288.
3. Concept of Vrana in Ayurveda, by Lakshman Singh, 1st Edition 2013, Chaukhambha Orientalia publication, Varanasi, pp. 1-2 description.
4. Sushruta Samhita, Ayurvedatattvasandipika, edited by kaviaraj Dr. Ambikadattashastri: Published by Varanasi, Choukambha Surbharati Prakashan Chikitsa Sthana, 2007; 1(57-58): 10. Sushrutasamhita.
5. Sushruta Samhita, edited with Ayurveda Tatva Sandipika by Kaviraja Ambika Dutta Shastri Chaukhambha Sanskrit Sansthan, Chikitsasthanam chapter 1 /8, p4.
6. Charak Samhita, Tripathi Brahmanand, Charak Samhita – Charak Chandrika, Hindi Commentry Vol I and II, Chaukhamba Subharti Prakashan, Varanasi, reprinted, Charak Chikitsa Sthana, 25/6; 2003.
7. Joshi SG. Shalyashalakyatantra. Vranavidnyaniya. Pune: Pune Sahitya Vitaran; 2013. p. 312-318.
8. Sharma A. Sushrut Samhita – Sushrut Vimarshini Hindi Vyakhya by Acharya Priyavat Sharma. Sutrasthan. Varanasi: Chaukhamba Surbharti Prakashan, 2010; 150-151.
9. Sushruta Samhita – Ayurveda tattvasandipka Hindi commentary by Shastri Ambikadutt, Chukhamba Sanskrit Sansthan, Varanasi, reprint edition, S.Su 28/13-17; 2010.
10. Sushruta Samhita, edited with Ayurveda Tatva Sandipika by Kaviraja Ambika Dutta Shastri Chaukhambha Sanskrit Sansthan, Sutra sthanam chapter 17 /22, 23, p74.
11. A brief review on shastiupakrama', by Alok Verma et al. IJAAR volume 1 issue 5 May-Jun 2014.

12. A brief review on shastiupakrama', by Alok Verma et al. IJAAR volume 1 issue 5 May-Jun 2014.
13. Sushruta Samhita, edited with Ayurveda Tatva Sandipika by Kaviraja Ambika Dutta Shastri Chaukhambha Sanskrit Sansthan, Sutra sthanam chapter 17 /22, 23, p74.
14. Susruta, Sushruta Samhita with Susrutavimarshini Hindi commentary. Edited by Anant Ram Sharma, Chaukambha Surabharati Prakashan, Varanasi, vol 1 Reprint – 2008 P-5.
15. Naresh Ghodela, Tukaram Sambhaji Dudhamal, Wound healing potential of Ayurved herbal and herbomineral formulations: A brief review, International Journal of Herbal Medicine, 2017; 5(1): 39-45.