ROLE OF DURVADI TAILA IN THE MANAGEMENT OF SADHYO VRANA

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KEYWORDS: Durvadi Tail, Sadhyo Vrana, Vrana shodhana, Vrana Ropana.

ABSTRACT

Healing is protective mechanism of our body. In modern science many antibacterial formulations are available with their own limitations. Ayurveda, the Indian traditional system of medicine, is based on empirical knowledge of the observations and the experience over millennia. Ayurveda is a science where there are so many formulations available to treat wound without any complication. Our Acharyas broadly described about treatment principles of wound management and classified the drugs related to Vrana shodhana and Vrana ropana. Classical management of wounds according to Sushruta Samhita follows 60 therapeutic steps, starting with an aseptic dressing of the affected part and ending with the rehabilitation of the normal structure and function. These therapeutic measures were aimed not only to accelerate the healing process but also to maintain the quality and aesthetics of the healing. On comprehensive review of Ayurvedic classics, Durva was found to be one of the drugs having wound healing properties. It is described in Vedas, Charaka Samhita, Sushruta Samhita. In Charaka Samhita, Durva is described in Prajasthapana and Varnya mahakashaya. In Sushruta Samhita, it is described in intrinsic haemorrhage. To rule out its efficacy, a study was carried out in which 30 patients of Sadhyo Vrana were selected for the trial and were subjected to local application of Durvadi Tail. The total effect of the therapy has provided considerably significant relief on the clinical parameters. Durvadi Tail was found to be safe and effective in the management of Sadhyo Vrana by virtue of its antibacterial, analgesic & hemostatic properties.

INTRODUCTION

Wounds are physical injuries that result in opening or break of the skin. Proper healing of wounds is essential for the restoration of disrupted anatomical continuity and disturbed functional status of the skin. Wound healing is a complex dynamic process results in the restoration of anatomic continuity and function. Various herbal formulations have been used in treatment of wounds over the years. Wound healing herbal extracts promote blood clotting, fight infection, and accelerate the healing of wounds. Wound healing is a natural restorative response to tissue injury. Healing is the interaction of a complex cascade of cellular events that generates resurfacing, reconstitution and restoration of the tensile strength of injured skin. Healing is a systematic process, traditionally explained in terms of three classic phases namely inflammation, proliferation, and maturation. A clot forms and inflammatory cells debride injured tissue during the inflammatory
phase. Epithelialization, fibroplasia, and angiogenesis occur during the proliferative phase. Meanwhile, granulation tissue forms and the wound begin to contract. Finally, during the maturation phase, collagen forms tight crosslink to other collagen and with protein molecules, increasing the tensile strength of the scar. The major aspect of the management of the fresh wound is prevention of the infection and speedy healing. Reducing pain, discharge and less discoloration after healing are the other important factors. The proper initial care of the fresh wound will definitely prevent the inadvertent use of oral and systemic antibiotics.

The earliest reference of Vrana is found in Vedic literature in context of injuries. Basic concept of wound cleansing, closure and splitting has been described in various medical systems. Ayurvedic treatises have classified the Vrana as Nija Vrana and Aagantuja Vrana. It is further classified into 16 sub-types. Sadyo Vranas mostly occur due to accidental injuries. As we see in today’s world the number of major & minor injuries taking place has increased. Sadyo Vranas is in Shudha state for 7 days. So, if these Vranas are treated within 7 days, the chances of getting infected are reduced.

The description about different aspects of Vrana appears in great details in Sushruta Samhita in which he has described Shashti Upakramas in the treatment of the wound. These are the 60 different regimes for the purpose of the wound healing. They cover all the aspect of the wound healing like rate, discoloration, scar formation etc. One of them is Ropana Karma which means the therapy for healing. It is specially emphasized in Shashti-upakrama as well as in Saptu-upakrama. Durva was found to be one of the drugs having wound healing properties. It is described in Vedas, Charaka Samhita, Sushruta Samhita. In Charaka Samhita, Durva is described in prajasthapanam and varnya mahakashaya.

In Sushruta Samhita, it is described in intrinsic haemorrhage. Durva is mentioned in Nighantus also. In Kaideva Nighantu, the synonyms, properties of Shvetadurva are well described and used in Visarpa, Daha. The synonyms and properties of Gandadurva also described and used in Trishna, Kushtha, Daha, Jvara, in Bhavaprakash Nighantu, Niladurva is described for the treatment of Visarpa, Trishna, Daha and Shvetadurva is used in vrana, visarpa, daha. So, this drug has been selected to check out its efficacy in wound management especially Sadhyo vrana. Durvadi Tail is a herbal formulation used as external application and is highly praised in the context of Sadhyo vrana in the management of acute pain.

### MATERIAL AND METHODS

The patients were randomly selected from the outpatient department (OPD) and inpatient department (IPD) of Shalya Tantra, Jammu Institute of Ayurveda and Research, Jammu, J&K, India. Total 30 patients of either sex having Shudh vrana were included in the study.

#### Inclusion Criteria
- Patients aged between 10 to 60 years
- Patients of either sex will be taken
- Patients with Shudha Vrana formed after cut through of ligated kshara sutra, excised cyst, excised pilonidal sinus, excised corn etc.

#### Exclusion Criteria
- Patients suffering from Degenerative disease
- Patients with uncontrolled Diabetes Mellitus
- Patients suffering from Diabetic Foot
- Patients suffering from lesions like Tuberculosis, Syphilis etc
- Patients suffering from Osteomyelitis
- Patients having Pre gangrenous or Gangrenous changes.
- Patients suffering from HIV
- Vrana present on all movable and highly movable joints

#### CLINICAL PARAMETERS OF STUDY

1. **Pain**

   ![Visual analogue scale for pain](image)

2. **Inflammation**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No inflammation</td>
<td>0</td>
</tr>
<tr>
<td>Mild inflammation</td>
<td>1</td>
</tr>
<tr>
<td>Moderate inflammation</td>
<td>2</td>
</tr>
<tr>
<td>Severe inflammation</td>
<td>3</td>
</tr>
</tbody>
</table>

3. **Discharge**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Discharge</td>
<td>0</td>
</tr>
<tr>
<td>Mild Discharge</td>
<td>1</td>
</tr>
<tr>
<td>Moderate Discharge</td>
<td>2</td>
</tr>
<tr>
<td>Severe Discharge</td>
<td>3</td>
</tr>
</tbody>
</table>
Investigations

- Hematological investigation- Hb%, TLC, DLC, HIV I &II, HbsAg
- Blood sugar
- Urine routine and microscopic examination

Drug: Durvadi Taila
Dose: 5-10 ml for local application as requirement once daily.
Duration: Till complete healing of the wound.
Follow up: After every 15 days for 3 months.

Drug Contive

Durvadi Taila has three contents- Durva, Kampillaka and Daruharida. [14,15]

Observations and Results

Table 1: Age in years

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>No. of patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-20</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>21-30</td>
<td>1</td>
<td>3.3%</td>
</tr>
<tr>
<td>31-40</td>
<td>5</td>
<td>16.6%</td>
</tr>
<tr>
<td>41-50</td>
<td>13</td>
<td>43.33%</td>
</tr>
<tr>
<td>51-60</td>
<td>11</td>
<td>36.6%</td>
</tr>
</tbody>
</table>

Table 2: Vrana category

<table>
<thead>
<tr>
<th>Types of Vrana</th>
<th>No. of patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinna Vrana</td>
<td>24</td>
<td>80%</td>
</tr>
<tr>
<td>Ghrishta Vrana</td>
<td>6</td>
<td>20%</td>
</tr>
</tbody>
</table>

Table 3: Effect of therapy on Pain

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain_BT_Doorva</td>
<td>1.60000</td>
<td>.63246</td>
<td>.16330</td>
<td>1.24976 - 1.95024</td>
<td>9.798</td>
<td>14</td>
<td>.000</td>
</tr>
<tr>
<td>Pain_AT_Doorva</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Effect of therapy on Inflammation

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflammation_BT_Doorva</td>
<td>1.66667</td>
<td>.61721</td>
<td>.15936</td>
<td>1.32487 - 2.00847</td>
<td>10.458</td>
<td>14</td>
<td>.000</td>
</tr>
<tr>
<td>Inflammation_AT_Doorva</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**DISCUSSION**

As per the above observations, age wise distribution of patients shows that most of them were from the age group of 41–50 years. This factor may be due to mainly earning occupational age and external exposure also. Among the 30 patients, males were more than females (76.6%) due to external exposure and nature of work. Majority of patients were having *Chinna Vrana* (80%) due to inclusion of Patients with *Shudha Vrana* formed after excised cyst, excised pilonidal sinus, excised corn etc. The drug showed highly significant results in all the three parameters i.e., pain, inflammation and discharge as the p-value in all the parameters was less than 0.001. The overall efficacy of the drug can be understood on the basis of the individual properties of the contents. *Durva* has been shown *Vrana Ropana* and *Vishaghna* properties. Therefore, it helps to remove microbes from wounds. It has the properties of *Daha prashamana* hence it creates cooling effect in burning sensation. It has also *Stambhana* and *Raktashodhaka* properties, hence checks bleeding and discharge from wounds and shows haemostatic action very well. It also contains active alkaloids like Beta sitosterol which is having anti inflammatory property and Phenol & flavanoids which hasten healing process. *Kampillaka* is having *Vrana Shodhaka, Vrana Ropaka* as well as *Kreemighana* properties. It contains *Cinnamic acid* which is anti-helminthic property and removes bacteria from the wounds and with the Anti-spasmodic and Anti-inflammatory properties due to presence of active alkaid *Lupeol*, it shows better effect in pain and tenderness and removes inflammation also. *Daruharidra* is a well known and a drug of choice for infection and inflammation for recent Ayurvedic practitioner. It has been proved that *Daruharidra* has *Shothahara, Raktashodhaka* and *Rakta Stambhana* properties due to the presence of active alkaloids *Berberine* (Anti bacterial, Anti viral & Anti fungal properties) and *Berberine sulphate* (anti inflammatory property). Therefore it will reduce inflammation and make blood free from various microbes. It has a property of a *Vedanasthapana* hence it will provide a better relief in pain and tenderness. *Tila Taila* is mentioned in four *Snehas* i.e., Ghrita, Taila, Vasa and Majja. It is used for various purposes as edible and external use also. When it is treated with above drugs it takes their properties. So it might help the drugs in reaching the minute spaces quickly by means of its *Sookshma, Vyavaayi, Vikaasi Gunas* & helps in reducing *Vedana* because of *Vataghna* property.

**CONCLUSION**

*Durvadi Tail* is explained in the context of management of pain in incised wounds, which has shown its efficacy in pain management and wound healing in *Sadhyo vrana*. As it is a lipid media, it worked very well as aseptic agent. So, it can be concluded that the trial drug *Durvadi Taila* possess Anti-inflammatory, Antibacterial, Analgesic & Hemostatic properties and can be used safely and effectively in the patients of *Sadhyo vrana*. There is no unwanted effect found during the course of treatment.

**REFERENCES**


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