A Clinical Study On The Effect Of *Samangadi Taila Lepa* In The Management Of *Sadyovrana*

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ABSTRACT: -
Wound healing is the process of repair that follows injury to the skin and other soft tissues. Following injury, an inflammatory response occurs and the cells below the dermis begin to increase collagen production. Later, the epithelial tissue is regenerated. There are three stages to the process of wound healing: inflammation, proliferation and remodeling. Wound literally means a discontinuity or break in the surface epithelium. It is seen as debilitating and scaring disorder usually seen affecting the human being at any age**.** *Samangadi taila* is explained in Sushruta samhita as a *Vrana Ropaniya* drug for freshly occurring wound. The present clinical study aims to a certain the effect of *Samangadi taila lepa* in management of *Sadyovrana (Vranaropana).* This study was conducted within the facilities the patients attending the O.P.D. and I.P.D. of Shalya tantra department of the S.S.R.A.M.C. Hospital, Inchal Belagavi have been selected irrespective of their sex, religion, race, occupation etc. The total 30 patients presenting the features of *Sadyovrana* were selected randomly treated with a *Samangadi taila lepa* applied for duration of 7 days. It can be concluded that application of *Samangadi taila lepa* is significant in the management of *Sadyovrana (Vranaropana).*
Key words : *Sadyovrana, Wound, Vrana Ropana, Samangadi taila lepa.*

Research Article.

INTRODUCTION

Shalya Tantra is the important branches of Ayurveda in which surgical and para-surgical techniques has described for management of various diseases. *Vrana* (wound) is one of them, which have been managed by human being from starting of civilization. Under the circumstances the first thing, which the men came across, was the injury from different sources, which caused him, the *Vrana* (wound).[1] *Vrana* is seen as debilitating and scaring disorder usually seen affecting the human being at any age. *Vrana* (wound) is the most important and widely described chapter of Shalya Tantra.

Sushruta – The father of surgery has scientifically classified it in a systemic manner whose wealth of clinical material and the principles of management are valid even today. classification of traumatic wounds, *Shuddha Vrana, Nadi Vrana, Sadhya Vrana, Dagdha Vrana* etc., their prognostic evaluation and management in the form of sixty *Upakramas* (procedures) which are from *Apatarpana to Rakshavidhana*, insistence on primary suturing in clean wounds, avoidance of sepsis and excision of extruded omentum and careful suturing of intestinal perforation in the management of perforating abdominal wounds, etc. are remarkable for their modern outlook.

In India, many indigenous drugs have mentioned in our old precious literature to heal the wounds.

A vast scope of research exists in the field of Ayurveda for the benefit of the science as well as humanity at large. It is true that many scientists & medicine experts are working on various preparations, which may help in achieving wound healing. Extensive experimental studies as well as a clinical trial of many drugs like *Rasna, Guggulu, Jati, and Karanja* etc. have already been tried on wound healing with better efficacy. There are so many compound drugs given in our texts, which are needed to be evaluated and reestablished with scientific manner. *Samangadi taila* is explained in Sushruta samhita as a *Vrana Ropaniya* drug for freshly occurring wound The present work is a further step in the field of Shalya Tantra entitled "A Clinical Study Of *Samangadi Taila Lepa* In The Management Of *Sadyovrana*"

DEFINATION

Gaatra – Part of body or tissue

Vichurnan - Means discontinuity, damage, break, or destruction

Damage or destruction of the part or tissue of body part is termed as Vrana [2].

Classification of *Vranas* :

Nijavrana and Aganthujavrana., Nijavranas are formed by vitiated doshas while *Aganthuja Vranas* are caused by external factors such as incision, punctures, lacerations, poisoned cuts, bruises etc. It can also be caused by bites of men, animals, birds, reptiles etc.

i) *Vranas* (wound) are again classified into two on the basis of the *Dosha dushti,* they are *Dushta vrana* and *Shudha vrana. Vranas* having more *Dosha Dushti* is called as *Dushta vrana* and those having less or no *Dosha Dushti* are called as *Shudha Vranas* [3].

Sadyo Vrana-(Agantuja Vrana)-

Wound with well separated edges, *Sadyovrana* (exogenous) mostly occurs due to accidental injuries. According to Shape and severity of the injury *Sadyovrana* classified into 6 types.

1. *CHINNA* - Extensive cut injury oblique or straight separation of parts of body [4], [5].
2. *BHINNA* -Perforation Of *Ashaya* and mild discharge [6], [7].
3. *VIDDHA* - Deep injury without perforation of *Ashaya* [8], [9].
4. *KSHATA* - Neither a cut injury nor a perforation but exhibits the nature of both uneven   shaped [10], [11].
5. *PICCHITA* - Crushed injury extended filled with blood and Bone marrow [12], [13].
6. *GHRISTA* - Rub injury skin gets peeled off, burning sensation and discharge [14], [15].

AIMS & OBJECTIVES

1. A detailed study of *Vrana* (wound) as explained in classics.
2. A detailed study of wound according to modern science.
3. To study the effect of *Samangadi taila lepa in Sadyovrana as Vranaropana* (wound healing)

Samangadi Taila Lepa:-
Ingredients [1]:-

Samanga(Manjishta), Haridra, Bharangi, Haritaki, Tutha, Suvarchala Lavana, Padmaka, *Lodhra, Yashtimadhu, Vidanga, Harenu Beeja.*

Method:-

As the reference in Sushrutha Samhita does not specify the quantity of ingredients and method of preparation, general rule of *Taila Paka* has been adapted. Dry ingredients were collected from the S.S.R.A.M.C and Hospital pharmacy. The collected ingredients were then made into fine powder and then little water added to made it *Kalka* form. A clean, thick bottomed vessel was taken and in that 1part of *Kalka Dravya* was taken. To that 4 parts of *Moorchita Tila Taila* and 16 parts of Water were added. It was then boiled over *Mandagni* for about 3 days. After observing the *Madhyama Paka Lakshanas* it was removed from fire. When it attained the room temperature, it was filtered and stored in a clean, sterile container for usage. *Lepa* were prepared with mustard oil as per *Lepa* preparation method for topical application.

MATERIALS AND METHODS

A) Inclusion Criteria:
1- Patients irrespective of age, sex, occupation were considered for the study.
2- Patients having clinical features of *Vrana* like cut, pain, redness, and fresh wounds were included for the study.

B) Exclusion Criteria:
1- Patients suffering from systemic disease like uncontrolled Diabetes mellitus, Tuberculosis, Leprosy etc were excluded from the study.
2- Patients suffering from grave conditions like malignant ulcer and other severe illnesses like HIV, HbsAg were also be excluded from the study.
3- Patients with severe anemia (Hb<7gm%) were

also be excluded from the study.

C) Sampling Design

A total of 30 cases of *Vrana* after considering the above mentioned criteria should be included for the study. The 30 diagnosed cases of *Sadyovrana* were randomly selected for the study.

Assessment Criteria:-

Assessment was analyzed on the basic of following objective and subjective parameters before during and after treatment.

Subjective Parameters

Pain:-

Parameter	Pain
0	No pain
1	Localized feelings of pain during movement only but no feeling during rest
2	Localized feelings of pain even during rest but not disturbing the sleep
3	Localized feelings of pain even during rest but disturbing the sleep

Tenderness:-

Parameter	Tenderness
0	Tolerance to pressure
1	Little response on sudden pressure
2	Wincing of face on super slight touch
3	Resist to touch & rigidity

Colour:-

Parameter	Colour
0	Normal skin colour
1	Redness
2	Redness with increased local temp.
3	Redness with fluctuation.

Objective Parameters:-

Length of Wound:

Parameter	Length of Wound
0	No discontinuity of skin/ mucous membrane
1	1cm
2	2cm
3	>3cm

Dept. of Wound:

Parameter	Dept. of Wound
0	No discontinuity of skin/ mucous membrane
1	1cm depth of the Wound
2	>1cm depth of the Wound
3	2cm depth of the Wound

Odour:

Parameter	Odour:
0	No smell
1	*Visragandhi*
2	Foul smell

Discharge:

Parameter	Discharge
0	No discharge
1	Serous discharge
2	Bloody discharge
3	Purulent discharge

Observation

Table-

1. Distribution of 30 patients of *Sadyovrana* according to sex.

SEX	Total No: 30	%
MALE	14	46.67
FEMALE	16	53.33

2. **Distribution of 30 patients of *Sadyovrana* according to Religion.**

CAST	Total No-30	%
HINDU	24	80
MUSLIM	06	20
CHRISTIAN	0	0

3. Distribution of 30 patients of *Sadyovrana* according to Age

Age Group (Yrs)	Total No- 30	%
20-30	2	6.66
31-40	5	16.66
41-50	10	33.33
51-60	10	33.33
61-65	3	10

6. **Distribution of 30 patients of *Sadyovrana* according to Bowel Habits.**

Bowel Habits	Total No-30	%
Regular	12	40
Irregular	12	40
Constipated	06	20

6.**Distribution of 30 patients of *Sadyovrana* according to Appetite.**

Appetite	Total No-30	%
Poor	05	16.67
Average	13	43.33
Good	12	40

Effect

Effect of *Samangadi taila lepa* on shoola (pain) in Sadyovrana

SYMPTOM	Measures				%	S.D(+-)	S.E(+)	t-value	p-value
	BT			BT-AT					
SHOOLA	2.467	AT	1.267	1.200	49.000	0.858	0.261	4.596	<.001
		FU1	0.800	1.667	68.000	0.969	0.259	5.653	<.001
		FU2	0.733	1.733	70.000	1.029	0.313	5.534	<.001
		FU3	1.000	1.467	59.000	0.982	0.299	4.907	<.001

Effect of *Samangadi taila lepa* on Tenderness in *Sadyovrana*

SYMPTOM	Measures				%	S.D(+-)	S.E(+)	t-value	p-value
	BT			BT-AT					
TENDERNESS	2.300	AT	1.100	1.200	52.000	0.904	0.275	4.360	<.001
		FU1	0.833	1.467	64.000	0.961	0.293	5.014	<.001
		FU2	0.800	1.500	65.000	0.974	0.296	5.060	<.001
		FU3	0.967	1.333	58.000	0.881	0.268	4.976	<.001

Effect of *Samangadi taila lepa* on colour in Sadyovrana

SYMPTOM	Measures				%	S.D(+-)	S.E(+-)	t-value	p-value
	BT			BT-AT					
COLOUR	1.600	AT	0.400	1.200	75.000	0.671	0.204	5.875	<.001
		FU1	0.267	1.333	83.000	0.782	0.238	5.600	<.001
		FU2	0.333	1.267	79.000	0.771	0.235	5.400	<.001
		FU3	0.433	1.167	73.000	0.789	0.240	4.860	<.001

Effect of *Samangadi taila lepa on length of wound in sadyovrana*.

SYMPTOM	Measures				%	S.D(+-)	S.E(+-)	t-value	p-value
	BT			BT-AT					
LENGTHOFWOUND	1.533	AT	0.933	0.600	39.000	0.598	0.182	3.298	<.001
		FU1	0.467	1.067	70.000	0.827	0.252	4.238	<.001
		FU2	0.500	1.033	67.000	0.725	0.221	4.682	<.001
		FU3	0.633	0.900	59.000	0.788	0.240	3.754	<.001

Effect of *Samangadi taila lepa on Depth of wound in Sadyovrana*

SYMPTOM	Measures				%	S.D(+)	S.E(+-)	t-value	p-value
	BT			BT-AT					
DEPTHOFWOUND	2.467	AT	1.700	0.767	31.000	0.542	0.165	4.644	<.001
		FU1	1.433	1.033	42.000	0.602	0.183	5.637	<.001
		FU2	1.433	1.033	42.000	0.635	0.193	5.345	<.001
		FU3	1.600	0.867	35.000	0.614	0.187	4.638	<.001

Effect of *Samangadi taila lepa on Odour in Sadyovrana*

SYMPTOM	Measures				%	S.D(+-)	S.E(+-)	t-value	p-value
	BT			BT-AT					
ODOUR	1.933	AT	0.833	1.000	57.000	0.658	0.200	5.493	<.001
		FU1	0.633	1.300	67.000	0.764	0.232	5.594	<.001
		FU2	0.600	1.333	69.000	0.782	0.238	5.600	<.001
		FU3	0.833	1.100	57.000	0.745	0.227	4.850	<.001

Effect of *Samangadi taila lepa* **on Discharge in** *Sadyovrana*

SYMPTOM	Measures				%	S.D(+)	S.E(+-)	t-value	p-value
	BT			BT-AT					
DISCHARGE	1.533	AT	1.133	0.400	26.000	0.431	0.131	3.047	<.001
		FU1	0.967	0.567	37.000	0.557	0.170	3.341	<.001
		FU2	0.833	0.700	46.000	0.642	0.195	3.585	<.001
		FU3	0.967	0.567	37.000	0.557	0.170	3.341	<.001

Overall effect of treatment

OVERALL EFFECT OF TREATMENT		
Class	Grading	No. of patients
0-25	No Change	0
26-50	Mild Improvement	15
51-75	Moderate improvement	14
76-100	Marked improvement	1

DISCUSSION

Discussion on Drug review:

Samangadi taila lepa is mentioned by Acharya Sushruta as a best *Vranaropaka,* hence it is taken for the treatment of *Sadyovrana. Rujahara* (analgesic), *Vatanulomana*, Analgesic, Anti-inflammatory properties of drug help in reducing the pain when it is administered in the form of *Lepa and Pittahara* qualities reduces burning sensation and bleeding. Antimicrobial activity of *Haridra* (turmeric) present in *Samangadi tail lepa* might have helped to fight against infection and promoting rapid healing of ulcer. *Vidanga* present in *Samangadi taila lepa*, is having *Kanduhara* (anti-pruritis) *& Kaphahara* property, by this pruritis and discharge, if present associated with wound it would be going to cured. The success rate of results obtained with *Samangadi taila lepa,* may be due to the above-mentioned factors.

Discussion on observation

It is observed that in the last two follow ups, the recordings signal the mild reversing of improvement seen earlier. This may be due to

1- Illiteracy – people of this group cannot understand the situation.

2- Poverty- the main question of daily bread and such basic requirements of self and family sidelines the medical advice may neglect.

3- Occupations- where the occupation demands the activities which in turn become the etiology of the disease like extreme work without safety measures etc So in spite of educating these people who had experienced the agony of the disease, they forget their sufferings and the medical advices as well and in them the reoccurrence is quit problem.

The history taking revealed of 30 cases of wound has proved that female (53.33 %) sufferers are more comparing to the males (46.67 %). This may be because of their work without safety measures works in the house, kitchen, pregnancies etc. While analyzing the incidence of disease according to age, it proved that the age group between 41-60 yrs are the most sufferers and is about 67 % of total strength of the patients.

RESULTS

INFERENCE ON SUBJECTIVE CRITERIA

1- *Shoola* (pain) reduced around 49 % after the 7 days treatment. This is due to the revealed *Srothorotha* (obstruction of channels) by the application of *Lepa*. The reduction rates were increased in to 68 % and 70 % after the first and second follow up. It was achieved because of the proper *Pathya Ahara Viharas* (wholesome diet and regimen) also. But in case of third follow up the rates were reduced to 59 %, shows the reoccurrence chance of disease by indulging the causative factors.

2- Tenderness gave 52 % improvement soon after the treatment, 64 % and 65 % after the first and second follow up. This suggests that the necrosis of the tissue is reduced by good blood circulation. In case of third follow up the improvement chart showed little reduction (58 %). It shows the decreasing circulation because of *Kapha Dosha* in the affected area by *Nidhana Sevana* (causative factors), again.

3- Colour showed 75 % dramatic improved result after the 7 days treatment and it becomes 83 % after the first follow up. But in second and third follow up shows little reduction in the graph was around 79 % and 73 %. It proves *Samangadi taila lepa* is highly beneficial in *Pitha Vikaras* and the indulging in causative factors didn't affect the graph much more.

4- Length of wound showed 39 % of result after the 7 days treatment. In first follow up it shows almost double result i.e. 70 %. This proves the healthy arteriole venules exchange of blood. Because of this good circulation the nerve cells congestion reduces and patient feels good relief. But in case of second and third follow up the result graph shows little reduction and that was about 67 % and 59 %.

5- Depth of wound - When it is reduced and shows 31 % of positive result after the 7days treatment. In first and second follow up this graph shows 42 % stable improvement. This had given a psychological relief to the patient. In the third follow up the rate reduced in to 35 % indicates the reoccurrence chances of the hardness and it is because of the *Apathya Sevana* (wholesome diet and regimen).

6- Odour gave 57 % of result with the 7days *Samangadi taila lepa* treatment. The rates were increased in to 67 % and 69 % after the first and second follow up. The reduction of *Shotha* (inflammation) proves the decreased or absence of blood leakage in to the interstitial layers followed by good venous blood circulation. This will give lightness as well as softness in the leg. In the third follow up the rate plunged to 57 % again due to indulgence in *Mithyahara Viharas.*

7- The result in case of the symptom Discharge was 26 % after the 7 days course of treatment and in first, second and third follow ups it was 37 %, 46% and 37% accordingly. Even though *Samangadi taila lepa* is highly beneficial in Discharge, the results were percentage wise comparatively less is because of *Kandu* (pruritis) which is still present true, causes the stimulation of excessive flow in the area further adding the causes for interstitial and intracellular accumulation said earlier.

CONCLUSION

All the data collected was recorded and subjected to statistical analysis and on its basis of the subject is concluded as

1. The *Samangadi taila lepa* has a highly significant role in the obliteration of features of primary wound i.e. *Sadyovrana.*

2. Cases of short duration, especially those within sudden onset responded very well to this method, where as in older cases response was comparatively poor.

3. The application of *Samangadi Taila Lepa* was well tolerated and no untoward effects were observed.

The exact mechanism of the action of *Samangadi taila lepa* in recent cases of *Sadyovrana* is thought by its expected *Ropana* (healer) effects due to the properties of deep wound healing and analgesics etc. But evaluation following large scale prospective trial studies are humbly suggested. In short, *Samangadi taila lepa* technique also can be included among

treatment modalities of the disease *Sadyovrana* which can be of much use in the treatment or management of the cases of lower economical group and those who are not fit for whatever reasons. Definitely it is a modality which is easy to conduct, requiring no high setups and so can be reached to the poorest of the nation. Thus, this study has proved the principle behind this modality of *Samangadi taila lepa* is valid even today in cases of *Sadyovrana.*

REFERENCES

1. Sharma P.V, Sushruta samhita Sutra sthana vol-I, English translation, 23rdchapter, shloka no.18, Varanasi: Chaukhambha Visvabharati; 1999, P.250.

2. Sharma P.V, Sushruta samhita Chikista sthana vol-I, English translation, 1st chapter, shloka no.8, Varanasi: Chaukhambha Visvabharati; 1999, P.248.

3. Sharma P.V, Sushruta samhita Chikista sthana vol-I, English translation, 1st chapter, shloka no.6, Varanasi: Chaukhambha Visvabharati;1999, P.246.

4. Sharma P.V, Sushruta samhita Chikista sthana vol-I, English translation, 1st chapter, shloka no.3, Varanasi: Chaukhambha Visvabharati;1999, P.245.

5. Upadhyaya S, Madhav Nidan, Madhukosh Vyakhyaya Vibhushitam, 43rd chapter, shloka no.2, Varanasi: 31st edition, Chaukhambha Sanskrit sansthan; 2002, P.106.

6. Sharma P.V, Sushruta samhita Chikista sthana

7. Upadhyaya S Madhav Nidan, Madhukosh Vyakhyaya Vibhushitam, part-2, 43rd chapter, shloka no.3, Varanasi: 31st edition, Chaukhambha Sanskrit sansthan; 2002, P.107.

8. Sharma P.V, Sushruta samhita Chikista sthana vol-I, English translation, 2nd chapter, shloka no.11, Varanasi: Chaukhambha Visva bharati;1999, P.276.

9. Upadhyaya S, Madhav Nidan, Madhukosh Vyakhyaya Vibhushitam, part-2, 43rd chapter, shloka no.4, Varanasi: 31st edition, Chaukhambha Sanskrit sansthan; 2002, P.107.

10. Sharma P.V, Sushruta samhita Chikista sthana vol-I, English translation, 2nd chapter, shloka no.19, Varanasi: Chaukhambha Visvabharati;1999, P.277.

11. Upadhyaya S, Madhav Nidan, Madhukosh Vyakhyaya Vibhushitam, 43rd chapter, shloka no.11, Varanasi: 31st edition, Chaukhambha Sanskrit sansthan; 2002, P.109.

12. Sharma P.V, Sushruta samhita Chikista sthana vol-I, English translation, 2nd chapter, shloka no.20, Varanasi: Chaukhambha Visvabharati;1999, P.278.

13. Upadhyaya S Madhav Nidan, Madhukosh Vyakhyaya Vibhushitam, 43rd chapter, shloka no.12, Varanasi: 31st edition, Chaukhambha Sanskrit sansthan; 2002, P.110.

14. Sharma P.V, Sushruta samhita Chikista sthana vol-I, English translation, 2nd chapter, shloka no.21, Varanasi: Chaukhambha Visvabharati;1999, P.278.

15. Upadhyaya S Madhav Nidan, Madhukosh Vyakhyaya Vibhushitam, 43rd chapter, shloka no.13, Varanasi: 31st edition, Chaukhambha Sanskrit sansthan; 2002, P.110.