

WOUND HEALING EFFECT OF NOOLA TAILA IN THE MANAGEMENT OF GHRUSTA VRANA WITH SPECIAL REFERENCE TO ABRASION WOUND – A CONCEPTUAL STUDY

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ABSTRACT

An Abrasion is a type of injury characterized by loss of superficial layer of the skin due to application of mechanical force. In the modern era there is remarkable increase in the number of traumatic wounds due to rise in the vehicular traffic. Acharya Vagbhata explained about Saptahika Chikitsa for Sadhyo Vrana in that Sechana, Lepana and Sandhana can be used for Ghrusta Vrana. In this cosmetic and antibiotic era, healing of wound is not only the intension but also to reduce the pain, burning sensation and minimizing the scar. Hence Noola Taila needs to be explored by scientific research. It is having Vrana Ropana and Varnya property by the ingredients it possesses. Keeping this in view, the above study is proposed to evaluate the effect of Noola Taila in the management of Ghrusta Vrana.

Keywords: Ghrusta Vrana, Noola Taila, Abrasion wound, Wound healing

INTRODUCTION

Vrana is the commonest painful condition that every human being suffers in their life. So, it is the responsibility of surgeon that it should be cured within short period with less pain and less cost.¹ Wound management probably was the first medico-surgical problem faced by physicians.² Acharya Sushruta elaborately explained about Ghrusta

Vrana in Sushruta Samhita Chikitsasthana and is defined as, when skin is removed by rubbing or any other cause associated with burning sensation and discharge.³It is of two types i.e. Sharirika and Agantuja.⁴ Agantuja (exogenous/traumatic) is caused by trauma from blowing, binding, falling down, injury with fangs, teeth or nails as well as due to

poisonous contact, fire and weapons⁵etc.

Acharya Sushruta has explained six types of Agantuja Vrana (exogenous) as having various shapes and features.⁶Ghrusta Vrana is one among them which exudates Lasika (lymph) alone or mixed blood, associated with burning sensation.⁷

Traumatic wounds occur at the rate of 50 million every year worldwide.⁸According to Indian Society for Trauma and Acute Care Center, New Delhi(2012)22.8% of all injuries were due to traffic related and 77.2% of other trauma wounds like self-fall, agricultural injury, burns, assaultsetc.⁹

The prevalence rate of minor injury in children under five years are of 67% and under 5 to 9 years 14.2%, such wounds should be treated by cleaning and topical application of antibiotics along with systemic analgesics.¹⁰The moto/principle behind wound healing is early healing with less complication and less scar.

Noola Taila is explained by Acharya Vangasena, in context of Agantuka Vrana Rogadhikara, contains Bala and Apamarga¹¹, it works as Vrana Ropaka, based on their respective Rasapanchakas, so the Ropana activity

of Noola Taila needs to be explored by scientific research.

AIM AND OBJECTIVES

- To assess wound healing effect of Noola Taila in the management of Ghrusta vrana.
- To review in detail about Ghrusta Vrana.

REVIEW OF LITERATURE AND DRUGS

- Description of Ghrusta Vrana, Nidana, Laxana and Chikitsa in Ayurvedic classics Bruhatrayi and Laghutrayi.
- Description of Abrasion wounds in Surgical textbook like S Das, SRB, Bailey & Love's.

DISEASE REVIEW

Nidhana:

Agantuja (exogenous/traumatic) is caused by trauma from blowing, binding, falling down, injury with fangs, teeth or nails as well as due to poisonous contact, fire and weapons⁵etc.

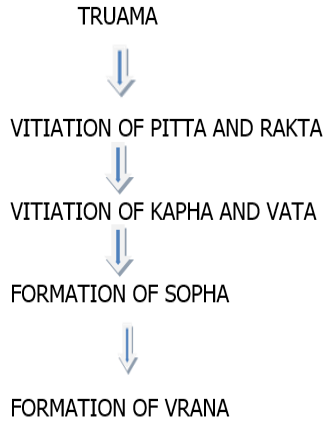
Abrasion is a type of injury characterized by loss of superficial layer of the skin due to application of mechanical force.

Rupa:

When skin is removed by friction, rubbing or any other cause presenting with complaints like Vrana Daha, Srava

and Vedana is known as Ghrusta Vrana which can be compared with Abrasion wound.¹²

Samprapti:



Classification:

Sushruta has classified the Agantuja vrana into 6 varieties according to their nature, depth, by the violence, surrounding tissue.¹³

1. Chinnam: Excised wound
2. Bhinnam: Deep punctured wound
3. Viddham: Superficially punctured wound
4. Kshathaja: Incised wound
5. Picchitha: Contusion
6. Ghrusta: Abrasion wound

Table No 01- Ghusta Vrana Lakshanas:

| Type | Sushruta Samhita ³ | Ashtanga Hridaya ⁷ | Madhava Nidana ¹⁴ |
|---------|--|--|--|
| Ghrusta | Peeling of skin of any part of body accompanied with watery exudation. | Exudes Lasika alone or Mixed with little of Rakta associated with burning sensation. | Peeling of skin of any part of body accompanied with watery exudation. |

CHIKITSA:

Saamaanya Chikitsa:

Immediate general treatment is to pacify the Ooshma released at the site of injury by Sheetala Kriya’s (cooling measures) [i.e. like that of Pitta Chikitsa] along with use of Madhu, Ghrita for Shodhana. Sadhyo Vrana which has severe pain should be washed in warm Yashtimadhu Ghrita

or Bala Taila often in order to mitigate the heat of Vrana¹⁵.

Drugs which possess Kashaaya, Sheeta, Madhura, Snigdha properties should be made use for Lepa¹⁶. Snehapana, Parisheka, Swedana, Lepa, Upanaaha, Snehabasti prepared from Vaatahara drugs should be administered.

Vishesha Chikitsa:

Ghrishta Vrana:-

- In order to pacify Ushna, Sheetala Aalepa, Parisheka should be done. These should be treated with Choornas (of Saala, Arjuna etc.) after relieving pain (by applying Madhuka, cold etc.)

DRUG REVIEW

Noola Taila is explained by Acharya Vangasena, in context of Agantuka Vrana Rogadhikara, contains Bala and Apamarga.¹¹

MATERIAL AND METHODS

All the references regarding Ghrusta Vrana are collected from Bruhatrayi, Laghutrayi and various textbooks.

- Concept of Ghrusta vrana and Noola Taila is studied in detail.

METHODOLOGY

Preparation of Noola Taila:

Ingredients of Noola Taila

| Sl. No | Ingredients | Latin Name | Used part | Quantity |
|--------|-------------|-----------------------|-----------|------------------|
| 1 | Bala | Sida cordifolia Linn. | Moola | 1 part (250gm) |
| 2 | Apamarga | Achyranthes aspera | Moola | 1 part (250gm) |
| 3 | Tila Taila | Sessamum indicum | Taila | 4 part (2000ml) |
| 4 | Jala | --- | --- | 16 part (8000ml) |

Noola Taila was prepared according to Tailapaka vidhi mentioned in Sharangadhara Samhita Madhyama Khand¹⁷.

PROCEDURE:

Purva karma:

- The procedure was carried out under aseptic precautions.

- Collection of all the references was done.
- Noola Taila was prepared under observation in BVVS Ayurveda Pharmacy, Bagalkot.

MATERIAL

The following materials used for study:

- Noola Taila (study group)
- Gloves
- Normal saline
- Gauze piece
- Roller bandage
- Artery forceps
- Scissor
- Micropore tape

- Wound toileting was done with normal saline.

Pradhana karma:

- Noola Taila in study group was applied over Ghrusta Varna uniformly once daily for 07 days, with soaked sterile gauze.

Paschat karma:

- Bandaging was done, if needed.

Observation:

- Assessment was done in following stages: Before treatment, during

treatment and after treatment on 7th day.

Follow Up:

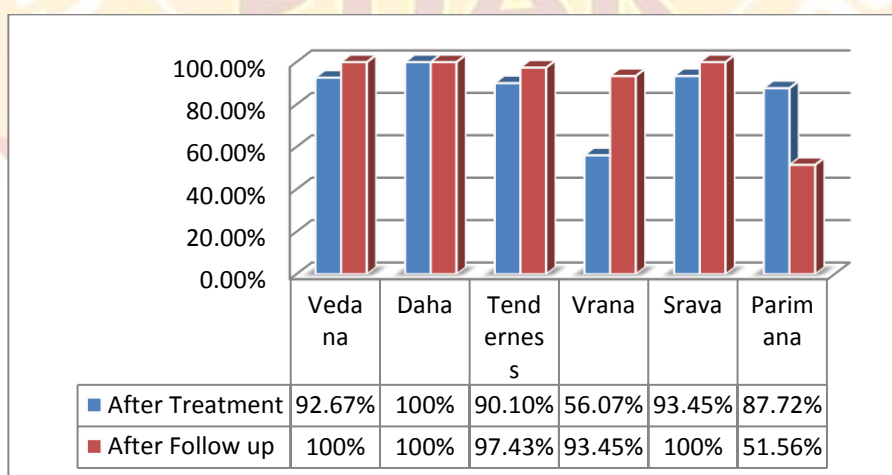
- After completion of treatment patient was asked to report for follow up study after 11th and 15th day.

Assessment criteria:

- The result of treatment was assessed on the basis of subjective & objective criteria by a suitable score/grading to each parameter.

OBSERVATION AND RESULT

| Result | After treatment (On day 7 th) | After follow up (On day 15 th) |
|-------------------|--|---|
| Vedana | 92.67% | 100% |
| Daha | 100% | 100% |
| Tenderness | 90.10% | 97.43% |
| Varna | 56.07% | 93.45% |
| Srava | 93.45% | 100% |
| Parimana | 87.72% | 51.56% |



DISCUSSION

Among Astanga Ayurveda, Shalya Tantra is one among them it deals

with the aetiology, diagnosis, prognosis, prevention and treatment of diseases which are Abhigataja.

Abhighataja could be considered as a main etiological factor to precipitate the clinical entity of abrasion wounds.

The clinical study was targeted to evaluate the action of Noola Taila application with an aim to minimize the wound surface, reduce discharge, promotes epithelialization and granulation tissue and to avoid hypertrophic scar formation. The use of Noola Taila in the form of application having a wound healing properties and constitutes basic therapeutic approach in alleviating the symptoms of abrasion wound, scar prevention. This review supports the wound healing and scar prevention of abrasion wounds, due to presence of Daha Shamaka, Vrana Ropana properties in it.

PROBABLE MODE OF ACTION OF NOOLA TAILA

- Noola Taila was helps in Vrana Shodhana, Ropana, Dahashaman and thus used in therapeutic field. Sheeta Virya, Madhura rasa in Bala acts as Pitta and Vata Shamaka.
- Taila being Snigdha in property acts as Vatashamaka.
- Apamarga having Tikta Rasa which acts as Raktaprasadhak, Ushna Virya

acts as Vatashamaka and Katu Vipaka act as Pittashamaka.

CONCLUSION

- The aim of present study was to evaluate Ropana effect of Noola Taila in the management of Ghrusta Vrana. Finally, after vivid discussion on observations and results the following conclusion can be drawn
- Noola Taila application is effective on Ghrusta Vrana 100% reduction in Vedana, Daha and Srava and also reduction in Tenderness 97.43%, Varna 93.45% and Parimana 51.56% after follow up.

Scope of Further Research

However Application with Noola Taila was effective in the treatment of Ghrusta Vrana and hypothesis behind the study was found to be correct. Since the clinical study was conducted on a limited number of patients, it may not be claimed as final. Detailed study on a large sample size may be conducted in this regard to evaluate the efficacy of Noola Taila so that new vistas can be obtained in the management of abrasion wounds.

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