



## Research Article

### ROLE OF *DURVADI TAILA* IN THE MANAGEMENT OF *SADHYO VRANA*

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**KEYWORDS:** *Durvadi Taila*, *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 Taila*. The total effect of the therapy has provided considerably significant relief on the clinical parameters. *Durvadi Taila* was found to be safe and effective in the management of *Sadhyo Vrana* by virtue of its antibacterial, analgesic & hemostatic properties.

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### 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 the 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*.<sup>[1,2,3]</sup> It is further classified into 16 sub-types.<sup>[4]</sup> *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.<sup>[5]</sup> *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.<sup>[6]</sup>

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.<sup>[7]</sup> 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 *Sapta-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 *prajasthapana* and *varnya mahakashaya*.<sup>[8]</sup>

In *Sushruta Samhita*, it is described in intrinsic haemorrhage.<sup>[9]</sup> *Durva* is mentioned in *Nighantus* also. In *Kaideva Nighantu*, the synonyms, properties of *Shvetadurva* are well described and used in *Visarpa*, *Daha*<sup>[10]</sup>. The synonyms and properties of *Gandadurva* also described and used in *Trishna*, *Kushtha*, *Daha*, *Jvara*<sup>[11]</sup>. In Bhavaprakash Nighantu, *Niladurva* is described for the treatment of *Visarpa*, *Trishna*, *Daha*<sup>[12]</sup> and *Shvetadurva* is used in *vrana*, *visarpa*, *daha*<sup>[13]</sup> So, this drug has been selected to check out its efficacy in wound management especially *Sadhya vrana*. *Durvadi Tail* is a herbal formulation used as external application and is highly praised in the context of *Sadhya vrana* in the management of acute pain.<sup>[14,15]</sup>

## 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.

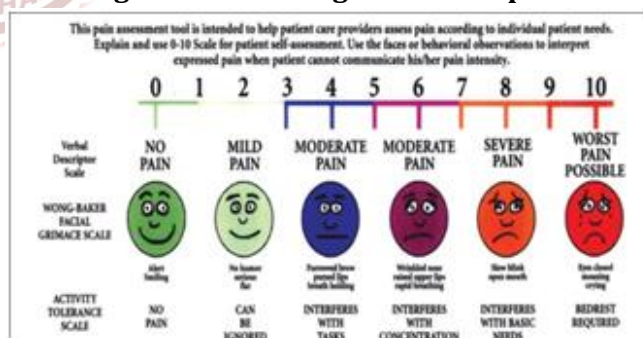
### Exclusion Criteria

- 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

Fig.1: Visual analogue scale for pain



### 2. Inflammation

No inflammation	0
Mild inflammation	1
Moderate inflammation	2
Severe inflammation	3

### 3. Discharge

No Discharge	0
Mild Discharge	1
Moderate Discharge	2
Severe Discharge	3

**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 Contribute**

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

**Method of preparation:** All the ingredients were cleaned, dried and *Yavkut churna* of *Dravyas* was done. These drugs were soaked in water for some time. Then *Tila Taila* was kept over the *Agni*, warmed till bubbles rise off. *Murchana* of *Tila taila* was done. After that the *Taila* was allowed to cool for some time, the *kalka dravyas* and *Durva swarasa* was poured into the *Tila taila* as per *Shastriya vidhana*. Then the *tail* was again kept over *Mandagni* till *Khar paka avastha* was achieved. Then the *Taila* was sieved, collected and packed in clean, sterilized air tight containers.

Among sixty *Upkramas* - *Kashaya*, *Varti*, *Kalka*, *Sarpi*, *Taila* and *Rasakriya* are explained as to be used for *Shodhana* and *Ropana* of *Vrana*.

**Observations and Results**

**Table 1: Age in years**

Age (Years)	No. of patients	Percentage
10-20	0	0%
21-30	1	3.3%
31-40	5	16.6%
41-50	13	43.33%
51-60	11	36.6%

**Table 2: Vrana category**

Types of Vrana	No. of patients	Percentage
<i>Chinna Vrana</i>	24	80%
<i>Ghrishta Vrana</i>	6	20%

**Table 3: Effect of therapy on Pain**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pain_BT_Doorva Pain_AT_Doorva	1.60000	.63246	.16330	1.24976	1.95024	9.798	14	.000

**Table 4: Effect of therapy on Inflammation**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Inflammation_BT_Doorva Inflammation_AT_Doorva	1.66667	.61721	.15936	1.32487	2.00847	10.458	14	.000

**Table 5: Effect of therapy on Discharge**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Discharge_BT_Doorva Discharge_AT_Doorva	1.73333	.45774	.11819	1.47985	1.98682	14.666	14	.000

## 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 fasten 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 alkaloid *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., *Ghritha*, *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

1. Acharya Charaka, Charaka samhita, Chikitsa sthana, 25th chapter, Shloka no 10-16, Pandit Kasinath pandey and Dr.Gorakhnath Chaturvedi. Varanasi: Chaukambha Bharti Academy; Reprinted 2007. P.698-699.
2. Acharya Vagbhata, Ashtanga Hridaya, Uttar tantra, 25th chapter, Shloka no 1,5-10 Kaviraj Atridev Gupt. Varanasi: Chaukhambha Prakashan; 2008.P.735-736.
3. Acharya Sushruta, Sushruta samhita, Chikitsa sthana, 2nd chapter, Shloka no.8,9, Hindi translated by Dr. Ambika Dutt Shastri. Varanasi: Chaukhambha Sanskrit Sansthan; 2007.P.14.
4. Acharya Charaka, Charaka samhita, Chikitsa sthana, 25th chapter, Shloka no86, Pandit Kasinath pandey and Dr.Gorakhnath Chaturvedi. Varanasi: Chaukambha Bharti Academy; Reprinted 2007.P.710.
5. Anant Damodar Athavale, Ashtanga Sangraha, 2nd edition, Pune, Shrimad Atreya Prakashan, 1980. page no.126.

6. Kavi.Dr.Ambikadatta Shastri, Sushruta Samhita, print 2014, Varanasi, Choukhamba Bharati Academy, 2014.chikitsastan 2/85 page no.26.
7. Acharya Sushruta, Sushruta samhita, Chikitsa sthana, 1st Chapter, Shloka no.8, Hindi translated by Dr. Ambika Dutt Shastri. Varanasi: Chaukhambha Sanskrit Sansthan; 2007.P.4.
8. Charaka Samhita of Agnivesha Part-II, Chikitsa sthana, Chapter-4/100, with Vidyotini Hindi Commentary by Pandit Kashinatha Shastri Edited by Dr.Gangasahaya Pandey, Fifth Edition, Chaukhambha Sanskrit Sansthan, Varanasi, 1997.
9. Sushruta Samhita of Maharshi Sushruta, Part-II, Uttarasthana, Chapter- 45/20, Hindi Commentary by Kaviraja Ambikadutta Shastri, Eleventh Edition, Chaukhambha Sanskrit Sansthan, Varanasi, 1997.
10. Kaiyadeva Nighantu, Oshadhi varga- Verse, 1232-1233, Pathyapathyavibodhaka, Edited and Translated by Prof. P.V.Sharma and Dr. Guru Prasad Sharma, Second Edition, Chaukhambha Orientalia, Varanasi, 2009.
11. Kaiyadeva Nighantu, Oshadhi varga- Verse, 1234-1236, Pathyapathyavibodhaka, Edited and Translated by Prof. P.V.Sharma and Dr. Guru Prasad Sharma, Second Edition, Chaukhambha Orientalia, Varanasi, 2009.
12. Bhavaprakash Nighantu (Indian Materia Medica) of Shri Bhavamishra, Commentary by Dr.K.C. Chunekar and Edited by Dr.G.S.Pandey, Tenth Edition, Chaukhambha Bharati Academy, Varanasi, 1995. Guduchyadi varga-Verse, 173.
13. Bhavaprakash Nighantu (Indian Materia Medica) of Shri Bhavamishra, Commentary by Dr.K.C. Chunekar and Edited by Dr.G.S.Pandey, Tenth Edition, Chaukhambha Bharati Academy, Varanasi, 1995. Guduchyadi varga-Verse, 174.
14. Sastri Vaidya laksmipati, Yogaratnakara with Vidyotini Hindi commentary edited by Sastri brahmasankar, Varanasi, Chaukhamba Prakashana edition-2008, Purvadha Pp-573,p-113 uttaradha-Pp-504 p-183,184.
15. Sen Govindadasji. Bhaisajyaratnavali with Siddhiprada Hindi commentary edited by Mishra Siddhinandan Varanasi: Choukhamba Surbharati prakashan,1<sup>st</sup> edition- 2005,Pp-1196, p-825,827.

**Cite this article as:**

Vishal Khanna, Ankush Bhardwaj, Abineet Raina, Asheesh Khajuria, Anjali Sharma. Role of Durvadi Taila in the Management of Sadhyo Vrana. AYUSHDHARA, 2017;4(4):1292-1296.

**Source of support: Nil, Conflict of interest: None Declared**

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