

CONTROLLED CLINICAL STUDY OF “MADHU” IN THE MANAGEMENT OF WOUND”**¹Dr. Meva Lal Gupta and ²Akhlaq Ahmad**¹Reader of Shalya Tantra, Department Sri Sai Ayurved Medical College Aligarh.²Speciality Shalya Tantra Department Sri Sai Ayurved Medical College Aligarh.***Corresponding Author: Dr. Meva Lal Gupta**

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ABSTRACT

The present thesis work entitled “CONTROLLED CLINICAL STUDY OF “MADHU” IN THE MANAGEMENT OF “WOUND” comprises with conceptual Study, clinical Study, discussion, summary and conclusion. This study is conducted with aim and objective i.e. ‘To evaluate the clinical efficacy of local application of madhu in the management of wound. The madhu application is described in sushruta samhita in chikitsa sthan. For traumatic wound madhu and sarpi is used as first aid treatment for traumatic wound.^[1] Due to madhur and kashay ras it suppresses the pitta. Honey help to prevention of wound pak due to madhur kashay rasa. Hence madhu selected for the present study to access the effectiveness in management of wound. In compresion of madhu we taken povidine ointment which is well stablished wound healing ointment. honey have property to attracting or absorbing moisture and its ph-3-3.5.these properties prevent colonization &bacterial penetration. Honey has a low water activity so it is a poor environment for their Growth. Honey’s antibacterial activity is partly due to the high osmolality created by its sugar content. Honey’s antibacterial activity is partly due to the high osmolality created by its sugar content. Activity stems from the unidentified phytochemical Antibacterial. So in compresion of povidine ointment taken madhu I for this study. The advantage of madhu is that the easily avilable, non irritant very simple and it can be used easily.

KEYWORDS: Sushruta samhita, chikitsa sthan, wound madhu.**INTRODUCTION**

From the begining of time, human being is struggling for existence and the struggle exposes him to trauma. In term to wound which compels him to search different types of medicine for the care of wound. Wound and ulcer both are synonymously used but wound is defined as the loss of continuity of the surface epithelium due to external injury. Where as an ulcer is the break in continuity of the covering epithelium i.e. skin or mucous membrane due to molecular death. In the same manner, Vrana is the discoloration of the damaged area due to formation of scar after healing,^[2] which remains till the body survives.

In modern system of medicine the proper initial care of wounds will definitely prevented by the use of Oral and Systemic Antibiotics. Antibiotics are potent antimicrobial agent with their high efficacy. With the invention of Penicillin by Alexander Fleming, it was concede that there will be no infections in future, but the dream shortly came to an end with the development of resistance of Penicillin. But many types of antimicrobial agent are search and used successfully, but the success was only transient. The problem remains the same and

many generations of antibiotics have failed to prove long lasting antimicrobial effect. The most frequently used tropical antimicrobial agent in modern wound care practice are Iodine and Silver containing products.

In Ayurveda, Vrana may be divided as Nija and Agantuja, where Agantuja Vrana with a correlation to Traumatic wound. Traumatic wounds are of six types and free from Tridosha involvement, which may be converted in to Dusta Vrana, if not treated carefully.

In Agantuja Vrana pain, edema and fresh bleeding are the main features. So the basic principal of management includes

1. Vedana shamaka.
2. Rakta sthambaka aushadi prayogas.
3. Shothahara.
4. Ropana karma

Madhu seems to possess above mentioned properties and hypothetical support.^[3] Shushruta the father of surgery have advocated sixty procedures for the wound care and its management. Ropana karma means the therapy of healing, is specially emphasized in shasti upakrama as

well as in sapta upakrama. Keeping in view the above hypothesis of study entitled “**CONTROLLED CLINICAL STUDY OF MADHU IN THE MANAGEMENT OF WOUND**” is proposed to evaluate the effect of Madhu (honey) in the management of agantuja Vrana.

MATERIAL AND METHODE

Plan of Study

a) Conceptual study

The details of literature of Agantuja Vrana, Madhu will be incorporated in great detail from Samhitas and, from modern literature and by surfing the internet.

b) Clinical study

Patients were selected irrespective of age, sex, education, economy status, etc. patients were selected from O.P.D., I.P.D. of S.A.M.C. Aligarh, Malkhan Singh Dist. Hospital Aligarh, different health camps, selected patients were divided into two groups. The patient's referred from other practitioners, hospitals, institutions were also considered for the present study.

Selection Criteria

Patient were selected on the basis of signs and symptoms of Agantuja Vrana described in texts. Signs or symptoms of Agantuja Vrana as stated in modern medicine was also considered.

Inclusion Criteria

Wound surface area < 30 cm².
Traumatic wound with history of < 7 days.
Patient having traumatic wound.

Exclusion criteria

Infected / pus discharging wound.
Wounds with systemic involvement and morbid changes.
Suturing wounds.
Wound with visceral boney & spinal injuries.
Diabetic Patients.
Wound, will not be taken with involvement of bone & muscles.

c) Drug Source

Madhu will be collected by the professional people and Povidone-Iodine 5% will be purchased from the market

Method

The screened patients of wound were randomly selected and classified into two groups. Group A and Group B.

Group A

Group B

Drug and doses

In Group A

Will be treated by Madhu application once daily for 28days -trail group.

In Group B

Will be treated with Povidone-Iodine. lotion once daily for 28 days -controlled group.

Observation period

- Daily follow up for 1 week for the every next day of procedure. Afterwards weekly interval till 4th week.

Materials and Methods

Selection of Patients

The patient fulfilling the clinical criterias for diagnosis of traumatic wound were randomly selected irrespective of their age, sex, religion, occupation etc. from OPD and IPD section of Department of Shalya tantra, SAMC & Hospital, Aligarh would be selected by simple random sampling method. The patient's referred from other practitioners, hospitals, institutions will also consider for the present study

Inclusion Criteria

- Wound surface area < 30 cm².
- Traumatic wound with history of < 7 days.
- Patient having traumatic wound.

Exclusion Criteria-The following patients were excluded from study-

- Infected / pus discharging wound.
- Wounds with systemic involvement and morbid changes.
- Suturing wounds.
- Wound with visceral boney & spinal injuries.
- Diabetic Patients.
- Wound, will not be taken with involvement of bone & muscles.

Diagnostic Criteria

- a. All the patients were diagnosed & assessed on the basis of following Ayurvedic & modern Classical signs & symptoms of wound – pain, discharge, swelling.
- b. A special proforma was designed to record all details of the patients.
- c. The routine Haematological, Biochemical & Radiological investigations were also carried out to exclude any other pathology.

Plan of Work

The following plans were followed

- 1) The patients were first registered in wound Clinic.
- 2) A complete history of the disease along with the presenting complaints was noted.
- 3) The patients had been examined for systemic and general examination.
- 4) Pathological evaluation of each patient was conducted.
- 5) Diagnosis was made on Ayurvedic as well as Modern view.
- 6) Treatment was given as per groups.
- 7) Result assessment was done as per criteria.
- 8) Stastical data presentation was recorded.

Process of Diagnosis

Inspection- Following points were noted.

The condition of wound

Types of discharge

Palpation

The digital examination includes tenderness, indurations.

Size of wound: it done maximum Dimension (length × breadth)

Grouping

A total number of 45 patients of wound were registered for the present study. They were randomly divided into two groups

Group-(A)- The patients selected in this group were subjected to madhu therapy procedure.

Group-(B)- The patients selected in this group were subjected to povidine iodine procedure.

Application of drug- drug applied twice in a day.

Follow Up Study-4 Weeks.

Criteria for Assessment

The improvement provided by the therapy was assessed on the basis of classical signs & symptoms of Arsha. All the signs & symptoms were assigned score depending upon their severity, to assess the effect of the procedure objectively. The following pattern was adopted for the scoring

Registration data**1. Status of the patients.**

Groups	Group a	Group b	Total	%
Total registered	24	21	45	100%
Discontinue	01	00	44	2.22%
Completed	23	21	44	97.77

Total 45 patients were registered in present study. Among them 24 patients were in group A and 21 patients

Size

0. No discontinuity of skin / mucous membrane.

1. ¼ of previous area & depth of the wound left

2. ½ of previous area & depth of the wound left.

3> ½ of previous area of depth of the wound left.

Vedana (Pain)

0: Pain less condition.

1: Localized feeling of pain during movement only but no feeling during rest.

2: Localized feeling of pain even during rest but not disturbing the sleep.

3: Localized continuous feeling of pain, radiating & not relieved by rest.

Discharge

0. No discharge

1. Scanty and occasionally discharge

2. Frequent discharge of blood on dressing

3. Profuse and continuous discharge which need frequent dressing.

Colure

0. Normal pigmentation of skin

1. Slight red

2. Reddish black

3. Pale yellow /blackish

in group B. 1 patient in group A was discontinued hence total 44 patients had completed the treatment.

Statistical analysis**Effect of therapy****Effect of madhu application.**

Symptoms	B.T.	A.T.	%	SD	SE	't'	'p'
	Mean score						
Size	2.87	0.30	89.39	00.58	0.12	20.86	<0.001
Vedna	0.96	0.00	100.00	00.71	0.15	06.50	<0.001
Colure	1.69	0.26	84.62	00.60	0.13	10.38	<0.001
Discharge	0.22	0.00	100.00	00.60	0.13	01.73	<0.050

The above table shows that the size was decreased 89.39% in madhu group which was found statistically highly significant. Pain was reduced up to 84.62% which was statistically highly significant also. The floor and pus discharge improvement and improvement in

unhealthy granulation tissue were 100.00% which was highly significant statistically. The colour was reduced up to 84.62 % which was statistically significant after completion of 4th week.

2. Effect of Povidine Application.

Symptoms	B.T.	A.T.	%	SD	SE	't'	'p'
	Mean score						
Size	3.0	0.23	92.06	0.43	0.09	29.07	<0.001
Vedna	2.00	0.09	95.23	0.62	0.13	13.96	<0.001
Colure	1.71	0.23	86.11	0.81	0.17	08.31	<0.001
Discharge	0.14	0.00	100.00	0.47	0.10	01.36	<0.05

This table shows that the size of wound was decreased 92.07% in Povidone Iodine treated group which was statistically highly significant. Pain was reduced up to 95.23% which was statistically highly significant. The floor and pus discharge improvement and improvement

in unhealthy granulation tissue were 100.00% which was highly significant statistically. The colour was reduced up to 86.11 % which was statistically significant after completion of 4th week.

Overall Percentile effect of therapy in both groups

Criteria	Overall Effect of therapy			
	Group- A		Group- B	
	No. of patients	%	No. of patients	%
Cured	17	70.80	17	80.95
Marked improvement	5	33.33	2	13.33
Moderate improvement	00	00.00	00	00.00
No change	01	04.20	00	00.00

It was noticed that in **Group A**, maximum 70.80% were cured by complete healing occurred within 28 days and markedly improved cases were 25.00% which showed complete healing by more than 28 but less than 35 days. Only one patient showed unchanged condition of the wound. In the standard group i.e. in **Group B**, 80.95% patients showed complete healing within 28 days followed by 19.05% patients with complete healing within 21-30 days. No patient was found unchanged in this group.

RESULT

IN GROUP-A, total 70.83% patients were completely cured that is complete healing was observed within 28 days followed by 25.00% of them with marked improvement indicative of complete healing in 35 days. Only 04.17% patients showed no progress towards healing within such range of time. All the patients showed complete healing within maximum 35 days of time.

In Group-B, total 76.20% patients were completely cured followed by 23.81% of them with marked improvement. No patient showed delayed healing or unchanged condition of the wound

CONCLUSION

After completion of study both groups show good result, on the basis of objective and subjective parameters both groups show significant results. Overall statically both groups show good results.

REFERENCE

1. Sushrut Chikitsa Sthan, 1/65.
2. SU. SU. 21/40.
3. SU. SU. 45/132.