AN OBSERVATIONAL STUDY TO EVALUATE THE EFFICACY OF NIRGUNDI TAILA IN DUSHTA VRANA W.S.R. TO VENOUS ULCER

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ABSTRACT
Venous ulcers (stasis ulcers, varicose ulcers) are the wounds occurring due to inappropriate functioning of venous valves, usually of the legs. It is one of the most serious chronic venous insufficiency complications¹. The overall incidence rate is 0.76% in men and 1.42% in women². When a venous valve gets damaged, it prevents the backflow of blood, which causes pressure in the veins that leads to hypertension and, in turn, venous ulcers³. These are mostly along the medial distal leg, which is often very painful, can bleed, and get infected. Treating varicose ulcers is a difficult task to the physician and a nightmare to the suffering patients, though a good number of the treatment principles are mentioned and practiced in allied sciences. In Ayurveda, this condition is considered as duṣṭavraṇa. It can be managed with the specific shodhanatherapy. Total 10 patients were selected for the study. Nirgundi taila⁴ was applied after cleaning wound with triphala kashaya⁵. In overall study, it was observed that Middle aged, males of lower middle income group with varicosity of large veins of the leg are the sufferers. Mean healing time is 5.5 weeks. Taila as upakrama is mentioned by Sushruta for VranaRopana andShodhana⁶. At the cell surface the lipid soluble drugs penetrate into the cell more rapidly than water soluble drugs and can enter into the circulation very quickly. Dravyas used in NirgundiTaila help in VranaShodhanaRopana, RaktaPrasadana.and also helps in reducing eczema. Also they have antifungal antimicrobial properties. They help to tone up the skin and connective tissue as it is having twachya and vranaropana properties⁷.

Keywords: vrana, Dustavrana, Nirgunditaila, Triphalakashaya, venous ulcer

INTRODUCTION
History of medical science starts with Vrana and its healing aspects. Theearliest medical writings like Vedic literature extensively consider wound / ulcer andits care in the context of injuries. Empirically, the ancient surgeons of India, Egypt, Greece and Europe developed the different gentle methods of treating the wounds. Treatments of wounds / ulcers are probably the first surgical problem faced by every doctor...
as frequency of injuries is more often than any other diseases.

Healing of Vrana is a physiological process of regeneration and repair after injury. Due to interference of vitiated Doshas, Vrana becomes Dushta and normal healing gets delayed. The presence of Dushta Vrana worsens the condition of the patient to a greater extent. Dushta Vrana, being a chronic ailment causes long-term suffering and so, to treat such types of Vranas specific treatments are necessary. Dushta Vrana can be considered as chronic non-healing ulcers like venous ulcer, diabetic ulcer, arterial ulcer or infected ulcers can be considered. Chronic venous ulcer is 5 to 7 times common than arterial ulcer. Its overall prevalence was given 0.18% and mainly reported in women in western countries. The incidence maybe more in our country as here patient do not seek early medical advice because of limb covering apparel, scanty financial resources and disregard for disfigurement of limb.

Venous ulcers (stasis ulcers, varicose ulcers) are wounds occurring due to improper functioning of venous valves, usually of the legs. Damaged venous valves prevent the backflow of blood and cause pressure in the veins. Hence an arterial pressure reduces significantly than venous and therefore, blood is not pumped as effectively into the area. A venous ulcer will not usually heal without expert advice and treatment. Without cleaning and regular dressings, the ulcers usually spread quickly. Venous ulcers can be very painful and may limit mobility and quality of life. The longer the duration of the venous ulcer, the more is the damage to skin and greater the difficulty in healing. The annual prevalence of venous leg ulcer among the elderly is 1.69%. The overall incidence rate is 0.76% in men and 1.42% in women.

In ancient Indian medicine, such conditions are considered as dusťavṛṇa (non-healing wounds) because they are produced by vitiated doṣas inside the body. This can be treated successfully with śodhana (purification) and śamana (pacification) therapy. So, the fore mentioned benefits basti (decoction enema therapy) were assessed in alleviating the symptoms and in the healing process of venarose ulcer in the patient.

According to the Ayurveda ulcers are known as “Vrana”. Which is divided into two types Healing ulcers are called “Nijaa Varna” and Non Healing ulcers are called “Dushta Varna”. Varna is the skin condition in which the tissues undergo destruction and after healing it leaves its scar.

From the Ayurvedic prospective, Vrana formation is a condition of Vata –Kapha origin. Vata is responsible for the faulty division of cells and Kapha for their growth. Hence Vata pushes Kapha out of the balance that results in the formation of Granthi. Kapha plays the predominant role as it enters the affected dhatu. The dhatusthat involves in this are Medas, Mamsa and Rakta. This results in the slow growth of the Granthi.

In non healing ulcers Pitta is vitiated and the condition becomes worst due to the involvement of all the three dosha. The Agni becomes dushit and starts digesting the surroundings tissues of the body slowly. In this the dosha also goes to the Mamsadhatu (Muscular tissue) and Ashtidhatu (Bones), as it goes deep it becomes more difficult to treat.

In Sushruta Samhita, the detailed management of ulcers, encompassing 60 Upakramas covering all aspects from the points of its occurrence to its total healing is mentioned. Taila is one among them for Shodhana and Ropana. Other upakramas are mentioned for Shodhana and Ropanae Kashaya, Varti, Kalka, Sarpi, Rasakriya and Avaschurnana. Among these, Taila Upakrama has its own specific indications in the management of Vrana. Nirgundita taila has been mentioned as one among them. Taila yoga contain the drugs possessing Shodhana and Ropana properties thus considered as the good measures for local treatment of Dushta Vrana.

MATERIALS AND METHODOLOGY

MATERIALS: The following materials were used during thesis work like

- Nirgundita taila
- Triphala Kashaya
• Scissors
• Measuring scale
• Sterile gauze
• Basin
• Vessel
• Cotton swab
• Artery forceps
• Scalpel
• B.P. handle
• Sterile gloves
• Kidney tray
• Roller bandage

METHODS:
For purpose of present study Nirgundi Taila was selected.

Sampling:
The present study was performed on selected patients aged between 20 and 70 years, irrespective of Sex, Educational status, Religion and Occupation. 10 Patients were randomly selected from OPD and IPD of Shalyatantra Dept of RAMC H & RC, BANGALORE. Patients having classical features of Dushta Vrana like Pain, Inflammation, Itching, spreading in nature, oozing of pus or blood and the wounds/ulcers which were not healed by primary intention were selected for trial. Patients were registered and treated for the present study with the help of proforma prepared for the study.

DIAGNOSTIC CRITERIA
Patient with Lakshanas of Dushta Vrana and having a chronicity of minimum 4 weeks.

INCLUSION CRITERIA
• Patients having Lakshanas of Dushta Vrana.
• Patients with symptoms of venous ulcer
• Patients of either sex were taken.
• Dushta Vrana occurring in extremities.
• Patients aged between 20-70 years.

EXCLUSION CRITERIA
• Dushta Vrana occurring in other than extremities.
• Pt with other systemic disorders
• Patient above age of 70 will be excluded

RESEARCH DESIGN:
It is a single group clinical study. Here Nirgundi Taila is taken for study.

A special case proforma containing all the necessary details pertaining to the study was prepared.
The data obtained in both the groups was recorded, tabulated, and statistically analyzed using paired t test

ASSIGNMENT:
After proper diagnosis, the selected 10 patients of Dushta Vrana were treated in following way
• Vrana Prakshalana using Triphala Kwatha.
• Dressing will be done by using Nirgundita la daily

After wearing sterile gloves, the ulcers were carefully examined and slough, pus discharge were cleaned with sterile gauze. Then ulcers were washed with Triphala Kashaya and dried with sterile gauze. The taila was applied to a sterile gauze and placed it over the wound and bandaging done. The quantity of taila was depending on the size of the Vrana.

The bandaging is done to prevent the contamination from surrounding area and to protect the part from external trauma and to keep the medicament on the lesion for longer duration. Depending upon the quantity of oozing and odour, dressing was done either daily or twice in a day and it was continued for a maximum of 56 days (8 weeks).

DURATION OF TREATMENT
The duration of treatment was for maximum of 8 weeks.

OBSERVATION PERIOD:
The changes in the Ulcer were observed once in a week as per case proforma.

FOLLOW UP PERIOD— Once in 15 days for 1 month after study duration.

ASSESSMENT CRITERIA
SUBJECTIVE PARAMETERS
1) PAIN
Grade 0- Absent
Grade 1- Present

2) ITCHING
Grade 0- Absent
Grade 1- Present
3) **BURNING SENSATION**
0 – No burning sensation.
1 – Continuous burning sensation

**OBJECTIVE PARAMETERS**

1) **DISCHARGE**
Grade0- Absent
Grade1- Present

2) **SMELL**
Grade0- Foul smell absent
Grade1- Foul smell present

3) **FLOOR**
Grade0- complete wound healing
Grade1- evenly spread pink granulation tissue
Grade2- evenly spread bright beefy red granulation tissue
Grade3- no healthy granulation tissue/ covered with slough

4) **TENDERNESS**
Grade0- Absent
Grade1- Present

5) **EDGE**
Grade0- Not well defined
Grade1- With advanced border of epithelium
Grade2- No advancing border of epithelium
Grade3- Well defined

6) **SURROUNDING SKIN**
Grade0- No discoloration
Grade1- Blackish discoloration around the ulcer with normal skin texture.
Grade2- Blackish discoloration around the ulcer with dryness of skin
Grade3- Dark blackish discoloration around the ulcer with thickened skin.

Healing index = size of wound / time of healing (in days)

**EXCELLENT**- Dustavrana lakshanas changes in to Roodha vrana lakshanas

**GOOD** – Dustavrana lakshanas changes in to Roohyamana vrana lakshanas

**FAIR** – Dustavrana lakshanas changes in to Shuddha vrana lakshanas

**POOR** - Dustavrana lakshanas remain as it is or only few criteria respond

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**LAB INVESTIGATIONS**

**Blood**
- Hemoglobin percentage:
- Total Count
- Differential count
- E S R
- Blood Sugar Level

**OBSERVATION**
Out of total 10 patients, maximum 6 were in the age group of less than 30 years(10%), 6 were females, 5 were un educated, 8 from urban region, 8 were hindus, in Chronicity, 7 had > 5 months, 6 were vegetarians, 6 patients were having onset of disease due to trauma, varicosity of large veins in 7 patients.

**DATA RELATED TO THE CLINICAL OBSERVATIONS**

1. **PAIN**
Before treatment pain was present in 9 patients (90%) absent in 1 patient (10%).
At the end of first week, pain was present in 7 patients (70%) absent in patients (30%).
At the end of second week, pain was present in 6 patients (60.0%) absent in 4 patients (40%).
At the end of third week, pain was present in 5 patients (50%) absent in patients (50%).
At the end of fourth week, pain was present in 3 patients (30%) absent in 7 patients (70%).
At the end of sixth week, pain was present in 2 patients (80%) absent in 2 patients (20%).
At the end of eighth week, pain was present in 0 patients (0.0%) absent in 20 patients (100%).

2. **ITCHING**
Before treatment itching was present in 6 patients (60.0%) absent in 4 patients (40%).
At the end of first week, itching was present in 5 patients (50%) absent in patients (50%).
At the end of second week, itching was present in 3 patients (30%) absent in 7 patients (70%).
At the end of sixth week, itching was present in 2 patients (80%) absent in 2 patients (20%).
At the end of eighth week, itching was present in 0 patients (0.0%) absent in 20 patients (100%).
At the end of fifth week, itching was present in 0 patients (0.0%) absent in 10 patients (100%).
At the end of eighth week, itching was present in 0 patients (0.0%) absent in 10 patients (100%).

3. Evaluation of discharge
Before treatment discharge was present in 9 patients (90.0%) absent in 1 patients (10%).
At the end of first week, discharge was present in 7 patients (70%) absent in 3 patients (30%).
At the end of second week, discharge was present in 6 patients (60.0%) absent in 4 patients (40%).
At the end of third week, discharge was present in 3 patients (30%) absent in 7 patients (70%).
At the end of fourth week, discharge was present in 2 patients (20%) absent in 8 patients (80%).
At the end of fifth week, discharge was present in 0 patients (0.0%) absent in 10 patients (100%).
At the end of eighth week, discharge was present in 0 patients (0.0%) absent in 10 patients (100%).

4. Evaluation of smell
Before treatment smell was present in 4 patients (40%) absent in 6 patients (60%).
At the end of first week, smell was present in 4 patients (40%) absent in 6 patients (60%).
At the end of second week, smell was present in 2 patients (20%) absent in 8 patients (80%).
At the end of third week, smell was present in 2 patients (20%) absent in 8 patients (80%).
At the end of fourth week, smell was present in 0 patients (0.0%) absent in 10 patients (100%).
At the end of fifth week, smell was present in 0 patients (0.0%) absent in 10 patients (100%).
At the end of eighth week, smell was present in 0 patients (0.0%) absent in 10 patients (100%).

5. Evaluation of tenderness
Before treatment tenderness was present in 8 patients (80.0%) absent in 2 patients (20%).
At the end of first week, tenderness was present in 6 patients (60.0%) absent in 4 patients (40%).
At the end of second week, tenderness was present in 4 patients (40%) absent in 6 patients (60%).
At the end of third week, tenderness was present in 3 patients (30%) absent in 7 patients (70%).
At the end of fourth week, tenderness was present in 1 patient (10%) absent in 9 patients (90%).
At the end of fifth week, tenderness was present in 0 patients (0.0%) absent in 10 patients (100%).
At the end of eighth week, tenderness was present in 0 patients (0.0%) absent in 10 patients (100%).

6. Evaluation of floor
Before treatment, floor was in grade 3 in 10 patients (100%), in grade 2, in 0 patient (0%), in grade 1, in 0 patient (0%), grade 0 in, 0 patient (0%).
At the end of First week, floor was in grade 3 in 7 patients (70%), in grade 2, in 6 patients (60%), in grade 1, in 2 patients(20%), in grade 0, in 0 patient.
At the end of second week floor was in grade 3 in 0 patient (0%), in grade 2, in 7 patients (70%), in grade 1 in, 1 patients (10%), in grade 0, in 2 patients (20%).
At the end of third week floor was in grade 3 in 0 patients (0%), in grade 2 in, 2 patients (20%), in grade 1 in 6 patients (60%), in grade 0, in 2 patients (20%).
At the end of fourth week floor was in grade 3 in 0 patients (0%), in grade 2, in 0 patient (0%), in grade 1, in 2 patient (20%), in grade 0, in 8 patients (80%).
At the end of fifth week floor was in grade 3 in 1 patients (10%), in grade 2, in 0 patient (0%), in grade 1, in 0 patient (0%), in grade 0, in 9 patients (90%).
At the end of eight week floor was in grade 3 in 0 patients (0%), in grade 2, in 0 patient (0%), in grade 1, in 1 patient (10%), in grade 0, in 9 patients (90%).

7. Evaluation of edge
Before treatment, edge was in grade 3 in 9 patients (90%), in grade 2, in 1 patient (10%), in grade 1, in 0 patient (0%), grade 0, in 0 patient (0 %).
At the end of First week, edge was in grade 3 in 7 patients (70%), in grade 2, in 2 patients (20%), in grade 1, in 1 patients (10%), in grade 0, in 0 patient.
At the end of second week edge was in grade 3 in 0 patient (0%), in grade 2, in 5 patients (50%), in grade 1, 4 patients (40%), in grade 0, in 1 patients (10%).
At the end of third week edge was in grade 3 in 0 patients (0%), in grade 2, in 2 patients (20%), in grade 1, in 6 patients (60%), in grade 0, in 2 patients (20%).

At the end of fourth week edge was in grade 3 in 1 patient (10%), in grade 2, in 0 patient (0%), in grade 1, in 2 patients (20%), in grade 0, in 7 patients (70%).

At the end of sixth week edge was in grade 3 in 1 patient (10%), in grade 2, in 0 patient (0%), in grade 1, in 0 patient (0%), in grade 0, in 9 patients (90%).

At the end of eight week edge was in grade 3 in 0 patient (0%), in grade 2, in 0 patient (0%), in grade 1, in 1 patient (10%), in grade 0, in 9 patients (90%).

8. Evaluation of surrounding skin

Before treatment, surrounding skin was in grade 3 in 8 patients (80%), in grade 2, in 1 patients (10%), in grade 1, in 1 patients (10%), grade 0, in 0 patient (0%).

At the end of first week, surrounding skin was in grade 3 in 1 patient (10%), in grade 2, in 5 patients (50%), in grade 1, in 4 patients (40%), in grade 0, in 0 patient.

At the end of second week surrounding skin was in grade 3 in 0 patient (0%), in grade 2, in 6 patients (60%), in grade 1, in 4 patients (40%), in grade 0, in 0 patient.

At the end of third week surrounding skin was in grade 3 in 0 patient (0%), in grade 2, in 2 patients (20%), in grade 1, in 8 patients (80%), in grade 0, in 0 patient (0%).

At the end of fourth week surrounding skin was in grade 3 in 0 patient (0%), in grade 2, in 1 patient (10%), in grade 1, in 9 patients (90%), in grade 0, in 0 patient (0%).

At the end of fifth week surrounding skin was in grade 3 in 0 patient (0%), in grade 2, in 1 patient (10%), in grade 1, in 9 patients (90%), in grade 0, in 0 patient (0%).

At the end of eighth week surrounding skin was in grade 3 in 0 patient (0%), in grade 2, in 1 patient (10%), in grade 1, in 9 patients (90%), in grade 0, in 0 patient (0%).

**RESULTS**

**Pain:**

P-value was strongly significant during second week and suggestive of significance at third week.

At the end of the treatment, in the group, 9 patients were under grade 0 and 1 was under grade 1.

**Itching:**

P-value was strongly significant during first, second, third and fourth week. At the end of the treatment, in group 8 patients were under grade 0 and 1 patient was under grade 1.

**Discharge:**

P-value was strongly significant during first and second week. At the end of the treatment in the group, 7 patients were under grade 0 and 3 patient was under grade 1.

**Smell:**

P-value was strongly significant during first week and moderately significant during second week. At the end of the treatment, the patients were under grade 0.

**Tenderness:**

P-value was strongly significant during second week. At the end of the treatment in group all the patients were under grade 0.

**Floor:**

P-value was moderately significant during first, fourth and sixth week. At the end of the treatment in group, no patients were under grade 3, 2 patients were under grade 2, no patients were under grade 1.

**Edge:**

P-value was moderately significant during fourth and sixth week. At the end of the treatment in group no patients were under grade 3, 2 patients were under grade 2, 0 patients were under grade 1, 18 patients were under grade 0.

**Surrounding skin:**

P-value was strongly significant during second, third and fourth week and suggestive of significance during first week. At the end of the treatment group no patients were under grade 3, 3 patients were under grade 0.
grade 2, 7 patients were under grade 1, no patients were under grade 0.

**DISCUSSION**

The study was an observation study of nirgundi taila in the management of Dushta Vrana. Taila upakrama w.s.r to varicose ulcer is a treatment for Vrana having the property of both Shodhana and Ropana. In the current surgical practice debridement is one of the procedures to remove the slough and to promote healing process. A beneficial impact is achieved in the present study by integrating advanced knowledge, to evaluate the concepts of ulcer management. Cost effectiveness meets the need of the poor.

First, Dushta Vrana will be cleaned by using Triphala Kwatha. This will also enhance the formation of granulation tissue by removing the slough. Gauze dipped in nimbadi taila is to be applied in control group, to create and maintain a clean, moist environment. Shodhana or Ropana guna will be achieved by virtue of its properties.

The patients have been advised to avoid Kleda Janaka Viharas like day sleep, Aharas like fresh grains, milk, curds, fatty substances, horse gram, food having Amla, Lavana & Katu rasa

This includes different measures by local and general medications as well as properdiet. Appropriate management in proper time will help to avoid the conversion of Sadhyain to Asadhyacategory. From this it is clear that Sushrutaappreciated woundhealing & regarding this he must have performed several experiments. For managing the different stages / conditions from Vrana till managing the complications produced after the complete healing of a vrana, a series of treatmentsmodalities have been mentioned in our classics. The line of treatment can be summedup as follows:  
1. Pacify the Vrana in the initial stage, thereby preventing its further development.  
2. Vrana attains Pakwaavastha by promoting suppuration. Once the contents are drained out, the patient gets relief from pain and also there is now a chance of healing.

3. Sodhana and Ropana of Dushta Vranatill vrana become Shudhaby means of desloughing and promoting healing with appropriate Upakrama.

4. Correcting the Vaikrutha of Vrana (restoration of various deformities) due to complications which are produced during the process of healing.

So the 60 Upakramas which are mentioned in SushrutaSamhita is indicated in the management of Vrana, Vrana and its various complications produced during the process of healing of a Vrana. Among them Kashaya, Varti, Kalka, Sarpi, Taila and Rasakriya are used for both Sodhana and Ropana of Vrana.

**B. DISCUSSION ON DRUG**

To achieve the main goal of healing, it is necessary to remove the local Dushtioondebridement at the site of Vrana. In Misrakadhyaya of Sushrutasamhita, drugs for Shodhana and Ropana of Vrana are clearly mentioned. In VranahavingUnnathamamsa, Alpasravaand Asnigdhatha, should be cleansed with taila prepared by using Shodhana drugs. In KaphaVataVrana, healing is attained by taila prepared with RopanaDravya.

**KASHAYA PRAKSHALANA**

Kashayais one among the ShastiUpakrama used for VranaShodhana and Ropana. Prakashalana is the process of pouring liquid into the affected part. In thisUpakrama, VranaPrakashalanais done with the Kashayarhich are having VranaShodhanaand Ropanaproperties. According to AcharyaSusrutha, Vranarhich emitsbad smell, exudes discharges should be cleaned with Kashayaof drugs having Shodhanaeffect.

DushtaVraanaor Vrana caused by Kushta and Prameha. In vrana which is not Sudha, Kshalana of Kwatha prepared with Patola and NimbaPatra can be used and in Vrana which is Sudha, Kshalanaof Kwatha prepared with the Twak of Nyagrodhadiganan can be used.
Acharya Vangasena explained Vrana Prakashalana with Bringaraja Swarasa and TriphalaKashaya for Vrana Shodhana. AcharyaCharaka mentioned that Vrana Shodhana should be done when there is PoothiGandha, Vivarnata, BahuSrava and MahaRuja. For vranaShodhanaKashaya prepared with Harithaki, Vibhithaki, Amalaki, etc

1. Taila: Tilatala is used in the preparation of nirgunditaaila. It has Ushna, Katu, Teeksha, Madhura, Vataguna, Vyavayi, Vikasi & Sookshmagunas. When it is treated with drugs it takes the properties of those drugs. So it might help in reaching the minute channels by means of its Sookshma, Vyavayi, Vikasagunas & helps in reducing Vedana.

2. Shodhana: Refers to irrigation of the local debris by means of Lekhanaaction andLaghu, Tikshnaproperties. In case of Vranaassociated with Durgandha, Kledhaand Picchilagunas, Shodhanashould be done by using Kashayaof various Dravyas. This ultimately cleans the vrana.

3. Ropana: It is achieved by action of “DhatuPoshana”. Ropanakriya of should be adopted in Vranas which are having the features of ShudhaVrana.

PAIN: Pain is due to the predominance of VataDoshaandalso due to the inflammation and ischemic changes in the ulcer.

ITCHING SENSATION: This is due to the predominance of KaphaDosha in the condition. Itching sensation is also caused by venous insufficiency, poorly controlled diabetes, pus discharge and slough due to infection.

BURNING SENSATION: This is because of the predominance of Pitta and Rakthuin the condition. Burning sensation can also occur in diabetic neuropathy, ischemia and arterial insufficiency.

SMELL: This is due to infection, purulent discharge and slough formation.

DISCHARGE: Purulent discharge was observed in most of the diabetic ulcers and serous discharge is observed in venous ulcer.

TENDERNESS: Severe Tenderness is found in patients having ulcer due to venous and arterial insufficiency.

GRANULATION TISSUE: The floor of the ulcer was partially covered without Granulation tissue formation. Due to improper Granulation tissue formation, healing was delayed.

CONCLUSION

It was observed that venous ulcer is a type of Dustavrana, incidence of Dustavrana increase with the age. It was mainly found in unskilled workers and housewives.

This incidence of Dustavrana was more in patients with varicosity of large veins.

Incidence of Dustavrana was more in patients who had not undergone any treatment for venous insufficiency but in few cases, it comes back even after post-Surgery.

The technique used in this research is simple, cost effective, can be done as an outpatient procedure with easily available medicines and also there have been no untoward side effects found in the study.

The procedure is well tolerated; it does not require high-tech gadgets or anaesthesia.

There was improvement in to Discharge, smell and tenderness, improvement was shown highly with respect to pain, itching, discharge, floor, edge and surrounding skin.

Mode of Action Nirgundi Taila:

Most of the ingredients of taila are having Tikta, Kashaya rasa and Laghu, RukshagunasKashaya rasa: It does Shoshana and hence helps in VranaRopana.

Tikta rasa: It does Twak – MamsaShtireekarana & Lekhana, it might help in increasing tensile strength of the DushtaVrana.

Katu Rasa: It has Vrana Shodhana & Avasadana properties.
Tilataila helps in reaching the minute channels by means of its Sookshma, Vyavayi, Vikasigunas and helps in reducing Vedana. Jatyaditaila includes the drugs which Possess Shodhana & Ropana qualities; it helps in proper healing of Dushtavrana.

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