

**A CRITICAL REVIEW: WOUND CARE IN AYURVEDA****Bijendra Kumar<sup>1\*</sup>, Suman Yadav<sup>2</sup> and Ashutosh Kumar Yadav<sup>3</sup>**<sup>1</sup>PG Scholar, Department of Shalya Tantra, RAC Varanasi.<sup>2</sup>Reader and HOD Department of Shalya Tantra, RAC Varanasi.<sup>3</sup>Reader, Department of Rachna Sharir, RAC Varanasi.Article Received on  
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Varanasi.**ABSTRACT**

Wound is defined as the condition wherein tissues undergo destruction (*vichurnana*). Wound is a condition even after complete healing leaves a scar (*vrana vastu*) over the area which stays as long as the person alive. wound in Ayurveda is described as *Vrana*, is one of the oldest element from which the humankind has suffered. In Ayurveda wound has 6 roots or causes of vitiation- Vata, Pitta, Kapha, Rakta, Sannipata and Agantuj, can be managed by 60 measures (*Shasti Upakrama*) as described by *Maharshi Sushruta*. These sixty different types of procedures in general may be summarized in the seven basic

procedures (*saptopakrama*) in the management of *Vrana shopha*. For managing the complete healing of wound, a series of treatment procedures have been mentioned. These procedures primarily help in the *Shodhana* (cleansing) and *Ropana* (healing) of the formed wound. They also play an important role in cosmetic repair, by setting right if there is any complication occurred during the process of healing. The procedures in *shasti upakrama* from *seevana karma* to *vrana dhoopana* play a major role in cleansing and promoting the healing of the incised/burst and drained wound.

**KEYWORDS:** *Vrana, Vrana Vastu, Vichurnana, Vrana shopha, Shasti Upakrama, Saptopakrama, Shodhana, Ropana* etc.

**INTRODUCTION**

The *Vrana* or wound is primary or initial presence in any kind of surgical cases. So, in any kind of surgery, there is a common thing that is *Vrana*. *Vrana* is a discontinuation in the integrity of the skin or tissues or mucous membrane. There are various kind of wound management is advocated in modern medical science whereas the management of *Vrana* has

been illustrated in *Sushruta Samhita* in very detail manner which is known as *Shashti Upakram*. *Vrana* and its management are of prime importance in surgical practices. Generally, a *Vrana* created by a surgeon is healed with primary intention. But many other types wounds follow a secondary intention to heal. Although there are sixty procedures to manage the wound in *Sushrut Samhita*, from very early inflammatory stage due to vitiation of local tissue by vitiated *Doshas*, up to the complete process of healing with cosmetic care. This review article will focus on seven basic procedures, importance of procedures from 21 to 34 i.e. from *Seevana Karma* to *Ropana Karma* in *Shasti Upakrama* in the management of natural/surgeon made wound specially, *Shodhana* and *Ropana* alongwith the maneuvers to promote fast healing and avoidance of any recurrence in future.

### Aim and Objective

1. To evaluate the importance of wound care in Ayurveda as described in *Sushrut Samhita*.
2. To understand the basic principles of wound management.
3. Critical analysis of *Shodhana* and *Ropana karma* with various herbal preparations.
4. *Pathya Apathya* followed in wound care alongwith the illustrations of maneuvers apply to avoid any future recurrence of wound.
5. Management of *Dushta Vrana*.

### MATERIAL AND METHOD

All references of *Shasti Upakrama* and wound care are collected and compiled from *Sushrut Samhita* and other ayurvedic reference books.

### Literature review

The specific concept of the origin and development of *Vrana* has been taken from the text of a scholarly paper as well as theoretical and methodological contributions to a particular topic from the following literature-

- *Susrut samhita, sutrasthana*, chapter- 14, 17,19,21.
- *Susrut samhita, chikitsasthana*, chapter- 1, 2.
- Text book of Shalya Tantra by Dr. Rajneesh V. Giri, chapter 5, wound and ulcers (*Vrana*).

### Management of wound

Quite a number of conditions and types of wounds are responsible for early healing, delay healing or incurable stages. Although much progress has been made in management of

wound in past few years, management of *Vrana* has been significant health related issue ever since period of *Sushruta*. Numbers of procedures are performed for various steps of healing of *Vrana*. Among these, *Shuddha Vrana* has been treated by *Ropana* remedies, whereas *Dushta Vrana* is managed on the basis of involvement of vitiated *Doshas*, site of *Vrana*, excessive putrefaction, and inflammatory changes. *Sushruta* described sixty different types of management of *Vrana* in general. He described almost all the basic principles of *Vrana Upakrama* in form of seven different types of *Upakrama* (management) of *Shopha*.

#### Showing incorporation of *shashti upakrama* in *sapta upakrama*

7 Upakrama	60 Upakrama
<i>Vimlapana</i>	<i>Apatarpana, Aalepa, Parisheka, Abhyanga, Swedana, Vimlapana.</i>
<i>Avasechana</i>	<i>Visravana, Sneha, Vamana, Virechana.</i>
<i>Upanaha</i>	<i>Upanaha, Pachana.</i>
<i>Patana</i>	<i>Chedana, Bhedana, Darana, Lekhana, Eshana, Aharana, Vyadhana, Visravana, Seevana.</i>
<i>Shodhana, Ropana</i>	<i>Sandhana, Peedana, Shonitasthapana, Nirvapana, Utkarika, Kashaya, Varti, Kalka, Sarpi, Taila, Rasakriya, Choorna, Dhoopana.</i>
<i>Vaikrutapaham</i>	<i>Utsadhana-Rakshavidhan</i>

First three *upakramas* are for *Vranashotha*. 4<sup>th</sup> is *Vhastrakarma*, while last three are for *Vrana*.

***Vimlapana*** - In case of *Sthira, Manda Ruja Vranashopha*, after *Snehana* and *Swedana* to the part, *Peedana* should be done with a *bamboo* tube or palm and sole or thumb.

***Avasechana*** – In case of *Shopha* of recent on set, *Raktamokshana* should be resorted to in order to mitigate the *Vedana* and *Paka*. Even in *Vrana* associated with *shopha*, which are *Kathina*, containing *Rakta*, *Vedanayukta* or deep seated, *Rakta Avasechana* should be done. In case of *Shopha* associated with *Visha*, *Rakta Visravana* should be done by using leech or by *Shastra*.

***Upanaha*** - It should be applied in *Aamavastha* and *Vidagdhavastha* of *Vranashopha*.

***Patana*** - It should be done in case of *Pakwa Shopha* only.

***Shodhana*** - It is one of the important measures in case of *Vrana Chikitsa*. Among 60 *Upakramas* as mentioned earlier *Kashaya, Varti, Kalka, Sarpi, Taila, Rasakriya* and *Avachoorana* are the different methods for *Shodhana*. In case of *Vrana* associated with *Durgandha, Kleda* and *Picchilata*, *Shodhana* should be done using *Kashaya* of various *Dravyas* or *Shodhana Taila* whereas in case of *Vrana* which has *Utsanna Mamsa, Alpasrava* etc. *Shodhana* should be done with *Tila Taila* mixed with *Sarshap Taila*.

**Ropana** - *Ropana Kriya* should be adopted in *Vranas* which show the features of *Shuddha Vrana*. *Kashaya*, *Varti*, *Kalka*, *Sarpi*, *Taila*, *Rasakriya* and *Avachoornan* are the different methods for *Ropana*. In case of *Vranas* which are predominant in *Kapha* and *Vata*, *Ropana* should be done by *Taila* processed with those *Dosha-Shamak Dravyas*.

**Vaikrutapaham** - Even after complete healing of *Vrana* restoration of normal colour, Shapes are essential. So *Vaikrutapaham* is a measure which helps in restoration. For this *KrishnaKarma*, *PanduKarma*, *Romasanjanana*, *Lomapaharana* etc. are mentioned.

### Importance of various procedures in the management of wound

For managing the whole range of symptoms/conditions from inflammatory stage till the complications produced after the complete healing of a wound, a series of treatment procedures have been mentioned. These procedures pacify the abscess in the initial stages itself, preventing its further development or promote suppuration so that the abscess gets suppurated. once the pus etc, gets drained out, the patient gets relief from the pain and also there is now a chance for healing.

**These procedures include:** *Seevana*, *Sandhan*, *Peedana*, *Shonitsthaapan*, *Nirvaapan*, *Utkarika*, *Kashaya*, *Varti*, *Kalka*, *Sarpi*, *Tail*, *Raskriya*, *Avchoornana* and *Vrana Dhoopana*.

**Seevana** – *Seevana* means suturing. *Sushruta* described *Seevana Karma* in detail along with types of stitches and their indications. *Seevana* is done on *Vrana* having wide gaping wound with loss of skin, *Vrana* in a fleshy part, and without *Puyasrava* i.e. without infection.

**Sandhana** - This means to join. It is a measure for adhesion of the edges in a fleshy part without suppuration.

**Peedana** - It is indicated to remove *Puya* from *Sukshmamukhi* and *Marmasthita*

*Vrana*. In this procedure, application of medicated plaster or *Aalepa* of (*kalaya*, *yava*, *godhuma*, *masa*, *mudag*, *harenu* etc.) is done around the mouth of *Puyayukta* and *Sukshmamukhi Vrana*.

**Shonitasthapan** – It is a procedure of inducing haemostasis and is indicated in *Agantuj*, *Sadyovrana* and *Shastrakarmaja Vrana*. *Sushrut* has described 4 ways of *Shonitasthapanaa* . *Sandhan*, *Skandana*, *Pachana*, *Dahana*.

**Nirvapana** - It means cold compress. This is done on *Vrana* having *Ushna Guna* i.e. *Pitta-Raktaja Vrana*, *Dahayukta* and *Jwaryukta Vrana* with the help of proper *Sheeta Dravyas* like *Dugdha*, *Ghrita* etc.

**Utkarika** - This means poultice. It is indicated for *Ksheenmamsi*, *Alpasravi*, *Todayukta*, *Shulayukta*, *Kathinyayukta* and *Kampayukta Vrana*. These types of *Vrana* are fomented with poultice-like preparation, i.e. *Utkarika*—cooked with *Vataghna Dravyas*.

**Kashaya** - This means decoction and is indicated in *Dushta* as well as *Shuddha vrana*. Washing of *Dushta Vrana* is done with *Kashaya* of *Shodhan Dravyas* (*sursaadi gana*, *aragvadhadi gana*) while washing of *ShuddhaVrana* is done with *Kashaya* of *Ropan Dravyas*. In vaat vitiation- *Dashmoola kwath*, in pitta vitiation- *Nyagrodhadi kwath*, in kapha vitiation- *Aragvadhadi kwath* is used.

**Kalka** - It is an application of *Kalka* or paste prepared of *patola*, *tila*, *yashtimadhu*, *trivrit*, *danti*, *haridra*, *daruharidra*, *nimba* etc. on *Vrana Shodhana* and *Ropana Kalka* are applied on *Dushta* and *Shuddha Vrana* respectively. *Shodhana Kalka* is also applied in *Shalyayukta*, *Anumukhi*, *Gambhir*, *Putimamsi Vrana* while *Ropan Kalka* is applied in *MarmasthitaVrana*.

**Varti** – This means plugs or lints. These are made by plastering them with Paste of *Shodhan Dravyas*(*trivrit*, *danti*, *langgli*, *madhu*, *saindhava* etc.). These are indicated in *Puyayukta*, *Dushta*, and *Shuddha Vranas*. *Varti* is useful in *Sukshmamukhi*, *NadiVrana* and deep *Vrana*.

**Ghrita** - Medicated *Ghrita* (*Ghee*) is applied on *Vrana*. This *Upakrama* is especially for *Ropana Karma* in *Dushta Vrana*. *Shodhana Dravya Siddha Ghrita* is used. This *Upakrama* is indicated for *Pittaja*, *Raktaja*, *Vishaja*, *Agantuj* and *Gambhir Vrana*.

**Taila** - The application of medicated oil is *Taila Upakrama*. Many types of *Siddha Taila* are used for different types of *Vrana* especially for *Shodhana* and *Ropana Karmas*. *Shodhana Taila* is applied to *Dushta*, *Utsannamamsi* and *Alpasravi Vrana*. *Ropana Taila* is applied to *Shuddha vrana* and it is also useful in *Vata-Kaphaja Vrana*.

**Rasakriya** - It is indicated for *Shodhana* and *Ropana* effects. Decoction of Medicinal *Dravyas*(*Salsaaradi gana*, *saurastraja*, *kasisa*, *hartala*, *manasila* etc.) is further boiled and saturated to achieve *Ghana Awastha*. This *Ghana* is then applied over the *Vrana*. *Shodhana Rasakriya* is applied to *Sthiramamsi* and *Dushtavrana*. *Ropana Rasakriya* is applied to *Sandhisthita*, *Pittaja*, *Raktaja* and *Abhighataj Vrana*.

**Avachoornana** - This means sprinkling of *Churna* over *Vrana*. *Shodhana* and *Ropana Churna* are sprinkled over superficial i.e. *Twak sthita*, *Sthira mamsi*, *Avikrut akruti* and *GhrishtaVrana*.

**Vranadhoopana** - It means fumigation that is indicated for *Vataj*, *Tivra shulayukta* and *Sravi Vrana*. Fumigation is done with many preparations (*linen,yava* and *ghrit*, *nimba patra,vacha,hingu,saindhava* and *sarshapa* etc.). Fumigation relieves the wound site from *krimi,kandu,raja* etc.

In order to prevent complications during healing and recurrent vitiation of *doshas* after its complete healing, the patient should consume *laghu matra aahara*. Food should be *snigdha*, *ushna* and should always cause the *agni deepana*. Even after wound has got completely healed, one should protect the patient from *krimi*, evil spirits etc. which may cause recurrence or produce various complications. Things should be avoided during wound condition: day sleep, late night sleep sexual act, excessive fresh grain consumption, milk and milk products, sour, salty, sweet articles, *vishtambhi*, *guru*, *sheeta*, *vidahi* food. Wholesome food for wound patient include: *yava*, *godhuma*, *sastika*, *Sali*, *mudaga*, *masoor*, *jeevanti*, *bal moolak*, *vaartak*, *dadima*, *dhatiri* etc.

Patient should keep in a well maintained and hygienic ward so that to prohibit any further complication.

### Treatment of dushta vrana

*Dushtavrana* is treated according to the presence of *prakupita* dosha. *Vamana*, *Shirovirechana*, *Virechan*, *Asthapana Basti*, *Langhana*, *Raktamokshana* and specific sort of diet is advised. For *Vrana Dhavana*, *Kashaya* are prepared using *dravyas* of the *surasadi* and *rajvrukshadi Ganas*, *Siddha Ghrita* and *Siddha Taila* of these *Dravyas* are used for *Vranakarma*. *Vividha upkrama* according to *doshadushti* are as follows- *VatajVrana*: *Snehayukta Swedana*, *Upanaha*, *Pradeha* and *Parisheka* of *Vataghna Dravyas*. *Pittaj Vrana*: *Sheeta*, *madhura* and *Tikta Dravyas* as *Kalka*, *Pradeha*, *Kwath* and *Parisheka* are used. *Ghritapana* and *Virechana* are used. *Kaphaj Vrana*: *Katu*, *Kashaya*, *Ruksha*, *Ushna Dravyas* as *Pradeha* and *Parishechana* are used. *Langhana* and *Pachana* are advised. *Aahar* composed of *Tikta*, *Katu*, *Kashaya Dravyas* should be prescribed.

### CONCLUSION

From above study, we can be concluded that *Acharya Sushruta* describe *Vrana* and *vranaupakrama* (management of wound) in detail. This description clearly suggests that they have understood this disease clearly and therefore were able to treat this condition properly. That can be employed according to the different stages of wound. It is easy to learn and apply the principle of *saptopakrama* in the management of surgical wounds whereas *Shashtiupakrama* provide us lot of option for the management of wound in different stages.



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