

DUSTA VRANA: A SINGLE CASE STUDY**Dr. Krishnadev C. P.¹, Dr. Vivekanand Mohan Kullolli^{2*} and Dr. Harish Daga³**¹P.G. Scholar, Department of Shalya Tantra, Parul Institute of Ayurveda, Parul University, Limda, Vadodara, Gujarat, India.²Professor, Department of Shalya Tantra, Parul Institute of Ayurved, Parul University, Limda, Vadodara, Gujarat, India.³Assistant Professor, Department of Shalya Tantra, Parul Institute of Ayurved, Parul university, Limda, Vadodara, Gujarat, India.***Corresponding Author: Dr. Vivekanand Kullolli**

Professor, Department of Shalya Tantra, Parul Institute of Ayurved, Parul University, Limda, Vadodara, Gujarat, India.

Article Received on 20/01/2019

Article Revised on 09/02/2019

Article Accepted on 01/03/2019

ABSTRACT

Dustavrana (non healing ulcer) are a frequently encountered problem in present era produced commonly as a complication of trauma or pathologic insult and it causes long term agony to the patient. The issue of Non-healing ulcers management with ayurvedic remedy is one of the major areas of the research and has come under increased study. In the present study *nimbapatratilakalkawith madhu* is selected which is mentioned by acharya sushrutha in the context of *vrana*. These medicaments possess *vranshodhana* and *ropana* properties. It was used topically in non healing ulcer once daily for 28 days.

KEYWORDS: *Dustavrana, Nimbapatra, Tilakalka, Madhu, Vrana Shodana- Ropana*, Non healing ulcer.**INTRODUCTION**

The *vrana*(wound) and *ropana*(healing) are the two sides of the surgical coin on which an expert surgeon has to play his role sincerely. The word *Vrana*(wound) is imitative from the verbal root “*Vran*” which means anything that causing discontinuity of the skin and other tissues under lying it.^[1]

Means splitting or tearing of the body tissues, since it causes discontinuity of the body. The scars of the wound never disappear even after healing and remains till the body survives is called *vrana*(wound) by the wise.^[2] Detailed description about *vrana*(wound) is mentioned by sushrutha acharya. *Vrana*(wound) is generally classified into two groups i.e., *Sharira are* due to vitiated dosha and *Agantuja* i.e., *Sadhyo Vrana*(wound) which caused due to trauma.^[3] If the *vrana*(wound) gets infective or not to heal for a long time then it is called as *Dustavrana*(infected wound or non-healing ulcer).^[4]

Now a days the clinician giving the treatment like betadine, silver nitrate, H₂O₂, Eusol or antibiotics, or any medications which are used in day to day practice but clinicians have their own limitations or available life saving procedure like amputation or surgery only but Sushruthaacharya already mentioned about any type of *vrana*(wound) can be treated by *Sasti Upakramas* method or else wise principle of management runs through –*Vedana shamaka, Shothahara, Rakta*

stambhaka, Aushadhi prayoga, Sodhana and Ropana karmawith pathya -apathyaprayoga.

CASE HISTORY

A 53 years old male came to the shalya OPD no 116 of Parul Ayurveda Hospital, Vadodara, Gujarat with the complaints of painless wound at lateral aspect of left ankle joint since 1 year.

Patient having History of road traffic accident before 1 year with wound at lateral aspect of lower 1/3rd of left leg didn't get healed even after 1 year.

PAST HISTORY

patient is k/c/o diabetes mellitus for 13 year underregular oral hypoglycemic agents.

On examination the wound was 5×3 cm (length×width) situated on muscle of lateral aspect of lower 1/3rd of left leg involving skin and muscle with punched out edges and fragile granulation tissue. Irregular and pale margin with slight foul smell.



Figure 1.

MATERIALS AND METHODS

Materials for Treatment

Formulation of the proper and relevant line of treatment is the main entity in the wound management, which includes external and internal medication in the form of *Sodhana* and *Ropana* concept with relation to *Dustavrana* (non healing ulcer).

Externally

For *Sodhana*, *Vrana* (wound) *prakshalana* (rinsing) with *Panchavalkalakwatha* followed by dressing with *Nimbapatratilakalka* with honey for 7 days for *Ropana* (healing process).

Internally

Table no.1 showing the internal medicines.

<i>Arogyavardhinivati</i>	2-2-2
<i>Manjistadhighanavati</i>	2-0-2
<i>swadistavirechana</i>	2-0-2
<i>Mamejwaghanavati</i>	2-2-2
<i>Madhumeharichurna</i>	5gm-5gm-5gm
<i>Phalatrikadikashaya</i>	20ml-0-20ml
<i>Syp.Liv- 52</i>	2 Tsf – 0 – 2 Tsf

At the end of 28 days the 1-yearold *DustaVrana* (wound) was completely healed.

ASSESSMENT CRITERIA

The wound healing was assessed based on

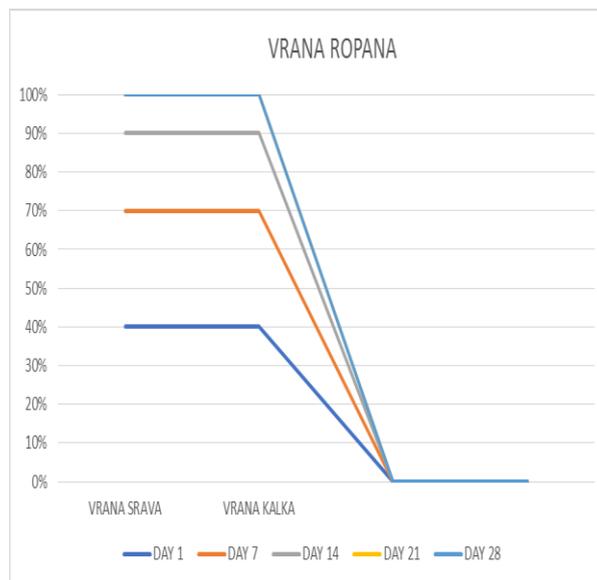
1. *Vrana srava*
2. *Vrana varna* with before treatment and after treatment gradation as below

Vrana srava

- No discharge = 0
- Serous discharge = 1
- Mucous discharge = 2
- Serosanguinous discharge = 3
- Mucopurulent discharge = 4

Vrana varna

- Skin colour = 0
- Pale pink granulation = 1
- Red granulation = 2
- White(pale granulation) = 3
- Black / grey = 4



RESULT

1st day wound which was having pale white granulation with mucopurulent discharge turned into red granulation and serous discharge on 7th day after the application of *nimbapatratilakalka* with *madhu*, further wound was improved with healthy granulation tissue and mild serous discharge from 14th and 21st day to start with epithelization to get completely healed by 28th day with the continuation of same treatment.

DISCUSSION

The one year old *dustavrana* which was reluctant to heal even after proper management of diabetes mellitus and the wound by contemporary science, shown encouraging result by the ayurvedic medicines with 28 days.

The probable mode of action of the internal medication as well as external application can be drawn as below.

Neem leaves (*Azadirachta Indica*) have active ingredients such as nimbidin and sodium nimbidate which possessing anti-inflammatory, antibacterial, antifungal and antiviral properties that help in healing process and also contains an excellent nutrition which plays a vital role information of collagen and formation of new capillaries. So it is clear that it might be helpful in the phases of wound healing process.^[7]

Sesame is rich in Vitamin E. Hence acts as a natural antioxidant. It also contains Vitamin K. Sesame contains magnesium, copper, calcium, iron, zinc, and vitamin B6. In these vitamins are highly helpful for healing the wound by giving the vitamins at the phases of wound healing.

Terpenoid present in sesame also act as antibacterial and antidiabetic properties and also helpful in reducing blood sugar and blood pressure.^[8]

For 1st day: **Externally** *pariseka* with *panchavalkalakwatha* and followed by application of *nimbapatra* with *tila* and *madhu*. For that they having the properties like **anti-inflammatory**, antiulcer, antifungal, antibacterial, antioxidant is beneficial to cleanses and heals the wound.

Internally *Arogyavardhinigutika* (2-2-2) given for curing the *medo dosha*, *madhumeha* and *yakrtavikara* because the margin of the wound is blackish colour then we can assume that the *yakrat* is not functioning properly. Along that *swadishtavirechanagutika* (2-0-2), *phalatrikadi Kashaya*(2tsf-0-2tsf)B/F and syp. Liv 52 (2tsf-02tsf) for functioning the liver properly so that *leenasamadosa*(toxins) inside the body get purified and cleared, Then we chose for controlling the diabetic by giving *mamejwaghanavati*(2-2-2)B/F, *madhumeharichurna*(5gm-5gm-5gm)B/F with luke warm water.

On 7th day: *Vrana*(wound) is changed into *Ruhiyamanvrana*(healing wound), which has the colour of peigon(grey) inside, is devoid of moisture(exudation), has good granulation tissue adhering firmly, is to be considered as healing^[9] within this less time because above mentioned properties of the drug showed the progressive result.

On 14th day: the *Vrana*'s(wound)lips (edges) are blue in colour, which has developed (small) eruptions (granulation tissue) which is even, not having pain and exudation is said to *beshudhavrana*(wound)^[10] which means healing or healthy wound.

On 21st to 28th day: The *lakshana* of the *vrana*(wound) is was healed in its seat(dwelling place/tissue), which has no eruptions, swelling or pain, has the colour same as of the skin and which is even of one level considered it as healed wound.^[11]

Before treatment



Fig.1.

During treatment



Fig-2.1

Fig-2.2



Fig-2.3

Fig-2.4

After the treatment



Fig-3.1

Fig3.2

CONCLUSION

Even though the explanation in relation to *dustavrana* in the classics do not directly attribute the *madhumeha*(diabetes mellitus) as one of the cause, the sequele of *dustavrana* are similar to diabetic wound. Most of the *dustavrana* are the result of vitiation of all the 3 *doshas* with one of the *dosadominance*.

Thelepa of *tilakalka* and *madhu* mentioned for *ropana*where as the *lepa* of *nimbapatra* and *madhu* is mentioned for *vrana*shodana. The combination of all the three ie. *Nimbapatra*, *tilakalka* and *madhu* has given the effect of both *shodhana* and *ropana* of the *vrana*within 28 days. The internal medication with

arogyavardhinivati, manjistadighanavati,
 mamamejwaghanavati, swadishtavirecaha,
 madhumeharichurna, phalatikadiksaya, syp.liv 52 helped
 for the wound healing by systemic control of the vitiated
dosas and diabetes mellitus. The *tridosasamaka* effect of
 this *lepa* can be used in all types of *dustavrana* even
 secondary to diabetic mellitus also.

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