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# A REVIEW ARTICLE ON HEALING EFFECT OF DIFFERENT AYURVEDIC TAILA (MEDICATED OIL) IN NON-HEALING WOUNDS

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#### ABSTRACT

Non-healing wounds pose a significant healthcare challenge worldwide, with various factors contributing to their delayed healing. Ayurveda, the ancient Indian system of medicine offers a holistic approach to wound management. This review article aims to analyze the success rate of different *Ayurvedic taila* in the treatment of *Dushta vrana*. The article discusses review articles, clinical studies and case reports, shedding light on the potential of *Ayurvedic taila* as a valuable addition to modern wound care practices. Ayurvedic oils are applied directly to the wound site, facilitating the removal of dead tissue, reducing inflammation, and nourishing the surrounding skin.

**KEYWORDS:** Non-healing wound, vrana, Ayurvedic Taila.

## INTRODUCTION

The wound is defined as discontinuity of skin or tissue.<sup>[1]</sup> Even if it has healed it leaves a scar which stays lifelong. *Dushta vrana* worsens the condition of the patient with different complications and may become fatal. In India, most of the population still resides in poor hygienic and malnourished conditions, so the incidence of infection is maximum and delayed ulcer healing is more common.

In India, the prevalence of wounds in the population studied (6917) is 15.03 per 10002. [2] In today's modern world of civilisation, the occurrence of wounds is neglected due to a busy schedule. It results in various infections of the wound and it is transformed into *dushta vrana* i.e. non-healing wound. The procedure of wound healing is the series of various phenomena occurring in the body to heal a wound. Bacterial infections in the wound break the healing process and ultimately result in serious complications. The most important thing while managing *dushta vrana* is time as well as good resisting

power. Due to this, it becomes necessary to heal the wound within the legitimate time.

## AIM AND OBJECTIVE

To study the healing effect of different medicated *taila* used in Ayurveda for *dushta vrana*.

Various research articles published in National and international journals on different types of *taila* for *dushta vrana* were studied and the following observations were made.

## MATERIAL AND METHODS

The present work is a review study to find out the healing effect of different *Ayurvedic taila* preparations in *dushta vrana* (non-healing wounds). For this, clinical trials regarding the application of *Ayurvedic taila* preparations on non-healing wounds were studied from different national and international journals, published articles and different research papers.

Sr.No	Ayurvedic Taila	Research Article	Author
1	Ropan taila <sup>[3]</sup>	Review on wound healing activity of Ropana taila	Nidhi Shah et.al
2	Ingudi taila <sup>[4]</sup>	Clinical study of <i>Ingudi</i> ( <i>Balanites aegyptica</i> linn. delile) with special refference to its role in wound healing	Sanjeev Kumar, et.al
3	Apamarg kshara taila <sup>[5]</sup>	Clinical effect of <i>Apamarga Kshara Taila</i> and adjuvant drugs in the management of diabetic wound	Hetal Koriya, et.al
4	Jatyadi taila <sup>[6]</sup>	A case study on <i>Jatyadi Taila Vrana Basti</i> in the management of <i>Dushta Vrana</i> with special reference	Dr. M. R. Poornima

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		to Venous ulcer	
5	Kuppilai taila <sup>[7]</sup>	A study on the effects of a <i>Kuppilai</i> (Ennai) oil in the management of chronic wounds	S Anpuchelvy, G Sritharan
6	Kumari Swaras-siddha Taila <sup>[8]</sup>	Efficacy of Kumari Swaras and Kumari Swaras Siddha Taila in Vrana	Dr. Umakant S. Chaudhari et.al
7	Kampillakadi taila <sup>[9]</sup>	Wound healing potential of <i>Vakeri</i> fortified <i>Kampillakadi Taila</i>	Pranjali P. Dhawal et.al
8	Hinsradya taila <sup>[10]</sup>	Management of non-healing infected wound by external application of and <i>Hinsradya Taila</i> and <i>Triphala Guggulu</i>	Mhaiskar Bhushan D, et.al
9	Kasisadi taila <sup>[11]</sup>	Clinical effect of <i>Kasisadi Taila</i> in the management of post operative wound of infected sebaceous cyst-case report	Hetal Nakrani et.al
10	Chandanadi taila <sup>[12]</sup>	A review on wound healing potential of <i>Chandanadi</i> taila	Netam Tripti, Singh et.al
11	Priyangvadi taila <sup>[13]</sup>	Priyangvadi Taila-a potential remedy for Dushta vrana: a case study	Dr Harit Kumari, et.al
12	Haridra taila <sup>[14]</sup>	Clinical evaluation of the <i>shodhana</i> effect of <i>Haridra</i> taila and ropana effect of <i>Madhu</i> in dushta vrana	Rathore Garima, et.al
13	Jatyadi taila <sup>[15]</sup>	Wound healing effect of <i>Vimlapana karma</i> with <i>Jatyadi taila</i> in diabetic foot ulcer	Yogesh S.Kulkarni, et.al
14	Neem taila <sup>[16]</sup>	Effect of <i>Neem</i> oil and <i>Haridra</i> on non-healing wounds	Anjali Singh, et.al

#### RESULT AND DISCUSSION

- 1) Sanjeev Kumar, et.al conducted a clinical study on Ingudi taila. (Balanites aegyptiaca linn. Delile.) with special reference to its role in wound healing. Total 40 patients were studied which were divided into two groups having 20 patients in each group. Group 1 was treated with antiseptic topically with debridement. Group 2 was treated with *Ingudi tail* locally with debridement. The inter-group comparison showed no statistically significant difference at the initial and 6<sup>th</sup> weeks however, it was statistically highly significant at the 12th week (p< 0.01). In the subject treated with *Ingudi tail*, the wound area reduced by > 50% at the end of 6 weeks in comparison to the initial, in 3 patients of Group 1 and 10 patients of Group 2, whereas the reduction at the end of 12 weeks was more than 50% in 8 cases of Group1 and 17 patients of Group 2. Based on these findings, the study concluded that Ingudi oil is a good wound healer as it facilitates wound healing by regeneration and organization of healthy granulation and epithelialization.
- 2) Hetal Koriya, et.al conducted a clinical effect of Apamarga Kshara Taila and adjuvant drugs in the management of Diabetic wounds. In this single case study, a 70-year-old male diabetic patient with a nonhealing wound at the dorsum of the left foot since last 4 years was treated with systemic as well as local management with diet modification for 50 days. Case management was done by *Upakramas* like *Langhana* (depletion therapy), Pachana (digestion), Anulomana (normalization of Dosha movement), Triphala Kashaya (medicated decoction), Taila (medicated oil application), Avasadana (debridement of the wound), Utsadana (induction of granulation), Vrana Bandhana (dressing) and Pathya-Apathya (Do's and dont's) etc. which are mentioned in Sushruta Samhita. Complete wound

- healing was achieved in 50 days. On the first day patient presented with a non-healing ulcer at the dorsum of the left foot (Wagner's classification grade II), on the 15<sup>th</sup> day features of *Shuddha Vrana* noticed that were *Jihvatalabha* (pink colour), *Avedano* (painless), *Nirasravi* (no discharge), *Pidakisama* (pin head granulation). On the 30<sup>th</sup> day, *Rohit Vrana lakshana* (signs of wound contraction) was noticed and three zones of healing white zone, blue zone (*Kapotvarna Pratima*), and red zone achieved by continued wound dressing with *Apamarga Kshar Taila* and complete wound healing was achieved on 50<sup>th</sup> day by regular aseptic dressing.
- 3) Dr M. R. Poornima conducted a case study on Jatyadi Taila Vrana Basti in the management of dushta Vrana w.s.r. to venous ulcers. In this single case study 30 years old male patient without any systemic disorders presented with non-healing ulcer in the left lower limb just above the medial malleolus. The wound was cleaned with Panchavalkala Kashaya. After proper cleansing, Vrana Basti was done on alternate day with Jatyadi Taila which was kept in situ for 15 mins. After three sittings of Vranabasti, an approximation of ulcer edges was seen. Floor developed healthy granulation tissue with no slough. The pain and foul smell were reduced after 7 days. Gradually healing of the ulcer was seen over one and a half month. Jatyadi Tailaa is Tikta and Kashaya rasapradhana, which is Pittakaphahara and has Vrana Shodhana, Ropana, Pootihara, Vedanasthapana properties, which helped in healing of the wound.
- 4) S. Anpuchelvy et.al conducted a study on the effects of a *Kuppilai* (*Ennai*) oil in the management of chronic wounds. In this study, 40 patients were enrolled and divided equally into two groups. Group A patients were

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treated with *Kuppilai ennai* oil locally on the wounds once a day for 30 days and compared with the Group B patients who were treated with normal saline gauze. Analysis of types of wounds showed that 72.72% of treated cases of fissures were cured, followed by 66.67% of cases of post-operative wounds were cured. Similarly, some cases (50%) of Pressure sores were also reported cured. The size was decreased by 69.23% which was statistically highly significant. There was considerable improvement (> 80%) in swelling and unhealthy margin. Pain, tenderness, discharge and unhealthy granulation tissue showed moderate effect (between 60 to 70 per cent) in chronic wounds. The topical application of *Kuppilai ennai* is found efficacious in wound healing without any adverse effect.

- 5) Dr Umakant S et.al conducted the study Efficacy of Kumari Swaras and Kumari Swarassiddha Taila in Vrana. The study is carried out on 30 patients, which were divided into 2 groups each containing 15 patients. The patients from the first group were treated with Kumari Swaras and the patients from the second group were treated with Kumari Swaras Siddha Taila. Out of 15 patients from group A (Kumari swaras) 6 patients (40%) were completely cured Similarly from group B treated with kumari swaras siddha tail 9 patients (60%) were cured completely. Kumari (Aloe vera) is rakta prasadana in nature. This activity can be correlated with anti-inflammatory action due to the presence of sterol in aloe vera leaf gel. The study proved that Kumari (Aloe vera) has potent woundhealing action. Besides this, it is also anti-inflammatory and antimicrobial against the common pathogen of the wound.
- 6) Mhaiskar Bhushan D, et.al conducted a study of the management of non-healing infected wounds by external application of *Hinsradya Taila* and *Triphala Guggulu*. In this case, study 42 year male patient complaining of a wound on the lateral surface of the upper part of their right leg since last 5 years was treated with Triphala guggul 500 mg orally twice a day for 10 days and dressed with *Hinsradya tail* to the wound every third day for one month. During treatment, observations were made every third day. The colour of the wound changed after 3 days, Discharge reduced after 6 days, the slough and the foul smell were reduced gradually, and fresh Granulations were seen. The surface area of the wound decreased to half an inch in length, one inch in breadth and the wound completely healed at the end of 3 months. study proved that Hinsradya Taila external application can be used effectively in the management of non-healing wounds. Oral Triphala Guggulu intervention helped early wound healing and a significant reduction in pain.
- 7) Hetal Nakrani Dr., et.al conducted a Clinical Effect of *Kasisadi Taila* in the management of post-operative wound of infected sebaceous cyst- a case report. In this case study 50 years old female patient presenting with

- deep post operative wound at right gluteal region after the excision of infected Sebaceous cyst was treated with *Kasisadi Taila* locally in routine dressing instead of conventional dressing with antiseptic. The wound was observed and assessed daily for healthy granulation tissue. Wound healing was promoted from the base within 7 days. The wound size was reduced with contracted margins without any complication. The wound healed completely with a normal scar after two months. This single case study concluded that *Kasisadi* oil possesses *Shodhan* (Cleaning), *Lekhan* (Scraping/debride), *and Ropan* (healing) properties and has the potential to heal the post-operative wound of an infected sebaceous cyst.
- 8) Dr Harit Kumari et.al. conducted a study entitled 'A Potential Remedy for *Dushta Vrana*: A Case Study'. In this case study a 60 yearold male patient had a traumatic ulcer over the dorsum of the left foot with pus discharge, foul smell, pain & swelling around the ulcer since last 20 days. The wound was irrigated with freshly prepared lukewarm *Nimbtwak kwatha* daily, after proper cleaning with sterile swabs, *Priyangvadi Taila* was locally applied. The clinical features of *dushta vrana* were improved by the end of 1st week and the wound was healed completely at the end of 12th week leaving minimal scar. During the follow-up for 1 month, no signs of recurrence were noticed. Based on this case study, it can be concluded that the *Priyangvadi Taila* was found to be very effective in the management of *dushta vrana*.
- 9) Rathore Garima et.al. conducted clinical evaluation of the shodhana effect of Haridra taila and ropan effect of Madhu in dushta vrana. This study included 30 patients and duration of treatment was 90 days. Wounds were dressed daily with Haridra taila and Madhu till it get healed. Pain, tenderness, discharge, size and depth of ulcer as well as granulation tissue at floor were the parameters to assess the effect of the treatment on dushta vrana. Out of 30 patients 18 patients i.e. 60% were completely healed. 4 patients i.e. 3.33% were markedly healed, 6 patients i.e. (20%) were moderately healed and 2 patients i.e. 6.66% were mildly healed after the completion of the course as well as follow up period. The study concluded that Haridra tail mixed with Madhu as a dressing material is effecte in improving the signs and symptoms of vrana due to the shodhana effect of haridra Taila and the ropana effect of madhu.
- 10)Yogesh Sheshagirirao Kulkarni, et.al conducted a study 'Wound healing effect of *Vimplapankarma* with *Jatyadi taila* in diabetic foot'. In this case study 70 year old male patient had ulcer over a ventral aspect of the third toe of his right foot since 2 months along with discolouration, severe pain and reddishness. *Vimlapanakarma* was performed with *jatyadi taila on and* around the wound for about 15–20 minutes daily for 10 days. *Vimlapanakarma* showed a significant role in wound healing of diabetic foot ulcers, in a short period (10 days) with no recurrence seen till 45 days follow-up.

Gentle massage using *jatyadi taila* with the help of the thumb and pulp of the fingers leads to a rise in the local temperature. This in turn leads to the relief of vasoconstriction and thereby the necessary nutrients, oxygen, insulin etc. were carried to the wound site. The anoxic condition of the wound is thus alleviated which helped in the regeneration of the epithelial cells and heals the wound in a shorter duration of time when compared to the other wound healing processes seen in the diabetic foot ulcer.

11) Anjali Singh, et.al conducted the Effect of Neem taila and *Haridra* on non-healing wounds In this study total of 60 patients having wounds more than 6 weeks duration were enrolled and randomely allocated to Group I (topical application of *neem* taila). Group (Haridra powder capsules, 1 g 3 times orally) and Group III (both drugs). Among 60 patients only 47 patients completed the treatment. Group I treated 16 patients. Group II treated 11 patients and Group III 20 patients. Topical use of *neem taila* and oral use of *haridra* powder capsule used in combination was found effective for chronic non-healing wounds. More than 50% healing at 12 weeks was observed in 75% of cases in Group I, 54% in Group II and 90% in Group III, which shows statistical insignificance of healing in Group III. The beneficial effects of therapy were obvious from 4th week onwards. Among these patients pus and discharge decreased and granulation tissue began to appear by 2<sup>nd</sup> week, only one patient of Group III showed hypergranulation tissue formation. Those wounds that achieved 50% healing at the end of 8 weeks were, 43% in Group I, 18% in Group II, and 70% in Group III. It is observed that the use of neem taila alone is comparatively better than the single use of the haridra capsule. This study showed that the combined use of neem taila and haridra can be a better option for chronic non-healing wounds.

## CONCLUSION

A diverse range of *taila*, each with distinct herbal compositions, was employed to assess their therapeutic impact on chronic wounds are often challenging to heal through conventional means.

The success rate of medicated oils as a local application in the treatment of non-healing wounds is influenced by various factors including the type, chronicity and severity of the wound, patient-specific factors and the quality of the oils used.

From the above review, it is observed that the efficacy of various ayurvedic local applications in *taila* form for the management of non-healing wounds showed encouraging success rate. Most of the wounds were seen completely healed within stipulated time period. Thus, it can be concluded that, *dushta vrana* can be effectively managed with various conventional medicated oils as a local application along with supportive medicines.

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