
“A controlled study of the effect of indrayava tail vikeshika in the management of dushta vrana”

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INTRODUCTION

In Ayurveda Acharya **Sushruta** ‘father of ancient surgery’ has described the types of **Vrana** according to healing stages i.e. **Ruhyamana Vrana**, **Shuddha Vrana** and **Dushta Vrana** on the basis of ancient pathophysiology of wound. In **Dushta Vrana** healing process is delayed due to infection. Acharya **Sushruta** already mentioned various ways of application of drugs over **Vrana** i.e. in the form of “**Pichu, Kawalika, Varti and Vikeshika**”. Acharya **Vagbhata** also mentioned the function of “**VIKESHIKA**” in **Vrana**.

“सपूतिमासं सोत्संगं
सगर्ति पूयगर्भिणम् ।
व्रणं विशोधयेच्छीघ्रं स्थिता
ह्यन्तर्विकेशिका॥”

(
अ.ह.सु.२
३/४७)

A vast scope of research exists in the field of Ayurveda for various preparations which may help in achieving wound healing.

In modern era **sofratulle** prepared by **Framycetin** are used for **Vranshodhan**. **Framycetin** drug has some adverse effects like allergy, absorption of drug in less quantity, if large areas of the body are being treated then possibility of **Ototoxicity** may occur. To minimize these adverse effects this is my humble effort to prepare **Indrayava Tail Vikeshika (Herbal Tulle)**, which might be fruitful in upcoming era and may be free from all these side effects and having good efficacy.

इन्द्रयवं त्रिदोषघ्नं संग्राहि कटु
शीतलम् ।
ज्वरातीसाररक्तार्शःकृमिवीसर्पकुष्ठनुत्
॥
दीपनं
गुदकीलास्रवातास्रश्लेष्मशूलजित् ।
(भा.प्र. हरीतक्यादि
वर्ग/१५८-१५९)

The ingredients used for preparation of this herbal healer are **Til tail** and **Indrayava** which have been recommended as **good wound healer** in our classical texts.

Along with this drug **Sofratulle** is included for comparative assessment.

AIMS AND OBJECTIVES

AIMS

1) To study **desloughing** effect of **Indrayava Tail Vikeshika in Dushta Vrana**.

2) To study probable mechanism of action of **Indrayava Tail Vikeshika in Dushta Vrana**.

OBJECTIVES

1) Comparative effect of **Indrayava Tail Vikeshika** with Sofratulle in management of Dushta Vrana.

2) To propose an alternative **cost effective** easy available herbal Preparation in management of Dushta Vrana.

MATERIAL AND METHODS

Literature was collected from various Ayurvedic and Modern texts and special case record form prepared to conduct study. Study was conducted from 10/6/2011 to 30/10/2012 at the R.A.Podar medical college and Hospital (Ayu.) Worli, Mumbai 18.

No. of patients: - 60 patients of Dushta Vrana were selected and divided randomly in two groups.

Group A (Trial group) – 30. Group B (Control group) -30

To assess Haematological stability of the patients, blood investigations were done prior to treatment.

INCLUSION CRITERIA

- 1) All infected wounds (Dushta vrana),
- 2) Chronic non healing wound.
- 3) Wound size up to **10 cm x 10 cm**.
- 4) Patient of both sexes male and female.
- 5) Patient of age 10 to 70 yrs were included

EXCLUSION CRITERIA

- 1) Patients suffering from major illness like Tubercular ulcer, HIV, HBsAg, Ascites, Renal and Liver failure, Malignancy, Bleeding disorders.
- 2) Complicated wounds like Osteomyelitis, Burn wound, Diabetic wound, Leprotic wound, Varicose ulcer, Syphilitic ulcer
- 3) Shuddh Vrana and Nadi Vrana.

Ethical clearance: - clearance from ethical committee of college was taken.

Drug used

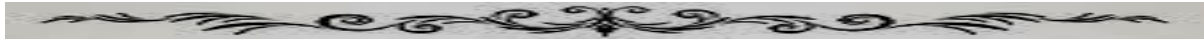
Group A: Herbal **Vikeshika** consists of cotton gauze impregnated in **Indrayava Siddha Tail** with a base composed of paraffin.

Group B: **SOFRA-TULLE** purchased from market.

Indrayava Tail was prepared as mentioned in **Sharangdhara Samhita**. Vikeshika was prepared as per standard method described in Ayurvedic texts.

तिलकल्कमधुघृताभ्यक्तवस्त्रस्य

सुत्रस्य वा वर्ति: विकेशिका ।

**सु.सू.१८/२१ डल्हन टिका**

Pus Culture study was done on 1st and 9th day. Assessment was done on the basis of effect of the drug on Wound size, Slough, Discharge, and Granulation Tissue. Data of all observed patient was reported In C.R.F and same data was compared.

CRITERIA FOR ASSESSMENT

- 1) Wound size
- 2) Slough
- 3) Discharge
- 4) Granulation Tissue

1) Wound size

- NIL 0
 0-25% of base line 1
 25-50% of base line 2
 50-75% of base line 3
 Base line 4

2) Slough

- Absent. : 0
 Slough covered up to 25% area of wound 1
 Slough covered up to 25-50% of wound 2
 Slough covered up to 50-75% of wound 3
 Slough covered all over wound 4

Observation**Percentage Wise Relief in Symptoms of Group A:**

Sr . n	Symptom s	B.T. Scor e	A.T. Scor e	Diff In scor	Percenta ge
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3) Discharge

- Absent 0
 Sero sanguineous 1
 Serous 2
 Purulent 3
 Purulent discharge with foul smell 4

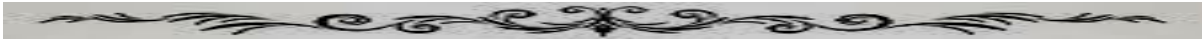
4) Granulation Tissue

- Wound closed/healthy granulation tissue 0
 75% wound covered with granulation tissue. 1
 50% wound covered with granulation tissue 2
 Unhealthy granulation with slough 3
 Absent 4

After treatment it will be calculated as below

- Cured 0----4
 Moderately Relieved 5----8
 Mild Relieved. 9----12
 Not Relieved 13----16

RESULT:-Cured/Moderately relieved/Mild relieved/Not relieved.



o.				e	
1	Wound size	95	71	24	25.263
2	Slough	96	17	70	72.917
3	Discharge	93	50	43	46.237
4	Granulation Tissue	96	44	52	54.1667

Percentage Wise Relief in Symptoms of Group B:

S r. n o.	Symptoms	B.T . Sco re	A.T . Sco re	Dif f In sco re	Percent age
1	Wound size	107	81	26	24.299
2	Slough	99	38	61	61.616
3	Discharge	91	32	59	64.835
4	Granulation Tissue	92	58	34	36.957

TOTAL EFFECT OF THERAPY

<i>TOTAL EFFECT</i>	<i>GROUP A</i>	<i>%</i>	<i>GROUP B</i>	<i>%</i>
<i>Cured</i>	<i>9</i>	<i>30</i>	<i>4</i>	<i>13.33</i>
<i>Mod. Relief</i>	<i>18</i>	<i>60</i>	<i>15</i>	<i>50</i>
<i>Mild relief</i>	<i>3</i>	<i>10</i>	<i>11</i>	<i>36.67</i>
<i>Not cured</i>	<i>00</i>	<i>00</i>	<i>00</i>	<i>00</i>

Results and Conclusion

As out of 30 patients of trial group 9 pts were cured, 18 pts were moderately

relieved, 3 pts were mild relieved, while out of 30 pts of control group 4 pts were cured, 15

pts were moderately relieved, 11 pts were mild relieved.

It indicates that **Indrayava Tail Vikeshika** has significant role on Dushta Vrana than **Sofratulle** with the help of. **Chi-square test** We concluded the result as p was <0.05 , Hence Indrayava Tail Vikeshika was more effective than control group drug Sofra-tulle.

➤ **In case of slough**

INDRAYAVA TAIL VIKESHIKA acts as **Krimighna**. Due to this it **inhibits the growth of krimi** i.e. antibacterial effect. Due to the **Lekhan karma** of Indrayava Tail Vikeshika **desloughing action** as well as **antiadherence effect** is carried out which enhancing to form healthy granulation tissue.

➤ **In case of Granulation tissue**

INDRAYAVA TAIL VIKESHIKA promotes to form the healthy granulation tissue by **debriding** the slough of wound. These results are good than control drug Sofra-tulle.

➤ **In case of size of wound size**

Size of the wound not reduces significantly with the both drug.

Hence **INDRAYAVA TAIL VIKESHIKA** in Dushta vrana proves to be a **Desloughing agent** thereby providing an **alternative, cost effective, easy available**

herbal preparation in the management of Dushta Vrana.

Further scope of the study

✓ A study can be conducted by taking larger sample size, for larger duration and including all types of wounds.

✓ Mechanism of action of **INDRAYAVA TAIL VIKESHIKA** in various way could be studied

1) To study the bacteriostatic/ bactericidal action on specific organism.

2) To study the action of drug on bacterial cell wall, nucleus, cytochrome etc.

3) Does the drug interfere with protein synthesis of bacteria?

4) Molecular level study for the action of drug could be carried out.

References:

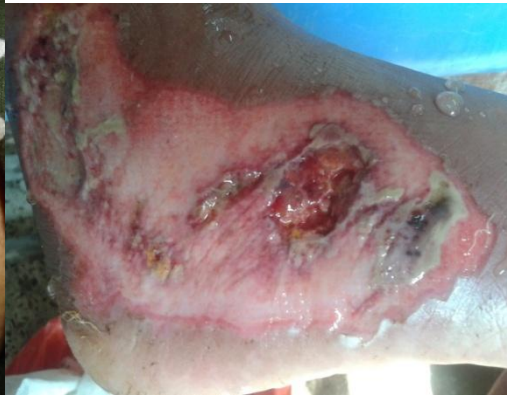
1. Sushrut Samhita Purvardha Dalhana commentary Chaukhamba publication Varanasi 2000
2. Ashtang hrudaya –Brahmanand Tripathi
3. Sharangadhar Samhita- Brahmanand Tripathi 2007
4. Madhav Nidan- Brahmanand Tripathi 2007
5. A concise textbook of surgery – DR. Soman Das
6. Inhibition of enteropathogenic Escherichia coli
7. adhesion on host epithelial cells by Holarrhena antidysenterica (L.) ALL. Phytother Res. 2009 Sep;
8. Kavitha D, Niranjali S. Department of Biochemistry,

PATEINT PHOTOGRAPHS

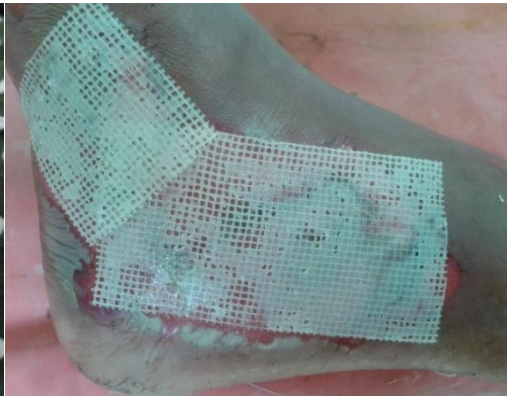
Group A



Group B



Before Treatment



During Treatment



After Treatment