



## Ayurveda

## A COMPARATIVE CLINICAL STUDY TO EVALUATE THE MANAGEMENT OF DUSHTA VRANA WITH KASISADI GHRITA AND JATYADI GHRITA AFTER JALOUKAVACHARANA

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**ABSTRACT** Vrana is basically the discontinuity of the tissues, it has been explained in all the Samhitas with great importance, It can occur due to Doshas or Aganthujanidana's. Vrunaropana is considered as important Karma in all the surgical procedures. According to contemporary science wound is an ailment every surgeon faces in his practice, healing of wounds is always a challenge for everyone, due to various problems like infection, underlying co morbidities, etc. A surgeon who can master the art of healing wounds undoubtedly becomes the best. In Samhita's treatment of Vrana has been elaborately explained, of which Chakradatta explains one of the important Vrunaropana yoga. In contemporary science it is used as an antiseptic for dressing wounds which helps in its healing. So keeping this in view "A Comparative Clinical Study To Evaluate The Efficacy Of Kasisadi Ghrita Against Jatyadi Ghrita After Jaluokavacharana In The Management Of Vrana W.S.R To Dushta Vrana was conducted.

**KEYWORDS :** Vrana, dushta vrana, Wound, Wound healing

### INTRODUCTION

Ayurveda, is an upaveda of Atharvana veda. It is one of the oldest healing science procedures now existing in the world. It is said that Brahma recalled this science before he created the living kingdom. The scope of Ayurveda is not limited only to the treatment of the diseased but it also tells how to prevent them and further it gives the knowledge of leading a successful, happy and peaceful life. It is the uniqueness of Ayurveda alone. The life of every individual starts with the healing of the wound of the cut umbilical cord. So, treatment for healing of this wound is of prime importance.

While explaining the scope of Shalya Tantra, Sushruta has mentioned *Vrana Vinishcayartham* as a major part of Shalya Tantra. Even though healing of Vrana is a natural process of the body, The Vrana should be protected from *Dosha Dushti* and from various microorganisms, which may afflict the Vrana and delay the normal healing process. So, for the early and uncomplicated healing of Vrana treatment is necessary. The history of medical science starts with the art and skill of wound healing. Treatment of the wound is probably the first medical problem faced by human beings. The frequency of injuries is more common than any other disease. Centuries ago, injury in the battle field due to hit by arrows was one of the common problems, along with contamination of the wound. Falling from trees, fall from heights, crushing against stone or hard materials animal and insect bites were the other causes for injury. The contamination of the wound due to various microorganisms delayed the process of wound healing. Bleeding and pain were the main complications of a wound which require immediate treatment. Usage of various types of leaves or soil was the treatment to arrest bleeding. Quest for knowledge by Ancient people led to many investigations and assumptions. Gradually things with better results were selected and tried with different forms.

Sushruta – The Father of surgery in his book Sushruta Samhita has explained Vrana its complication and management in great detail. In the *Vranitopaasaneeya Adhyaaya* he has explained that "If the Rakshaa Karma of Vrana is proper then the Nisaacaras leave the patient, in the same way as the Mrugaas (deer) run away from the jungle terrified by a lion."<sup>2</sup> For Sushruta health was not merely a freedom from disease, but a normal cheerful state of mind, body and soul.<sup>3</sup> Today wound is said to have healed when epithelialization is complete. But Sushruta would employ "Vaikrutaapaham"<sup>4</sup> measures which will bring back the normal colour and surface and even hairs.<sup>5</sup> Sushruta's classification of traumatic wounds their prognostic evaluation and management, on primary suturing in clean wounds, avoidance of sepsis etc. correspond remarkably with the modern outlook of wounds and wound-management.<sup>6</sup>

### AIMS AND OBJECTIVES

- To evaluate the efficacy of Kasisadi Ghrita in the management of Vrana w.s.r to Dushta Vrana.
- To compare the efficacy of Jatyadi Ghrita and Kasisadi Ghrita in the

management of Vrana w.s.r to Dushta Vrana.

- Study the Dushta Vrana as an ailment in detail.

### MATERIALS AND METHODS:

#### SOURCE OF DATA

**a) Literary Source:** All the classical, modern literatures contemporary text books including the websites journals about the disease and the drug was reviewed and documented for the intended study.

#### b) Sample Source:

30 patients with clinical features of Dushta Vrana coming under the inclusion criteria approaching the OPD and IPD of Shalya Tantra, RAMC & HRC Bengaluru was selected for the study. The sample collection was initiated with post approval from the Institutional Ethical Committee. The identified raw drugs required for Kasisadi Ghrita and Jatyadi Ghrita was purchased from approved and authentic pharmacy. Kasisadi Ghrita and Jatyadi Ghrita was purchased from approved and authentic pharmacy like nagarjuna pharmacy.

#### METHOD OF COLLECTION OF DATA

The subjects who fulfill the inclusion and exclusion criteria, and complying to the informed consent (IC) were selected randomly.

**Sample Size -** Group A - (kasisadi ghrita), Group B – (Jatyadi ghrita) each comprising minimum of 15 patients. A special case proforma containing all the necessary details pertaining to the study was prepared.

**Statistical Test:** The data obtained in both groups was recorded tabulated and statistically analyzed using suitable statistical methods.

### OBSERVATIONS

Statistical results of *Kasisadi Ghrita in Group A and Jatyadi Ghrita in Group B* patients after treatment. Total 30 patients were registered in this study. Out of that all 30 patients were studied in this project. 15 patients were in group A while 15 were in B group. Each patients was observed thoroughly and noted neatly. The observations are recorded and necessary charts and graphs were made.

#### Age Wise

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Out of 30 patients in group A and group B 8 Patients were of age group 30- 40yrs, 9 patients were from age group 41 to 50yrs, 5 patients from age group 51 to 60yrs. Here maximum no of patients were of older younger and older age as they are exposed more the trauma and

causing wound due to their working and life style pattern.

**Sex wise** – Out of 30 patients in group A and group B, 19 patients were male and 11 patients were of female, this might be because majorly men are associated with harsh work patterns which make them more prone for injuries. **Occupation Wise** – Out of 30 patients in group A and group B 18 patients are of occupation sitting position 6 patients are with occupation of prolonged standing and 6 patients were with occupation having prolonged walking. This has no specific relationship for the incidence, but field of work would have impact.

**Religion wise** – Out of 30 patients in group A and group B, 22 Patients were hindus, patients were 2 are muslims 6 patients are christians.

**Marital Status Wise** – Out of 30 patients in group A and group B .28 patients are married and 2 are unmarried. This would not have a rational explanation for such incidence.

**Education Wise** – Out of 30 patients group A and group B, 18 patients are of veg and 12 patients are of mixed food. This holds no much rationality but could helping wound healing.

**Economic status-** group A- 13.3% HM and group B-20 % HM total 16.7% HM, group A Middle class 60% , group B 60% Middle class, poor group A 26.7%, poor group B 20%, Total 23.3%.

**Vyasana** – In Vyasana Coffee Group A 20 % and Group B 13.3% and Smoke Group A 26.7% and Group B 20.% and Tea 46.7 %and Group B 60%, Tobacco group A 6.7% and Group B 6.7. %

**Ahar Vyasana** – In group A mixed group A 46.7% and group B 33.3% and Veg group A 53.35% and group B 66.7%.

**Koshta wise** – Out of 30 patients in group A and group B 12 patients are of Mrudu koshta, 8 are of Madhyama Kosta , 10 patients are of Krura Kosta. This could explain the Dosh predominance which would effect the healing process.

**Prakruthi Wise** – Out of 30 patients in group A and group B, 7 patients are of VP Prakruti ,4 patients are of PK Prakruti, 6 patients are of VK and 6 patients are of Kapha Pitta [KP]. Incidence of wound has no exact relation with Dosh Prakruti.

**DISCUSSION**

- Sushruta described that a skilled surgeon manages the Vrana heal rapidly with his intellectual approach. But whereas unskilled person makes even a Shuddha Vrana (healing wound) into Dushta Vrana (Non-healing wound) with his management.
- Application of irritant, toxic and highly potensive drugs with highly tightened bandages may deprive the Adhistana and which converts Shuddha Vrana into Dushta Vrana and forms pus, slough etc., in the Vrana.<sup>7</sup>
- The Vrana caused by Agni, Kshara Visha and Shaiyya are if sutured before the administration of Shodhana treatment, there are more chances to get infection with gas forming organisms. This type of conditions considered as Dushtavrana's.
- Improper, non-bandaging conditions of the wound is liable to get contamination and ultimately result into Dushta Vrana. Charaka has also mentioned as, excessive use of Sneha Dravya's, application of excess medicines and the wound neglected to treat are predispose factors of Dushta Vrana.<sup>8</sup>

**PROGNOSIS:**

**BAESD ON CONDITIONS OF THE PATIENT:**

Lesions in the young, the strong, the energetic and the self-controlled ones are easily curable. If all the above said four qualities present in that patient then the wound is easily curable. In the young the lesions heal because of fresh tissue. In the strong one, the muscles being firm and well developed. Fatigue does not develop in the energetic one even after trauma, pain, and dietary regulations.

The self-controlled can sustain any type of drastic treatments. Hence one who possesses these qualities is most easily curable. The same lesions in the old, the emaciated, and the timid should be known to have opposite qualities.

**DISCUSSION ON RESULT -**

In the present study, between two groups A and B the results obtained after treating 15 patients of Dushta vrana in each group treated with Kasisadi Dushta Ghrita application and Jatyadi Ghrita application

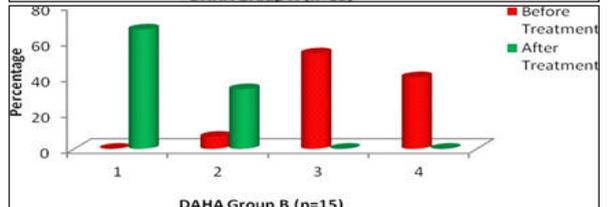
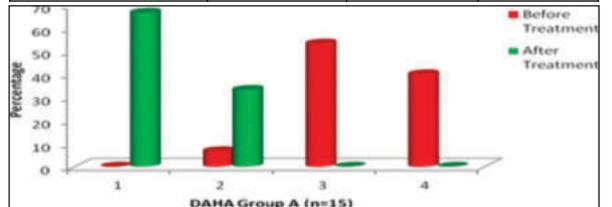
after Jalouokacharana.

**Kasisadi ghrita** – As shown most significant improvement in parameters. Graphical representation of these has been showed in the graphs. In the study for the parameter pain, group A treated with Kasisadi Ghrita and group B treated with Jatyadi Ghrita.

Group A showed 90.2 % improvement and group B showed 89.5 % improvement in tenderness after the treatment. 88 % Improvement was seen in group A whereas 52 % improvement was seen in surface of the wound on the 7th day of treatment When the parameter for assessment was the edge of the wound group A showed 80.02% improvement and group B showed only 60.86 % improvement.(Table 1, Table 2)

**Table 1: DAHA- Frequency Assessment In Two Groups Of Patients Studied**

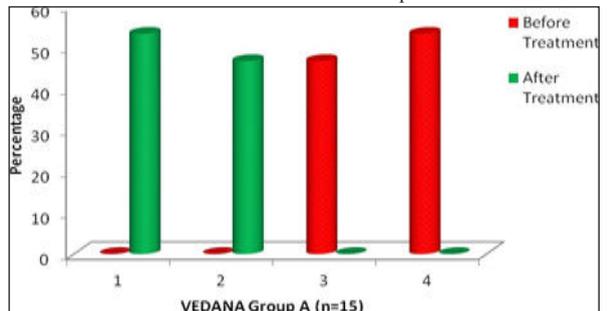
DAHA	Before Treatment	After Treatment	% difference
Group A (n=15)			
1	0	66.7	66.70%
2	6.7	33.3	26.60%
3	53.3	0	-53.30%
4	40	0	-40.00%
Group B (n=15)			
1	0	66.7	66.70%
2	6.7	33.3	26.60%
3	53.3	0	-53.30%
4	40	0	-40.00%
P value	1	1	-

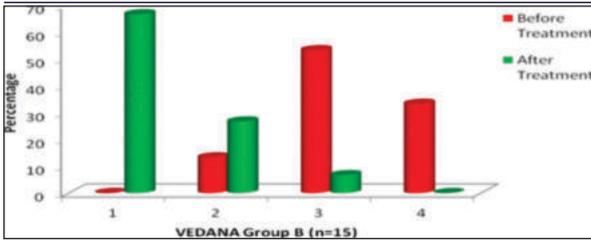


**Table 2: VEDANA- Frequency Assessment In Two Groups Of Patients Studied**

VEDANA	Before Treatment	After Treatment	% difference
Group A (n=15)			
1	0(0%)	8(53.3%)	53.3%
2	0(0%)	7(46.7%)	46.7%
3	7(46.7%)	0(0%)	-46.7%
4	8(53.3%)	0(0%)	-53.3%
Group B (n=15)			
1	0(0%)	10(66.7%)	66.7%
2	2(13.3%)	4(26.7%)	13.4%
3	8(53.3%)	1(6.7%)	-46.6%
4	5(33.3%)	0(0%)	-33.3%
P value	0.296	0.450	-

Chi-Square/Fisher Exact Test



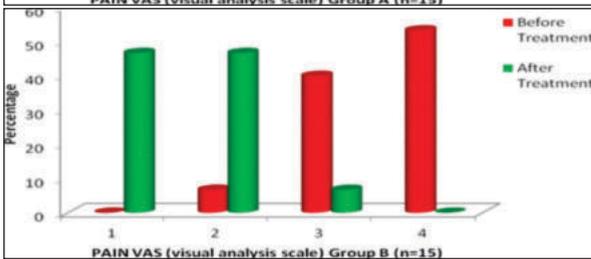
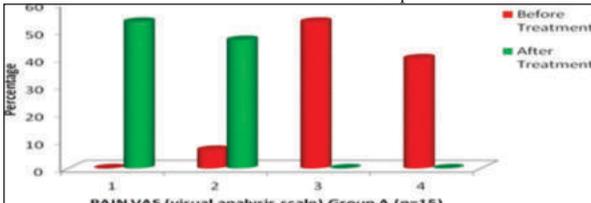


Group A showed 76 % improvement in base of the wound where as 60 % improvement was seen in group B. 100% improvement was seen in secretion of the wound in group A, whereas 57.93% improvement was observed in group. On 14th day when scar assessment was done between patients of both the groups, Group A showed 65.23 % reduction in scar formation whereas, group B showed 57.93 % reduction.(Table 3, Table 4, Table 5, Table 6)

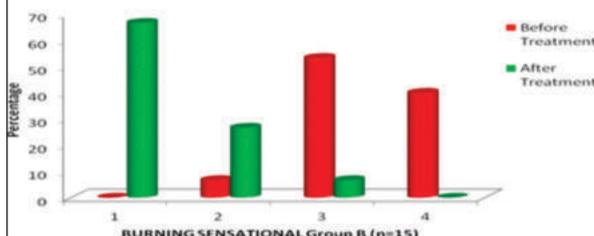
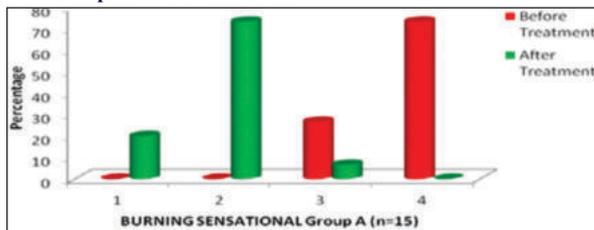
**Table 3: PAIN VAS (Visual Analysis Scale)- Frequency Assessment In Two Groups Of Patients Studied**

PAIN VAS (visual analysis scale)	Before Treatment	After Treatment	% difference
Group A (n=15)			
1	0	53.3	53.30%
2	6.7	46.7	40.00%
3	53.3	0	-53.30%
4	40	0	-40.00%
Group B (n=15)			
1	0	46.7	46.70%
2	6.7	46.7	40.00%
3	40	6.7	-33.30%
4	53.3	0	-53.30%
P value	0.848	1	-

Chi-Square/Fisher Exact Test



**Table 4: BURNING SENSATIONAL- Frequency Assessment In Two Groups Of Patients Studied**



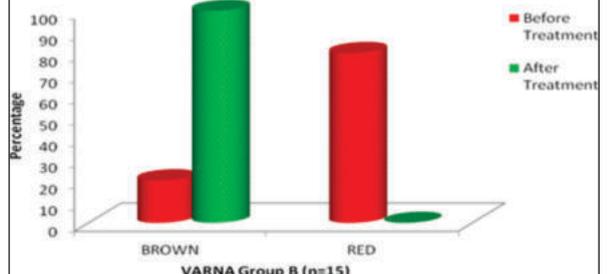
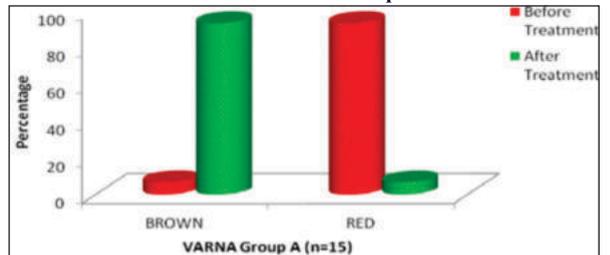
BURNING SENSATIONAL	Before Treatment	After Treatment	% difference
Group A (n=15)			
1	0	20	20.00%
2	0	73.3	73.30%
3	26.7	6.7	-20.00%
4	73.3	0	-73.30%
Group B (n=15)			
1	0	66.7	66.70%
2	6.7	26.7	20.00%
3	53.3	6.7	-46.60%
4	40	0	-40.00%
P value	0.139	0.014*	-

Chi-Square/Fisher Exact Test

**Table 5: VARNA- Frequency Assessment In Two Groups Of Patients Studied**

VARNA	Before Treatment	After Treatment	% difference
Group A (n=15)			
BROWN	1(6.7%)	14(93.3%)	86.6%
RED	14(93.3%)	1(6.7%)	-86.6%
Group B (n=15)			
BROWN	3(20%)	15(100%)	80.0%
RED	12(80%)	0(0%)	-80.0%
P value	0.598	1.000	-

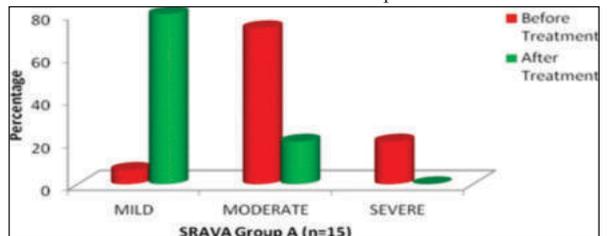
Chi-Square/Fisher Exact Test

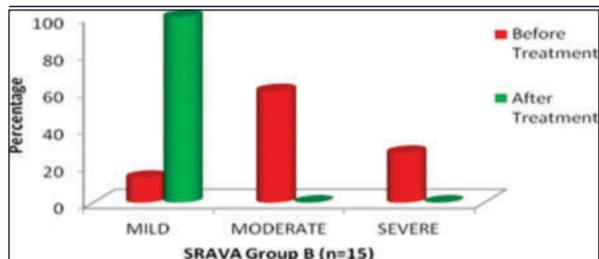


**Table 6: SRAVA- Frequency Assessment In Two Groups Of Patients Studied**

SRAVA	Before Treatment	After Treatment	% difference
Group A (n=15)			
MILD	1(6.7%)	12(80%)	73.3%
MODERATE	11(73.3%)	3(20%)	-53.3%
SEVERE	3(20%)	0(0%)	-20.0%
Group B (n=15)			
MILD	2(13.3%)	15(100%)	86.7%
MODERATE	9(60%)	0(0%)	-60.0%
SEVERE	4(26.7%)	0(0%)	-26.7%
P value	0.750	0.224	-

Chi-Square/Fisher Exact Test





### CONCLUSION:

Vrana is the discontinuity of the tissues due to exogenous or endogenous causes. From symptoms and causative factors of Vrana, it can be correlated to wounds and ulcers in modern science. Most of the causes for Vrana is due to Agantujanidana, whereas endogenous factors affect in its healing. Vranaropana was enhanced with sterile dressing and aseptic precautions. The effect of treatment statistically shows significant good results in group A when compared to group B. Kasisadi Ghrita application on Dushta vrana helped better in healing process in comparison to Jatyadi Ghrita after Jaloukavacharana.

### Scope For Further Study:

1. Kasisadi Ghrita application with Jatyadi Ghrita after Jaloukavacharana can be taken up for further study.

2. A comparative study of Kasisadi Ghrita and Jatyadi Ghrita after Jaloukavacharaan in dushta Vrana can be taken for study.

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