WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 10, Issue 11, 622-630.

Review Article

ISSN 2277-7105

EFFICACY OF RAKSHAS TAILA IN THE MANAGEMENT OF DUSTA VRANA W.S.R TO DELAYED HEALING ULCER

Dr. Durbadal Majumdar*1 and Dr. Subhalakshmi Maity2

¹Assistant Professor, Dept. of Shalyatantra, Raghunath Ayurved Mahavidyalaya & Hospital, Contai, Purba Medinipur, West Bengal.

²Assistant Professor, Dept. of Prasutitantra & Striroga, Raghunath Ayurved Mahavidyalaya & Hospital, Contai, Purba Medinipur, West Bengal.

Article Received on 31 June 2021,

Revised on 21 July 2021, Accepted on 10 August 2021 DOI: 10.20959/wjpps202111-21401

*Corresponding Author Dr. Durbadal Majumdar

Assistant Professor, Dept. of Shalyatantra, Raghunath Ayurved Mahavidyalaya & Hospital, Contai, Purba Medinipur, West Bengal.

ABSTRACT

Wound healing is a major problem from ages in surgical practice. A clean wound in normal body heals earlier with a minimum scar as compared to the contaminated wound i.e. Dusta Vrana. Therefore in present concept all efforts are directed to keep the wound clean and also to enhance the wound healing. To manage the Dusta Vrana different type of treatment modalities explained in the classics, Vrana Rakshas Taila is one among them. So, this study was conducted to evaluate the effectiveness of Vrana Rakshas Taila on ulcer healing. 30 patients were selected according to inclusion criteria and divided into two groups of 15 each.

Group I: Trail group, which were treated by Vrana Rakshas Taila local application once daily.

Group II: Control group, were treated by the basic principal of ulcer treatment that is the cleaning with normal saline, H₂O₂ sterile dry gauze were used for dressing. The result of Vrana Rakshas Taila is found to be statically significant in the process of wound healing The Vrana Rakshas Taila proofs a possible role in the healing of Dusta Vrana.

KEYWORDS: Dusta Vrana, Vrana Rakshas Taila and Ulcer.

INTRODUCTION

The life of every individual starts with healing of the cut umbilical cord. Wound healing is the major problem in surgical practice.

The problem of wound healing has drawn the attention of a large number of scientists all over the world. The importance of wound healing has long been recognized as fundamentally essential for the study of practice of surgery. The subject of wound healing forms the central theme of Susruta Samhita, where in he gave a vivid description of wound and management.

Some of the principles as enunciated by Susruta not only comparable, favourable and superior with some of the recent modern advances in the management of wounds. The wound or vrana may be defined as disruption of anatomical or functional continuity of viable tissue, whereas healing of wound is the process of restoration of continuity of living tissue. The general features of wound healing is known since long. However, in resent past, certain opinions have been experienced which have indicated lack of proper understanding of precise and intricate mechanism involved in the process of repair and regeneration.

Dusta vrana² is a long standing ulcer with profuse discharge and slough, where clearing slough and enabling the drug to reach the healthy tissue is more important. Slough can be cleared by using surgical instruments or oxidizing agents where healthy granulation tissues are damaged.^[3]

For the sodhana and ropana of vrana, both local and oral treatments are explained by Susruta.

Hence the clinical study on, 30 patients of Dushta Vrana Out of which 15 patients with the help of Vrana Rakshas Taila as the trial^[4], Whereas 15 patients where treated, by the basic principles of Ulcer treatment.

OBJECTIVES OF THE STUDY

- 1) To evaluate the effectiveness of Vrana Rakshas Taila on ulcer healing.
- 2) To prove the hypothesis laid in the ancient surgical text regarding ulcer healing and effectiveness.

MATERIAL AND METHODS

The clinical study was planned to evaluate the efficacy of Vrana Rakshas Taila application in the management of Dusta Vrana.

Materials:-Materials required for management and assessments.

-Gauze - Sinus forceps

- Scissor - Scalpel

- Measuring scale - Gloves

- Slough cutter Kidney tray
- Panchavalakala kasaya Vrana Rakshas Taila

for cleaning of wound. for application.

- Surgical pad
- Probing needles
- Artery forceps

Source of data: - Patients are attending the O.P.D & I.P.D. of my Ayurvedic clinic.

Method of collection of data: 30 patients were selected randomly for present study irrespective of age, sex and associated disease. However a specific treatment was given for the associated disease. The selected patients were divided into two groups of 15 each.

Group I: Trail group, which were treated by Vrana Rakshas Triala local application once daily.

Group II: Control group, were treated by the basic principal of ulcer treatment that is the cleaning with normal saline, H_2O_2 sterile dry gauze were used for dressing.

For both the groups, specific treatment was given for the associated disease.

METHOD OF PREPARATION

DRUG: - VRAN RAKSHAS TAILA

APPARATUS: - Khalwa yantra - 2

Wide mouthed vessel

Glass container

Ingredients

Parada - 10 grams

• Gandhak - 10 grams

• Hartala churn - 10 grams

• Sindur churn - 10 grams

• Manashila - 10 grams

• Tambra bhasma - 10 grams

Vatsnabha churna – 10 grams

• Rasona kalka - 10 grams

• Sarsapa taila - 10 grams

Preparation

Ist step- Parada and gandhaka are mixed well in khalwa yantra and kajjali is prepared.

IInd step- Fine powder of haratala, sindura, manashila, vatsnabha & rasona kalka are prepared in separate khalwa yantra.

IIIrd step- Kajjali is taken in khalwa yantra and the powder of tambra bhasma, haratala, sindur, manashila are added to kajjali.

It is mixed well. Later rasona kalka was added to the prepared kajjali & mixed well.

IVth **step-** In a wide mouthed vessel 200ml of sarshapa taila was taken and the mixture of kajjali was added to it and stirred well. To that vessel 400ml of water was added and placed below sunrays. Daily morning vessel was kept below sun rays and removed in the evening. The same procedure was followed for 25 days. On the 26th day after confirming the full evaporation of water from taila, it was removed from vessel and stored in glass container.

Duration of treatment – 1 month

Follow up period – 1month (changes were assessed on 3rd, 7th, 15th, and 30th, day)

Study design: Single blind between groups, comparative study with pre test and post test. The sign and symptom were recorded in the proforma designed specially for this study.

Inclusion criteria

- Delayed healing ulcer having the history of 2-3 weeks duration.
- Size of ulcer within 10cm.
- Bed sores
- Chronic surgical wound.

Exclusion criteria

- Ulcer less than 2-3 weeks duration.
- Ulcer more than 10 cm size.
- Malignant ulcer, Marjolin's ulcers
- Ulcer associated with chest injury and head injury.
- Ulcer associated with osteomylitis.
- Diabetic wound, syphilitic ulcer.

INVESTIGATION AND INTERVENTIONS

Investigation

- Total Haematogram with T.L.C., D.L.C., Hb% & E.S.R.
- Biopsy for the histopathological examination.
- R.B.S.
- V.D.R.L.

Intervention

Application of the Vrana Rakshas Taila. Once daily.

Method of Application

The procedure adopted was:-

- 1. Vrana was properly exposed.
- 2. It was thoroughly washed with Panchavalkala kashaya.
- 3. It was dried with sterile gauze.
- 4. If any of the Astavidha Shastra karma's needed used it.
- 5. The sterile gauze was prepared to the shape of wound; a thick layer of taila was applied to the gauze. Then placed over the wound and bandaging done carefully.

Though the bandaging is contraindicated in some of the Vrana's, bandaging done to prevent the contamination from surrounding and protect the part from external trauma and to keep the medicament on the lesion for longer duration.

Parameter of assessment

The patients were assessed on the basis of subjective and objective parameters before and after treatment.

Varna

Grade -0(-) - Twak samavarna.

Grade − 1(+) - Kapota varna (gray)

Grade - 2(++) - Shetarakta.

Grade - 3(+++) - Krishana.

Sraava

Grade -0(-) - No discharge

Grade -1(+) - If vrana wets 4x4 cm gauze piece (mild)

Grade -2(++) - If vrana wets 6x6 cm gauze piece (moderate)

Grade -3(+++) - If vrana wets more than 6x6 cm gauze piece (Profuse)

Vedana

Grade - 0(-) - No pain

Grade - 1(+) - pain relived without using analgesics (mild pain)

Grade - 2(++) - Pain relived with using of analgesics (moderate)

Grade -3(+++) - Pain not relived even after using analgesics (severe)

Gandha

Grade - 0(-) - No smell

Grade - 1(+) - Minimum bad smell (mild)

Grade - 2(++) - Intolerable Foul smell

Mamsanakura (Granulation tissue):-

Grade -0(-) - Healthy granulation

Grade - 1(+) - Moderate granulation

Grade - 2(++) - Unhealthy granulation

Grade 3(+++) - Granulation tissue absent

Criteria for Upashaya and Anupashaya

The results were classified as follows –

- **1. Uttama Upashaya:-** The wound getting healed within 2 weeks without any complications and without too much of functional constitutional and cosmetic disturbances.
- **2. Madhyama Upashaya:-** The wound getting healed within 2-3 weeks.
- **3. Alpa Upashaya:-** Patients with formation of granulation tissue under process at the end of
- 4 weeks, reduced discharge of pus, absence of slough, presence of slight pain and with healthy margins are considered to alpa upashaya.
- **4. Anupashaya:-** All the signs and symptoms of Dushta Vrana present at the start of the treatment, present even after completion of the duration and worsening of the clicinal picture the Dusta Vrana was termed as unchanged.

DISCUSSION ON THE EFFECT OF TREATMENT

Observation were made in 30 patients before and after treatment with Vrana Rakshas Taila in Trial group and dry sterile gauze dressing in Control Group with regard the subjective and objective criteria titled in the study before.

The trial has shown marked improvement in all patients

1) Varna

Group I: Varna changed considerably to normal (twak samavarna) in 60%, Before treatment severity of Vrana mean score was 2.2, and after the treatment mean score was reduced to 0.47, which is considerable significant in reducing the Varna.

Group II: Changes in varna 26.6%. Before treatment, severity of Vrana mean score was 2.33, and after the treatment mean score was reduced to 1.33, which is considerable significant in reducing the Varna.

2) Sraava

Group I: Discharge reduced in 86.6%, Before treatment severity of Sraava mean score was 2.53, and after the treatment mean score was reduced to 0.13, which is considerable significant in reducing the Sraava.

Group II: Discharge was reduced in 73.3%, before treatment mean score was 2.13, and after the treatment mean score was reduced to 0.73, which is considerable significant in reducing the Sraava.

3) Vedana

Group I: Vedana reduced upto 53.3%. Before treatment, severity of Vedana mean score was 2.53, and after the treatment mean score was reduced to 0.20, which is more significant in reducing the Vedana.

Group II: Vedana reduced upto 53.3%. Before treatment, severity of Vedana mean score was 2.73, and after the treatment mean score was reduced to 0.86, which is significant in reducing the Vedana.

4) Gandha

Group I: Foul smell has been eradicated nearly to 80%. Before treatment, severity of Gandha mean score was 1.06, and after the treatment mean score was reduced to 0.20, which is considerable significant in reducing the Gandha.

Group II: Foul smell has eradicated in 80%. Before treatment severity of Gandha mean score was 1.2, and after the treatment mean score was reduced to 0.86, which is considerable significant in reducing the Gandha.

5) Granulation

Group I: Improvement of healthy granulation tissue in 73.3% are noted, before treatment severity of Granulation mean score was 2.86, and mean score was reduced to 0.26, after treatment which is considerable significant in increasing the Granulation.

Group II: Development of healthy granulation was observed in 40%, before treatment severity of Granulation mean score was 2.26, and after the treatment mean score was reduced to 0.93, which is considerable significant in increasing the Granulation.

6) Size of the wound

Group I: Size of an ulcer has been reduced to considerable in 80% out of 15 patients. Before treatment the severity of size of wound mean score was 1.4, and after the treatment mean score was reduced to 0.2, considered to be significant in reducing the wound Size.

Group II: Size of vrana has reduced in 40%. Before treatment severity of size of wound mean score was 1.4, and after the treatment mean score was reduced to 0.86, which is significant in reducing the Size of the wound.

Among the 30 patients treated, the traumatic and varicose ulcers healed faster than bed sores and TAO. But differences are insignificant.

The over all result in trial group show that 73% patients were completely healed, 23.3% patients tends toward healing and 2.8% patients showed very low results in the one month period.

Where as in control group 46.6% patients healed 25.5% showed improvement, 20.9% showed moderate improvement and 6.6% cases showed no changes. This show that group I is more effective than group II.

Hence it was observed that Vrana Rakshas Taila as the name suggests synergistically shows doshahara action along with excellent sodhana and ropana effects.

Apart from this, the Vrana Rakshas Taila is having the effect of krimigna, sothahara, and vedana sthapana etc. All these qualities of a drug might have accelerated the healing process removing all such causative factor of Dusta Vrana.

CONCLUSION

- 1) All chronic and non healing ulcer with slough, foul smell, discharge etc. are considered as Dusta Vrana.
- 2) Normal pattern of wound healing can only be brought back, if the contaminated material is removed; such process is called vrana sodhana or debridement of the wound.
- 3) The trial drug Vrana Rakshas Taila by virtue of its properties like katu, tikta, rasa etc. is very much effective in treating Dusta Vrana.
- 4) The ingredients of drug (parada, gandha, tambra, hartal, etc.) acts as a lekhana, krimigana, vrana ropaka, sothahara vedana sthapana, and helpful in the process of granulation.
- 5) Sarsapa taila also having anti-bacterial and anti-inflammatory activity useful in reducing slough formation and swelling.
- 6) Thus Vrana Rakshas Taila proves its simple debridemetic agent as well as vrana ropana property in the management of Dusta Vrana.

BIBLIOGRAPHY

- 1. Baily & Love's Short Practice of Surgery, revised by Charles V. Mann, R. C. G. Russell, 21st edition, 1991, ELBS with Chapman and Hall.
- 2. Brahmanand Tripathi. Charaka Samhita of Agnivesh with Hindi Commentary Charak Chandrika. Vol I and II. I edition, Varanasi, Chaukhambha Surbharati Prakashan, 2004.
- 3. Abercrombie, M. Flint, M.H. and James, D.W. Wound Contraction in relation to collagen formation in scorbutic guinea pigs. J.Embryol Exp. Morphol, 1956; 4: 167.
- 4. Ayurvediya Rasashastra by Prof. Siddhinandan Mishra, 8th edition, Varanasi, Chaukhambha orientalia, 1998.