

RESEARCH ARTICLE

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EFFECT OF YASTIMADHU GHRITA IN THE MANAGEMENT OF ABHIGHATAJA VRANA (TRAUMATIC WOUND)

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ABSTRACT

Yastimadhu Ghrita, an Ayurvedic formulation described in Sushruta Samhita has been tried to relieve pain over 15 patients having wound caused by surgery or trauma (Su. Su. 5/42). The present medicine was prepared by following procedure described in classical texts.

Analytical study and laboratory investigations were done to prove its safety & efficacy. The duration of treatment ranges from 7-10 days which depends on its severity, chronicity & other factors related to the wound. Periodic assessment of the patients included in the study was done on every 3rd day, 5h day, 7th day, and 9th day.

The clinical assessment of the effects of trial drug on wound particularly in reducing pain, improvement of healing and regaining of functional ability was about 97.11%, 100% and 87.8% by 9th day, culminating all other inflammatory conditions. Thus the clinical result of *Yastimadhu Ghrita* in a therapeutic dose is found to be efficacious in reducing pain with promotion of healing. The assessment result of both the groups has been statistically analysed through unpaired t- test and p value and it is proved that the local application of *Yastimadhu Ghrita* in traumatic wound is clinically more effective to reduce pain that that of dressing only. In support of the study it can be stated that Yastimadhu Ghrita is a complete medical approach for trauma care and pain management.

Key words: Yastimadhu Ghrita, Abhighataj Vrana, Traumatic wound.

INTRODUCTION

In current times traumatology has been come up as a separate speciality which aims to restore vital functions, normalcy of anatomical structure of the affected part and immediate reduction of pain severity¹. The present trends to manage pain by administration of analgesics, narcotics, apparently barbiturates, are common Such drugs in attempts. contrast necessarily require knowledge of its administration otherwise to suffer from its adverse effects².

Pain caused by traumatic injury & surgical wound is a routine approach of management. Though wound healing is a physiological process which starts immediately after injury & normally doesn't require much help, but it is more prone to infections³. There are so many other local & systemic factors responsible for delaying the healing process.

Trauma care with reference to pain management has a prime focus in clinical practice⁴. Hence an attempt has been made to explore the Ayurvedic approaches for pain management. Systematic review of literature revealed that the severity of pain is the key factor leading to rise in increase in number of deaths owing to traumatic injury⁵.

In review of Ayurvedic literature it was found that *Yastimadhu Ghrita* acts a s a potent analgesic in case of traumatic / surgical injury⁶. Apart from the classical analgesics, *Yastimadhu* is suitable for reducing pain & augment faster healing. ⁷⁻

AIMS & OBJECTIVES:

Yastimadhu
Ghrita is a classical formulation prepared
from cow ghee & Yastimadhu
(Glycerrizha glabra) powder. It was aimed
to explore effect of Yastimadhu Ghrita in
traumatic wounds for seeking novelty in
current approach.

This is a case control clinical study. With criteria of 20-40 years of age & both gender, 30 cases of Abhighataj Vrana with varying shape & size were selected for the study from OPD of Gopabandhu Ayurveda Mahavidhalya & Hospital, Puri during 2008-2010. Patients having wound caused by systemic diseases, poisonous insect bites and or with infections were excluded. Selected patients were randomized and grouped into two groups 15 patients each viz. Group A; treated with Yastimadhu Ghrita & Group B: treated with only dressing (as per conventional approach). Duration of the study was 7- 10 days. Both the groups were evaluated according to the international scale of wound healing &

CLINICAL OBSERVATIONS

pain measurement, periodically.

For clinical observations different demographic data have been discussed viz age, sex, dietary habit, occupation, socio economic status, educational status, history of injury, shape & size of the wound etc. From the above demographic study it is revealed that out of 30 patients, there were 73.33% male, young persons of 21-30 years.56.67% were having high incidence of Abhighataj Vrana & probably because of their exposure to traffic & outdoor works.

Maximum patients were students (30%) & history of fall (50%) & accidents (43.33%) were having high incidence of Abhighataj Vrana. The shape of most of the wounds were irregular (56.67%) & 63.34% of patients were having injury in their lower limbs.

RESULTS & DISCUSSION

The clinical assessment of both the groups has been statistically analysed through unpaired t-test & p value. Improvement of the cardinal sign & symptoms of the wound, i.e. pain, swelling, size, & depth of the wound, loss of function of the affected

METHODOLOGY

part & healing condition of the wound etc. have been clinically evaluated. Besides the percentage of patients got improved has also been discussed. The degree of affection & intensity of each sign & symptom has been assessed in every 3rd day, 5th day, 7th day & 9th day.

From clinical observations, it has been revealed that in trial group 100 % of patients got relief from the severity of pain after 5 days while after 9 days in control group it was 86.67%. After 9 days in trial group swelling was reduced in 71.43% of patients & in control group it was 26.66%. Size of the wound was decreased in 53.33% patients of trial group & patients of control group after 9 days of treatment.

Depth of the wound was decreased in 100% of patients in trial group after 7 days but it was 100% in control group after 9 days. Loss of function was regained in 100% of patients in trial group after 9 days & it was 81.81% in control group. Healing of the wound was markedly improved in 100% of patients in trial group after 3 days while in control group it was 100% after 7 days of treatment.

Observations were made to assess the improvement/percentage of change in relation to degree of severity of each sign & symptom. Out of the study it was revealed that pain severity was reduced by 97.11% after 9 days in trail group while it was 48.07% in control group.

Accordingly in trial group degree of severity of swelling was reduced by

58.23% & in control group it was 30.25% after 9 days. After treatment size of the wound was reduced up to 26.13% in trial group & 8.04% in control group. Depth of the wound was reduced up to 87.09% in trial group & 52.63% in control group after 9 days. Functional ability was improved up to 100% in trial group & 56.25% in control group. Similarly the percentage of improvement in healing was 87.8% in trial group & 63.41% in control group after 9 days of treatment.

Out of the study the clinical assessment as a whole signifies that after 9 days of treatment in trial group 73.33% patients were attained maximum improvement, 20% moderate improvement & 6.67% mild improvement, whereas in control group 60% patients were attained moderate improvement and 40 % mild improvement.

While comparing the statistical analysis of both the groups, it was observed that the drug is highly effective value<0.001) in reducing pain after 3 days, size and depth of wound after 5 days of treatment while in case of swelling the patients of both the groups were equally improved with p value> 0.05. The function of affected part of the patients under trial group was remarkably improved than the patients of control group with value<0.01 after 7 days of treatment. Similarly the progress in healing was marked better in trial group with p value<0.01 after 5 days of treatment.

Table No 1
Showing the clinical assessment of results after treatment in trial and control groups (N=30)

Clinical	Trial Group									Control Group								
assessment	AT1		AT2		AT3		AT4		AT1		AT2		AT3		AT4			
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%		
Cure (100%)	-	-	-	-	-	-	11	73.	-	-	-	-	-	-	-	-		
								33-										
Maximum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Improvement																		
(75-99%)																		

Moderate	2	1	1	66.6	1	86.6	3	20	-	-	-	-	-	-	9	6
Improvement		3	0	7	3	7										0
(50-74%)																
		3														
		3														
Mild	12	8	5	33.3	2	13.3	1	6.6	9	6	1	8	1	10	6	4
Improvement		0		3		3		7		0	2	0	5	0		0
(25-49%)																
Unsatisfactory	1	6	-	-	-	-	-	-	6	4	3	2	-	-	1	-
(<25%)										0		0				
		6														
		7														

N = Total no of patients f= frequency %= percentage

AT1 = after 3 days of treatment

AT2 = after 5 days of treatment

CONCLUSION

On the whole it can be concluded that external application of *Yastimadhu Ghrita* is highly effective in rapid reduction of pain in traumatic injury culminating healing. It is not only safe and tissue friendly therapeutic modulation but also it opens scope for novel approaches described in Ayurveda classical texts for further betterment of society at large .

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REFERENCES:

- 1. Hussain LM, Redmond AD. Are prehospital deaths from accidental injury preventable? BMJ. 1994 Apr 23;308(6936):1077–1080
- 2.MacKenzie EJ et al. Functional recovery and medical costs of trauma: an analysis by type and severity of injury. The Journal of Trauma, 1988, 28;281-297.
- 3. Mann N et al. A systematic review of published evidence regarding trauma system effectiveness. The journal of Trauma, 1999, 47:525-33.
- 4. Mock C, maier RV, nii-Amon-kotei D. Low utilization of formal medical services

AT3 = after 7 days of treatment

AT4 = after 9 days of treatment

by injured persons in a developing nation. The Journal of Trauma, 1997, 42:504-513.

- 5. Ali J et al. Advanced trauma life support program increases emergency room application of trauma resuscitative procedures. The journal of Trauma, 1994, 36:391-394.
- 6. Sushruta Samhita, Sutra Sthana 5/41, GD Singhal, Chaukhamba Sanskrit Pratisthan, Delhi;Part 1;p51
- 7. Olukoga A, Donaldson D. Liquorice and its health implications. JR Soc Health 2000; 120:83-89
- 8. Poswillo D, Patridge M. Management of recurrent apthous ulcers. Br Dent J 1984:157:55-57
- 9. Goso Y, ogata Y, ishihara K, Hotta K. Effects of traditional herbal medicine on gastric mucin against ethanol-induced gastric injury in rats. Comp Biochem physiol c pharmacol toxicol endocrinol 1996;1 13:17-21
- 10. Aikawa Y, yoshiike T, Ogawa H. Effect of glycyrrizin on pain and HLA-DR antigen expression on CD8-positive cells in peripheral blood of herpes zoster patients in comparision with other antiviral agents. Skin pharmacol 1990;3:268-271

11. Akamatsu H, Komura J, Asada Y, Niwa Y. Mechanism of anti-inflammatory action of glycyrrhizin: effect on neutrophil functions including reactive oxygen species generation. Planta Med 1991; 57

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