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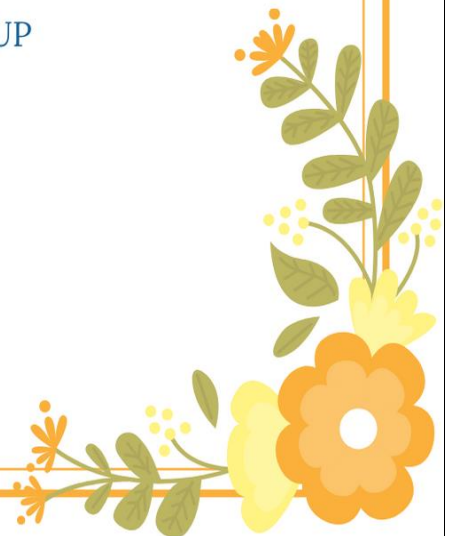
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Study of *Vranaropana* using *Dhatakipushpa Ghrita*

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ABSTRACT

Introduction: Sushrut samhita has given superior position to *vrana*. In ancient text a number of drugs and technique are talk about for *shodhana* and *ropana* of *Vrana*, One of them are medicated *Ghrit* preparation. In the present research work *DhatakipushpaGhrit* is used in the management of *Sadhyovrana*. So foran attempt is taken to analyze its effectiveness on *vrana*.

Aim: Evaluation of the efficacy of *DhatakipushpaGhrita* as *Vranaropak*.

Methodology: In the present research work 60 patients fulfilling inclusion criteria of *Sadhyovrana* were included. All the patients were called for dressing by using *Dhatakipushpaghrita* after specific days. Symptoms observed were graded into 0-3 grade scale and it was noted at each follow up.

Results: In this present research work by statistical analysis it was observed that *Dhatakipushpaghrita* is more effective in *Vranaropana* process. *Dhatakipushpaghrita* is proved to be safe, cost effective and easily available treatment in *Sadhyovrana*. There is very less difference in size of wounds by using *Dhatakipushpaghrita*. It also has very good results on 1st degree burn patients. *Dhatakipushpaghrita* is also use as *Raktastambhana* in *sadhyovrana* because of its *kashayarasa*. Most of the wounds are healed within 7 to 8 days.

Conclusions: This is the first study conducted on the evaluation of efficacy of *DhatakipushpaGhrita* in the management of *SadhyoVrana*. The results suggest that application of *DhatakipushpaGhrit* is found to be more effective in the management of *SadhyoVrana* as *Vranaropak*.

KEYWORDS

Vrana, Vranaropan, SadhyoVrana, DhatakipushpaGhruta



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INTRODUCTION

Wound healing plays important role in history of *Ayurveda*. Treatment of wound is probably the first medical problem faced by human beings. Many times non healing nature of ulcer poses a problem in practice. Healing of *vrana* is natural process but due to interference of vitiated *doshasvrana* becomes *dusta* and normal healing process delayed. Chronic wound is long standing ailment with profuse discharge and slough where more importance has been given in removing the debris and enabling the proliferation of healthy tissue. The prevalence of wounds in the population studied (n=6917) was 15.03 per 1000. The prevalence of acute and chronic wounds was 10.55 and 4.48 per 1000 of the population respectively. The most common site for both acute and chronic wounds was the lower extremity. In contrast to Western studies, the most common etiology for a chronic lower extremity wound was an untreated acute traumatic wound. This in turn highlights the need to establish community-based wound-care teams in India¹

Acharya sushruta has mentioned *vrana* with other important factors in definition of *shalyatantra*². Further he elaborately describes 60 therapeutic measures for the

management of *vrana* named as *shasti-upakrama*³.

For the *Shodhan* and *Ropana* seven *kriyakalpas* are mentioned that are *kashaya*, *varti*, *avachurnana*, *taila* and *sarpi*. Mode of *kriyakalpas* is according to the combination of drugs used. Among these *Sarpi* is the one in which ghrīt is used along with different kalpas and different ways⁴. *Dhataki* (*Woodfordiafruticosa*) plays important role in *vrana* *ropana*⁵.

Removing of dead and vitiate *addosha* by surgical ways cause injury to healthy tissue. For chemical debridement various chemicals like Povidone Ointment, Eosol, Hydrogen peroxide, Framycetinesulphate etc in the form of ointment, liquids and tulle are being used. Povidone ointment should not be use in case of sensitive participants. Flushing or hydrotherapy is used in mechanical debridement since chemical materials used for dressing have their own setbacks in this study. *Dhatakighrit* will be used in the form of tulle.

AIM

- To study *Vrana* in *Ayurvedic Samhitas* and efficacy of *Dhatakpushpa Ghrita* on *Vrana* for its *Vranaropaka* activity.
- To study the literature on wounds with reference to modern science and its types



and treatment.

- To evaluate efficacy of *Ropana* property of *Dataki Pushpa Ghrita* on *Vranaropana* (wound healing).

OBJECTIVES

1. To study the noof changes occurring on *Sadhyavrana* by clinical and statistical methods using criteria of assessment and visuals on specific time duration.

MATERIALS AND METHODS

MATERIAL:

1} *Dhataki Pushpa* fresh.

2} *Goghrita* (Cow's ghee)

Dhatakipushpa Ghritais prepared under expert supervision by standard method of *sidhaghrita* preparation for all patients at one time. The *Pushpa* of *Dhataki* collected and *Quath* prepared by *Quatha Kalpana*, later on this *Quath* was used to prepare *Dhatakipushpa Ghrita* using standard method of *Ghrita Kalpana*.

METHODS

1) ETHICAL CLEARANCE

From Ethical committee of YMT Ayurved Medical College, Sector 4, Kharghar, Navi Mumbai.

YMT/PGAyu/cert/006

2) CONSENT

Informed written consent with Case Record Form

3) TYPE OF STUDY

Open non-comparative clinical trial

4) NUMBER OF PATIENTS 60

5) DIET OF PATIENT

Normal usual diet

9) DURATION OF STUDY

The patient was observed for 15 days or unless *Vrana* heals earlier by clinical assessment. INCLUSION CRITERIA

- All type of *Sadhya Vrana* .
- Age of patient : 18 years to 60 years.
- Gender : both male and female .
- 1st and 2nd degree burn cases in *Ruhyamana* stage

EXCLUSION CRITERIA

- Malignant ulcers .
- Varicose ulcer.
- Bed sores.
- Diabetic wound .

PROCEDURE OF APPLICATION

- Wound area prepared by washing with normal saline or water (as shown in image 1) and dried with dry cotton gauge , Prepared *dhatakipushpa ghrita* tulle is then applied on wound area (as shown in image 2) followed by dressing bandage.



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Image 1 Wound Area



Image 2 Application of *dhatakpushpa ghrta*

OBSERVATIONS

It is observed that most of the patients fall under the age group between 18 to 30 yrs.

Out of total 60 cases selected, 39 patients (65%) were Male and 21 patients (35%) were Female.

In the present study, 60 patients fulfilling inclusion criteria of *Sadhyovrana* were studied. Symptoms observed were graded into 0-3 grade scale and they were noted on each follow-up.

RESULTS

The clinical study of Dhataki pushpa ghrta in the management of Vrana was carried out

Table 1 Statistical analysis of pain

Pain	Day0-1	Day1-5	Day5-8	Day8- 10	Day10- 12	Day12- 15	Day0- 15
Mean 1	2.1167	1.1333	0.1167	0	0	0	2.1167
Mean2	1.1333	0.1167	0	0	0	0	0

Table 2 Statistical analysis of size

Size	Day0 – 1	Day1- 5	Day5- 8	Day8- 10	Day10- 12	Day12- 15	Day0- 15
Mean1	1.4667	1	1	1	1	1	1.4667
Mean2	1	1	1	1	1	1	1

SIZE

During study it was found that there was very less difference in actual size of vran upto 15 days. The actual size of the

on selected 60 patients. Data was collected by clinical study with respect to assessment criteria as per follow up. Observations were made before, during and after the treatment. Assessment of the gradation was done on detailed Case Record Form adopting standard scoring methods of parameters. As assessment parameters include a mixture of qualitative and quantitative data, following statistical analysis is used.

Pain:

Maximum number of patients had severe pain followed by moderate and mild pain. The severity of pain before treatment and subsequent follow up as follows when these data was subjected to table analysis, t value was found to be significant ($t_{cal} > t_{table}$) showing significant. As seen in table 1 there was significant change between mean **Pain** Before Treatment and mean **Pain** After Treatment. As seen in table 2 there was significant change between mean **Size** Before Treatment and mean **Size** After Treatment.

vrana before applying dhatakpushpaghrta and on subsequent dressing. When these data was subjected to table analysis, t value was found to be significant ($t_{cal} > t_{table}$)



showing significant. Skin and around color. The skin colour around wound area of maximum patients is turns brown where as some of the wounds gets purple colour after 7 days.

Table 3 Statistical analysis of skin and around colour

Skin and color	Day0 -1	Day1-5	Day5-8	Day8-10	Day10- 12	Day12- 15	Day0-15
Mean 1	1.2883	1.2833	1	1	1.05	1.05	1.2833
Mean2	1.2833	1	1	1.05	1.05	1	1

As seen in table 3 there was significant change between mean **Skin and around color** Before Treatment and mean **Skin and around color** After Treatment

Margins

During study it is observed that margins of maximum number of patient are nt raised

Table 4 Statistical analysis of margin

Margins	Day0 -1	Day1-5	Day5-8	Day8-10	Day10-12	Day12-15	Day0-15
Mean 1	1.65	1.5833	1	1	1	0.0167	1.65
Mean2	1.5833	1	1	1	0.0167	0	0

As seen in table 4 there was significant change between mean **margin** Before Treatment and mean - **margin** After Treatment.

DISCHARGE

Table 5 Statistical analysis of discharge

Discharge	Day0 -1	Day1-5	Day5-8	Day8-10	Day10- 12	Day12- 15	Day0-15
Mean 1	0.0167	0.3833	0.45	0.5167	0.0667	0.0667	0.0167
Mean2	0.3833	0.45	0.5167	0.0667	0.0667	0.0167	0.0167

As seen in table 5 there was significant change between mean **Discharge** Before Treatment and mean **Discharge** After

When these data was subjected to table analysis, t value was found to be significant ($t_{cal} > t_{table}$) showing significant. Overall assessment shows that out of 60 patients over 90% patients have brown colour of brown and around area.

means it was plane during vranaropanaprocess.some of the wounds had slightly raised margins .when all these data subjected to table analysis, t value was found to be significant ($t_{cal} > t_{table}$) showing significant.

During this study there was mild(watery) to moderate (sero- sangious) discharge in maximum patients. When these data were subjected to table analysis, t value was found to be significant ($t_{cal} > t_{table}$) showing significant

Treatment Tenderness: Maximum number of patients had severe pain on deep palpation and some had pain on superficial



palpation which get relives day by day. When these data was subjected to table

analysis, t value was found to be significant ($t_{cal} > t_{table}$) showing significant.

Table 6 Statistical analysis of tenderness

Tenderness	Day0 -1	Day1-5	Day5-8	Day8-10	Day10-12	Day12-15	Day0-15
Mean 1	1.4333	1.4167	1.0167	1	0.85	0.5667	1.4333
Mean2	1.4167	1.0167	1	0.85	0.5667	0.0333	0.0333

As seen in table 6 there was significant change between mean **Tenderness** Before Treatment and mean **Tenderness** After Treatment.

Granulation

Maximum number of patients had grade 1 granulation followed by grade 2 when these data was subjected to table analysis, t value was found to be significant ($t_{cal} > t_{table}$) showing significant.

Table 7 Statistical analysis of Granulation

Granulation	Day0 -1	Day1-5	Day5-8	Day8-10	Day10-12	Day12-15	Day0-15
Mean 1	1.4754	1	1	1	1	1	1.4754
Mean2	1	1	1	1	1	1	1

As seen in table 7 there was significant change between mean **Granulation** Before Treatment and mean **Granulation** After Treatment.

DISCUSSION

Modern surgery has developed many advances in this field though there are certain limitations in treating wound in terms of side effects, lack of availability, cost effectiveness, etc. so we can think about *Ayurvedic* medicine as an alternative treatment in treating *Sadhyavrana*.

Various treatment modalities available for the treatment of wounds, various ointments like betadin ,steroids, various solutions .

Ayurveda has a great treasure of herbal drugs. Some drugs in this treasure are mentioned with a special property i.e. *Vranaropaka* property which means drug is beneficial for healing of wounds and can be a remedy for all sorts of wound healing without having any side effects.

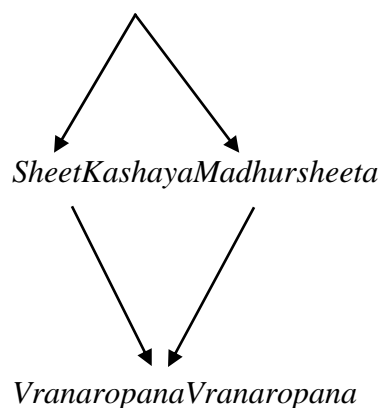
Dhataki is *kashayrasatmak* and sheet *viryadravyawhis* has a property of *vranaropana* as explained in *rajnighantu*. *Ghrita* is and its therapeutic uses are explained by almost all *samhitas*. Most of the *Ayurvedic* preparations are made with ghee. Digestion, absorption and delivery to a target organ system are crucial in obtaining the maximum benefit from any formulation.

This is facilitated by ghee. Since active ingredients are mixed with ghee, they are easily digested and absorbed. It is *madhurrasatmak* and sheet *viryadravya*. Considering these properties we decided “**Study of vranaropana using dhatakipushpaghrita.**”



Probable mode of action of DhatakipushpaGhrita of the easily digestible and assimilable food which provides essential nutrients and critical antioxidants to the human body for its protection and growth.

DhatakiPushpaGhrita



CONCLUSION

By statistical analysis it was concluded that *Dhatakinpushpaghrita* is effective in *Vranaropana* process. *Dhatakinpushpaghrita* is proved to be safe, cost effective and easily available treatment in *Sadhyovrana*. There is very less difference in size of wounds by using *Dhatakipushpaghrita*.

- *Dhatakipushpaghrita* is also used as *Raktastambhana* in *sadhyovrana* because of its *kashayarasa*.
- Most of the wounds are healed within 7 to 8 days.
- There are no signs of infections or any other complications. It means no any wounds are converted in *dustavrana*.



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