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# STUDY THE EFFICACY OF SWARJIKADYA GHRITA OINTMENT IN THE MANAGEMENT OF DUSHTA VRANA

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## ABSTRACT

Care of wound and to prevent it from infection and its management is the backbone of surgical practice i.e. Wound management are fundamental to the practice of surgery. In spite of brilliant advances in surgical field wound management still remains subject of speculations. Once infection occurs in wound, healing is always delayed. Aim & Objectives- To study the efficacy of *Swarjikadya Ghrita* ointment in management of *Dusta vrana*. Methodology- A study on 70 patients has been done. Group A (experimental group) was treated with *Swarjikadya Ghrita* ointment locally once a day & Tab. *Triphala Guggul* (500mg) twice a day orally. Group B (control group) was treated with *Triphala Kwath Dhavan* once a day & Tab. *Triphala Guggul* (500mg) twice a day orally. Statistical Analysis and Discussion- Statistical Analysis and Discussion about result will be discussed detail in paper. Result- The results are encouraging. After a clinical study, it was observed that patients treated with Group A had better effect as compare to Group B. Conclusion- Local Application of *Swarjiakadya Ghrita* ointment significant than Local Application of *Triphala Kwath Dhavan* in the management of *Dusta Vrana*. The details of the study will be discussed in full Article.

Keywords: Swarjikadya Ghrita ointment, Dusta Vrana, Triphala Kwath, Triphala Guggul

#### INTRODUCTION

Ayurveda, the Upveda of Atharveda is an ancient medical science, which has been eternally handed over from generation to generation. It deals with the details of surgery especially. Injury or wounds are known to us since beginning of mankind. Wound and their management are fundamental to practice of surgery. In order to gain and access to and deal with underlying pathology of infected wound the main task of surgeon is to minimize the adverse effect of wound, remove or repair the damaged structure and harness the process of healing to restore the function. Care of wound and to prevent it from infection and its management is the backbone of surgical practice. Negligence and ignorance are preliminary cause for getting wound infected or worsening. It takes longer time to heal; such type of wound and these becomes hazardous for both patient and doctor. So, management of infected wound is very important. In Ayurveda, Acharya Sushrut had given the prime importance to vrana, i.e. wound and its management. In many chapters of Sushrut Samhita like Agropaharniya, Aampakwashaniya, Vranitopasaniya, Dwivraniya Chikitsitam etc. Sushrut had written about vrana and its management.

**Aim:** To study the efficacy of *Swarjikadya Ghrita* ointment in management of *Dusta vrana*.

**Objective:** To establish safe and effective medicine is the management of infected wound., To provide better treatment for infected wound.

#### **Materials and Methods**

**Study Type -** Prospective open Randomize Controlled study, 70 patients were selected randomly and divided into 2 groups.

**Source of Data -** For present clinical study patient were selected from OPD / IPD of *Shalyatantra* dept. of RT Ayurved College and Hospital Akola, Maharashtra.

#### **Criteria for Inclusion:**

- 1) Patients from 18-70 years of age group, irrespective of sex were selected.
- 2) Patient with infected wound were selected.

#### **Criteria for Exclusion:**

- 1) Patient with systemic diseases like DM/syphilis/HIV/HbsAG, positive etc.
- 2) Any major complication during treatment.
- 3) Tuberculous wound.
- 4) Malignant wound.
- 5) Traumatic wound with severe complication like fracture, dislocation and severe Heamorrhage.

**Group A (Trial Group)**: Local Application of *Swarjikadya Ghrita* Ointment and orally *Triphala Guggul* tablet in BID dose for 15 days.

**Group B (Control Group)**: Local Application of *Triphala Kwath Dhavan* and orally *Triphala Guggul* tablet in BID dose for 15 days.

**Drug Review:** *Swarjikadya ghrita* is the reference taken from *Yogratnaker Samhita*.

**Preparation of** *Swarjikadya Ghrita* **Ointment:** Preparation of *Swarjikadya Ghrita* Ointment was done under supervision of *Rasa shastra* department of RT Ayurved College Akola.

- 1. Swarji Kshar 1 part
- 2. Yawa Kshar 1 part
- 3. *Kampillak* 1 part
- 4. *Harenuka* 1 part
- 5. Tankan 1 part
- 6. *Shwet Khadir* 1 part
- 7. *Tutha* 1 part
- 8. *Cow Ghrita* 7 part

All the above seven ingredients were taken in equal parts and *cow Ghrita* added and mixed with it. White soft paraffin + Hard paraffin + yellow bee wax taken as per requirement and melted as lowest melting point on water bath, then all the above drug is mixed and stirred and cooled at room temperature and thus *Swarjikadya Ghrita* Ointment is prepared.

#### **Criteria for Assessment**

Following criteria is observed for assessment of *Swarjikadya Ghrita* Ointment in the management of *Dushta vrana*.

1. **Objective Criteria:** a. History of patient, b. Vital function examination (TPR, BP), c. Total systemic examination, d. Discharge, e. Size, f. Margin, g. Swelling, h. Fever

- 2. Subjective Criteria: a. Pain, b. Tenderness
- 3. **Pathological Investigation:** a. Haemogram:-HB%,TLC, DLC, ESR, BSL (R), b. Urine examination:- (if required)

#### **Observations:**

**Effect of therapy on signs and symptoms by gradation after 15 days**. Evaluation of the effect of therapy by gradation was followed as per criteria of assessment. Assessment was done with Pain, Discharge, Size, Margin, Swelling, Tenderness and Fever.

The following tables shows improvement in Group A and Group B after 15 days.

Where, BT: Before treatment, AT: After treatment, C: No of Cured patients, I: No. of improved patients, UC: No. of Uncured patients

		Group A				Group B			
Sign/ symptom	Gradation	No. of pts BT	No. of p	ts. AT 15	days	No. of pts BT	T No. of pts. AT 15 days		
			С	Ι	UC		С	Ι	UC
	Grade 3	1	0	1	0	2	0	2	0
	Grade 2	21	7	14	0	15	0	13	2
Pain	Grade 1	13	11	02	0	18	9	0	09
	Grade 0	0	0	0	0	0	0	0	0
	Total	35	18	17	0	35	9	15	11
	Percentage	100	51.42	48.57	0	100	25.71	42.85	31.42

#### Table 1: Effect of therapy on Pain:

#### **Table 2:** Effect of therapy on Discharge:

		Group A				Group B			
Sign/ symptom	Gradation	No. of pts BT	of pts BT No. of pts. AT 15 days		No. of pts BT	No. of	No. of pts. AT 15 days		
			С	Ι	UC		С	Ι	UC
	Grade 3	9	0	8	1	6	0	6	0
	Grade 2	20	11	9	0	17	4	13	0
Discharge	Grade 1	6	5	1	0	12	6	0	6
	Grade 0	0	0	0	0	0	0	0	0
	Total	35	16	18	1	35	10	19	6
	Percentage	100	45.71	51.42	2.85	100	28.57	54.28	17.14

#### **Table 3:** Effect of therapy on Size:

		Group A				Group B			
Sign/ symptom	Gradation	No. of pts BT	No. of pt	s. AT 15	days	No. of pts BT	No. of pts. AT 15 days		
			С	Ι	UC		С	Ι	UC
	Grade 3	0	0	0	0	0	0	0	0
	Grade 2	3	0	2	1	1	0	1	0
Size	Grade 1	32	26	0	6	34	19	0	15
	Grade 0	0	0	0	0	0	0	0	0
	Total	35	26	2	7	35	19	1	15
	Percentage	100	74.28	5.71	20	100	54.28	2.85	42.85

		Group A				Group B			
Sign/ symptom	gn/ symptom Gradation No. of pts BT No. of pts. AT 15 days		No. of pts BT	No. of	pts. AT 1:	5 days			
			С	Ι	UC		С	Ι	UC
	Grade 3	0	0	0	0	0	0	0	0
	Grade 2	7	0	7	0	11	0	9	2
Margin	Grade 1	25	24	0	1	21	11	0	10
	Grade 0	3	3	0	0	3	3	0	0
	Total	35	27	7	1	35	14	9	12
	Percentage	100	68.57	20	2.58	100	31.42	25.71	34.28

## **Table 4:** Effect of therapy on Margin:

## Table 5: Effect of therapy on Swelling:

		Group A				Group B			
Sign/ symptom	Gradation	No. of pts BT	No. of pts BT No. of pts. AT 15 days		No. of pts BT	No. of p	ts. AT 15	days	
			С	Ι	UC		С	Ι	UC
	Grade 3	0	0	0	0	0	0	0	0
	Grade 2	0	0	0	0	2	0	2	0
Swelling	Grade 1	28	22	0	6	24	17	0	7
	Grade 0	7	7	0	0	9	9	0	0
	Total	35	29	0	6	35	26	2	7
	Percentage	100	62.85	0	17.14	100	48.57	5.71	20

## **Table 6:** Effect of therapy on Tenderness:

		Group A				Group B			
Sign/ symptom	Gradation	No. of pts BT	No. of pts. AT 15 days		No. of pts BT	No. of pts. AT 15 days			
			С	Ι	UC		С	Ι	UC
	Grade 3	0	0	0	0	0	0	0	0
	Grade 2	0	0	0	0	1	0	1	0
Tenderness	Grade 1	28	20	0	8	25	18	0	7
	Grade 0	7	7	0	0	9	9	0	0
	Total	35	27	0	8	35	27	1	7
	Percentage	100	57.14	0	22.85	100	51.42	5.71	20

### **Table 7:** Effect of therapy on Fever:

		Group A				Group B			
Sign/ symptom	Gradation	No. of pts BT No. of pts. AT 15 days		No. of pts BT No. of pts. AT 15		15 days			
			C	Ι	UC		С	Ι	UC
	Grade 3	0	0	0	0	0	0	0	0
	Grade 2	3	3	0	0	0	0	0	0
Fever	Grade 1	8	8	0	0	8	7	1	0
	Grade 0	24	24	0	0	27	27	0	0
	Total	35	35	0	0	35	34	0	0
	Percentage	100	31.42	0	0	100	20	2.85	0

Statistical values			
Parameters	Z Value	Z Critical	Significance
Pain	3.51	1.66	Significant
Discharge	3.03	1.66	Significant
Size	1.79	1.66	Significant
Margin	2.49	1.66	Significant
Swelling	0.47	1.66	Not significant
Tenderness	0.23	1.66	Not significant
Fever	1.54	1.66	Not significant

**Table 8:** Descriptive statistical table:

For pain, Discharge, Size, Margin the Z value comes greater than the critical value hence we reject  $H_0$  at 5% level of significance and conclude that drug A is more effective than drug B in reducing pain, Discharge, size and Margin. While in Swelling, Tenderness, fever, Z value comes out to be less than critical value hence we conclude that both the groups are equally effective in reducing Swelling, Tenderness, fever, It means that the said formulation used in trail group comparably shows significant recovery.

#### DISCUSSION

The percentage of relief in pain of cured patient is more in Trial Group A than the control Group B. Improved patients in group A are 48.57% and group B are 42.85% whereas uncured patients in group A are 0% and in group B is 31.42% respectively. Significant results were found in management of pain because of Analgesic (Vedanasthapaka) properties of Sarjikshar, Tankan, Harenuka and Cow Ghrita. The percentage of relief in Discharge of cured patient is more in Trial Group A than the control Group B. Improved patients in group A are 51.42% and in group B are 54.28% whereas uncured patients in Group A are 2.85% and in group B are 17.14% respectively. Significant results were found in reducing Discharge because of Vrana Shodhaka properties of Kampillak and Shweta Khadir. The percentage of relief in Size of cured patient is more in Trial Group A than the control Group B. Improved patients in group A are 5.71% and in group B are 2.85% whereas uncured patients in Group A are 20% and in group B are 42.85% respectively. Significant results were found in reducing Size of wound

because of Vranaropaka properties of Tutha, Tankan, Harenuka, Kampillak and Cow Ghrita. The percentage of relief in Margin of cured patient is more in Trial Group A than the control Group B. Improved patients in group A are 20% and in group B are 25.71% whereas uncured patients in Group A are 2.58% and in group B are 34.28% respectively. Significant results were found for assessment of Margin criteria because of Vranaropaka properties of Tutha, Tankan, Harenuka, Kampillak and Cow Ghrita. The percentage of relief in swelling of cured patient is more in Trial Group A than the control Group B. Improved patients in group A are 0% and in group B are 5.71% whereas uncured patients in Group A are 17.14% and in group B are 20% respectively. Significant results were found for in reducing Swelling because of Shothahara properties of Sarjikshar. Shweta Khadir, Harenuka and Madhuchista. The percentage of relief in tenderness of cured patient is more in Trial Group A than the control Group B. Improved patients in group A are 0% and in group B are 5.71% whereas uncured patients in Group A are 22.85% and in group B are 20% respectively. Significant results were found in reducing Tenderness because of analgesic (Vedanasthapaka) properties of Sarjikshar, Tankan and Harenuka. The percentage of relief in fever of cured patient is more in Trial Group A than the control Group B. Improved patients in group A are 0% and in group B are 2.85% whereas uncured patients in Group A are 0% and in group B are 0% respectively. Significant results were found in reducing Fever because of Jwaraghna properties of Shweta Khadir.

	Relief in percentage	
Symptoms	Trial Group A	Control Group B
Pain	51.42	25.71
Discharge	45.71	28.57
Size	74.28	54.28
Margin	68.57	31.42
Swelling	62.85	48.57
Tenderness	57.14	51.42
Fever	31.42	20

**Table 9:** Symptom wise percentage relief in cured patients in both the groups:

According to these values, for criteria Pain, Discharge, Size, Margin, Swelling, Tenderness, Fever, Trial Group shows remarkable relief than control group.

#### **Results-**

**Table 10:** Total percentage relief in effect of therapy on Dusta Vrana:

Group	Percentage Relief
Trial Group A	55.91%
Control Group B	37.13%

Total percentage relief in effect of therapy of *Dusta Vrana* for Trial group was 55.91% (marked improvement) while for control group was 37.13% (moderate improvement).

#### CONCLUSION

The symptoms wise statistical analysis, it is found that Local Application of *Swarjiakadya Ghrita* ointment significant than Local Application of *Triphala Kwath Dhavan* in the management of *Dusta Vrana*. This may be due to *Vranashodhak*, *Vranaropak*, antiinflammatory, antibacterial analgesic, anti-microbial action of the drugs used in *Swarjikadya Ghrita* ointment, hence action of the contents of *Swarjikadya Ghrita* ointment takes place in every nook and corner of the *Dusta Vrana*.

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