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A COMPARATIVE CLINICAL EVALUATION OF *KASEESA CHURNA* AND *HARIDRA CHURNA* APPLICATION ON *DUSHTA VRANA*

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ABSTRACT

Shalya Tantra is one of the important branch of Ayurveda in which Acharya *Sushruta* The father of surgery, whose wealth of clinical material and the principles of management are valid even today. That is why Sushruta has explained *Vrana* in such explanatory detail. That includes their etiological factors, types, patterns, treatment, prognosis and every minute possible description of them. *Sushruta samhita* has given superior position to *Vrana*. Sixty treatment modalities are mentioned in *Vrana*. No other disease has such large number of treatment. This reveals the importance of *Vrana* as *Roga*. Before 19th century in surgical history, death from infection was common. Bacteria prolong the inflammatory phase and interfere with wound healing. Infected wound is a big task. In the practice of surgery the big task is to manage the infected wounds because, bacterial infection of wound can impede the healing process and lead to life threatening. The aim of treating a wound is to either shorten the time required for healing or to minimize the undesired consequences. In such cases Ayurvedic preparations can prove their efficacy in the management of chronic and infected wounds. So, Dushta Vrana this topic is selected for study. Extensive experimental studies as well as clinical trials of drugs like *Haridra, Vacha, Nirgundi, Apamarga, and Karanja* etc. have already been tried on wound with better efficacy.

KEYWORDS: Vrana, Duashtavrana, *Kaseesa Churna, Haridra Churna.*

INTRODUCTION

Sushruta Samhita has given superior position to *Vrana*. *Sutrasthan* of this *samhita* shows description of the *Vrana* in most of the chapters and *Chikitsa Sthana* begins with Chapter for

Vrana. Sixty treatment modalities are mentioned in *Vrana*. No other disease has such large number of treatment. This reveals the importance of *Vrana* as *Roga*. *Sushruta* has mentioned *Vrana Vinishchaya* as a major part of *Shalya Tantra*. Classification of traumatic wounds, *Shuddha Vrana*, *Nadi Vrana*, *Sadhya Vrana*, *Dagdha Vrana* etc., their prognostic evaluation and management in the form of sixty *Upakramas* which are from *Apatarpana* to *Rakshavidhana*.[1]

The aim of treating a wound is to either shorten the time required for healing or to minimize the undesired consequences. There are many factors responsible to make healing process delayed like dead tissues, insufficient blood supply, protein deficiency, diseases like diabetes mellitus, tuberculosis etc. In case of delayed healing, it is more likely to be local than general which clarifies the magnitude of the problem of study. Many investigations and experiments have been carried out in medical science to understand the phenomenon of wound healing**.** Analgesics, antibiotics and antiseptics like Povidone iodine, Silver sulphadiazine etc. are in use for the treatment of wounds. These treatment modalities still have their own limitations and side effects. Attention is directed to discover an agent which will accelerate wound healing with less side effects.

In such cases *Ayurvedic* preparations can prove their efficacy in the management of chronic and infected wounds. So, *Dushta Vrana* is selected for study.

Selection of Drug

Ayurvedic formulations have immense potential for the management and treatment of wounds. These natural agents induce healing and regeneration of lost tissue by multiple mechanisms like encouraging blood clotting, fight infection and accelerate the healing of wound. Extensive experimental studies as well as clinical trials of drugs like *Haridra, Vacha, Nirgundi, Apamarga and Karanja* etc. have already been tried on wound with better efficacy.

In *Sushruta Samhita*, "*Shashti Upakramas*" are described for the treatment of the *Vrana*. These are the 60 different regimes for the purpose of the wound healing. They cover all the aspect of the wound healing viz. rate, discoloration, scar formation etc. These all 60 are effective. One of them which was taken for the present research work is *Avachurnana*.[2] *Acharya Sushruta* mentioned that *Kaseesa Churna* is used as *Shodhaniya Churna* in management of *Dushta Vrana*.[3]

Kaseesa is known to eliminate surface toxins and regenerates all cells and tissue. It is a powerful blood purifier and very effective against all types of wounds. *Kaseesa Churna* possesses the properties of cleansing and disinfecting the infected wounds thereby, promoting their fast healing by reducing symptoms like *Srava* (discharge), *Vedana* (pain), *Durgandhi* (foul smell) etc. which indicate state of infection in *Dushta Vrana*.

So *Kaseesa Churna* is selected for study as *Shodhaniya* drug in comparision with previous proven *Shodhaniya* drug *Haridra* in the management of *Dushta Vrana*.

AIM AND OBJECTIVES

Aim

To study the Efficacy of *Kaseesa Churna* application for *Shodhana* of *Dushta Vrana*.

Objectives

1. To study the duration required for *shodhana* of '*Dushta Vrana'* by *Kaseesa Churna* and *Haridra Churna* application.
2. To study the Efficacy of *Kaseesa Churna* application in *Dushta Vrana.*
3. To study literature related to *Vrana.*
4. To study literature related to *Kaseesa Churna.*

MATERIAL AND METHODS

For this purpose clinical study was carried out mainly into following phases –

1. Drug preparation

Kaseesa Churna Shodhana done with *Bhrungaraj* (Eclipta alba) *Swaras* by immersed once in it, in our college *Rasa shastra* dept. under guidance of experts.[4] *Kaseesa* Churna was prepared by using principle of *Churna Kalpana* as described in *Sharangdhara Samhita.*

2. Selection of patient.

60 Patients selected from opd of Sane Guruji Hospital, Hadapsar, Pune, Maharashtra. and divided randomly 30 patients in each group Two Control group and Trail group

Criteria for Inclusion

1. Infected wound due to trauma & accident with excessive foul smell and pus discharge.
2. Age group of 20 to 60 years, irrespective of gender.
3. Post I&D wounds.
4. Post debridement wound.

Criteria for Exclusion

1. Neoplastic ulcer.
2. Gangrenous wounds with sepsis, bed sores.
3. Other associated disorders e.g. Gout, Renal failure, Liver failure.
4. Varicose ulcer.
5. Diabetes mellitus
6. Metabolic disorders

Withdrawal criteria

1. Patient is not responding to the treatment and aggravation of symptoms within 15 days.
2. Patient who were not co-operating for treatment.
3. Patient who refused to continue the treatment.

3. Alternate Day dressing

Alternate day dressing done. In both groups wound cleaned with Normal saline, then *Avachurnana* of *churna* done by dusting over wound to cover complete wound.

4. Assessment criteria

1.Vedana 2. Akruti 3. Varna.4. Gandha.5. Srava.6. Kandu.

Daily Assessment done by using these five Criteria.

Study Design Flow Chart

- Group A (Trial Group) -- *Dressing* done with *Kaseesa Churna.*
- Group B (Control Group) -- *Dressing* done with *Haridra Churna*.

Study Design

▲

Screening subjects for Inclusion

⇩

Initial assessment

⇩

Randomization

⇩

Dressing done with *Kaseesa churna* alternate day

Dressing done with *Haridra Churna* alternate day

⇩

Duration- 15 days

⇩

Statistical analysis

⇩

Final assessment

⇩

Conclusion

RESULTS

Using Mann Whitney U-Test for comparison between two groups Trial group and control group

Ranks				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Vedana	Group A	30	33.02	990.50
	Group B	30	27.98	839.50
	Total	60		
Srava	Group A	30	31.67	950.00
	Group B	30	29.33	880.00
	Total	60		
Varna	Group A	30	30.00	900.00
	Group B	30	31.00	930.00
	Total	60		
Gandha	Group A	30	30.50	915.00
	Group B	30	30.50	915.00
	Total	60		
Kandu	Group A	30	27.73	832.00
	Group B	30	33.27	998.00
	Total	60		

A) On running the Mann-Whitney U test, it was observed that for each of the assessment criterion, the distribution after treatment showed same distribution suggesting that for both the treatment groups (Group A & Group B) The Significance value (P-value) for each of the assessment criteria along with the Decision for each assessment criterion has been specified in the table below.

The Mann-Whitney U test was run separately for each assessment criteria to compare the effectiveness between the control and trial group.

The result shows that the Null Hypothesis should be retained for each assessment criteria, suggesting same distribution in post-treatment values for both the groups.

Test Statistics[a]

	Vedana	***Srava***	***Varna***	***Gandha***	***Kandu***
Mann-Whitney U	374.500	415.000	435.000	450.000	367.000
Wilcoxon W	839.500	880.000	900.000	915.000	832.000
Z	-1.208	-.585	-.587	.000	-1.274
Asymp. Sig. (2-tailed)	.227	.558	.557	1.000	.203
a. Grouping Variable: Group					

CONCLUSION

The Group *A(Trial group)* treatment is as equally effective as the Group B (Control group) treatment.

After testing the effectiveness of *Kaseesa Churna* treatment against the *Haridra churna* Treatment by Mann Whitney test, results showed that The *Kaseesa churna* is equal effective as *Haridra* in *Shodhana* of *Dushta Vrana* Patients.

Days required for *Shodhana*

The total number of days of *Shodhana* required for patients in Trial and Control group shows the significant results of the treatment in both groups as below:

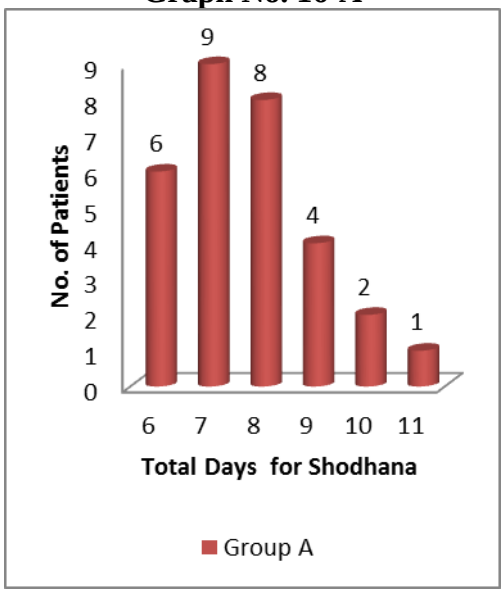
Table No. 16-A

Days For *Shodhan*	**Group A**	
	Frequency	**Percentage**
6	6	20
7	9	30
8	8	26.7
9	4	13.3
10	2	6.7
11	1	3.3
TOTAL	30	100

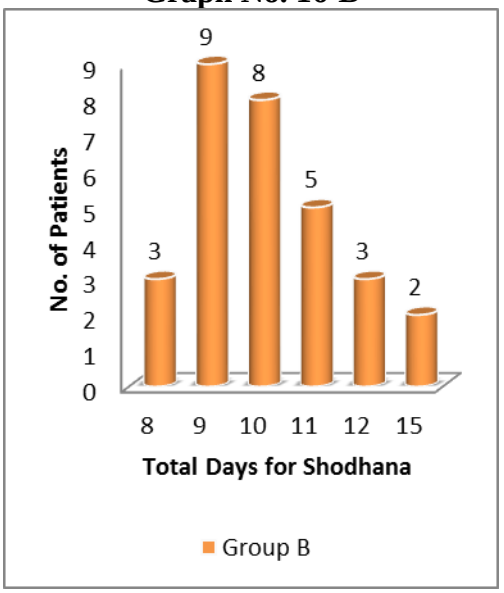
Table No. 16-B

Days For *Shodhan*	**Group B**	
	Frequency	**Percentage**
8	3	10
9	9	30
10	8	26.7
11	5	16.7
12	3	10
15	2	6.7
TOTAL	30	100

Graph No. 16-A



Graph No. 16-B



Graphical presentation of Total days for *Shodhana*

CONCLUSION

It can be concluded from the graph that For group A (Trial group), 6(20%) patients undergone *Shodhan* for 6 days, 9(30%) patients for 7 days, 8(26.7%) patients for 8 days, 4(13.3%) patients for 9 days, 2(6.7%) patients for 10 days and 1(3.3%) patient for 11 days.

That is most of the patients in group A (Trial group) undergone *Shodhan* for 7 days also the number days of *Shodhan* varies from 6 to 11 days.

For group B (Control group), 3(10%) patients undergone *Shodhan* for 8 days, 9(30%) patients for 9 days, 8(26.7%) patients for 10 days, 5(16.7%) patients for 11 days, 3(10%) patients for 12 days and 2(6.7%) patient for 15 days.

That is most of the patients in group B (Control group) undergone *Shodhan* for 9 days also the number days of *Shodhan* varies from 8 to 15 days.

Hence Average days for *Shodhan of Dushta vrana* of Group A (Trial group) is 7 days & Group B (Control group) is 9 days, so *Kaseesa churna* having better result than *Haridra churna*.

REFERENCES

1. Sushruta Samhita: Kavi. Dr. Ambikadatta Shastri, Choukhamba Bharati Academy, Chikitsa Sthan, 2007; 1.
2. Sushruta Samhita: Kavi. Dr. Ambikadatta Shastri, Choukhamba Bharati Academy, Sutrasthan, 2007; 1-9.
3. Sushruta Samhita: Kavi. Dr. Ambikadatta Shastri, Choukhamba Bharati Academy, Sutrasthan, 2007; 36-20.
4. Rasratnasamuchaya: Kaviraj Amikadatta Shastri, 3-54, 9th Edition, 1995.
5. Prof. Dr. Gnyendra Pandey, Wound Healing Drug Therapy, First Edition-1004, Chawkhamba Sanskrit Series Office, Varanasi.
6. Sushruta-Samhita: Sutrasthanam Sanskrit Text with "Ayurvedarahasyadipika" Hindi Comentry; Dr. Bhaskar Govind Ghanekar B.Sc. MBBS., Reprint 1998, Meharchand Lachhmandas Publications, New Delhi 110002 India.
7. Textbook of Surgery: S.Das, 3rd Edition, 2001; 03.
8. Bailey & Love's; Short Practice of Surgery; R.C.G. Russell, Norman S. Williams & Christopher J.K. Bulstrode; 24th Edition, 2004.
9. Sabiston Textbook Of Surgery; Courteny M.TOWNSEND, Jr. MD; B. Mark Evers, MD; Kenneth L. Mattox, MD; 18th Edition, Elsevier Publication, 2008; 1.