Abstract: Wounds and wound infections have become a common entity which is faced by different physicians and surgeons. Chronic, non-healing wounds like Diabetic wounds, Varicose ulcers, bed sores have become a challenge to the medical fraternity. Antibiotics are efficient in killing and controlling the growth of microorganisms by their bactericidal and bacteriostatic actions but due to the repeated use of antibiotics, organisms have become resistant to their action. Vrana Dhoopana described in Ayurveda helps in cleaning and disinfecting the wound and also promotes fast healing of wounds. In this study, 60 patients were randomly selected and divided in two groups. Vrana dhoopana followed by dressing with vrana shodhana taila was administered to the 30 patients in Group A (Trial group) and only dressing with vrana shodhana taila was done in the 30 patients in Group B (Control group). Significant results were obtained in Trial group where the wound was subjected to Nimbadi Dhoopa. It means we can conclude that Vrana Dhoopana with Nimbadi Dhoopa has significant results on Dushta Vrana. It helps in minimizing the infection present in the wound thus, having Rakshoghnath effect on it.

Keyword: Nimbadi Dhoop, Rakshoghnath, Dushtavrana

Introduction: Wounds i.e. Vranas are considered to be the primary pathology in the field of Surgery. Chronic, non-healing wounds that are common now-a-days have become a challenge to the medical fraternity. Growth of micro-organisms and secondary infections in the wounds have led to the over use of antibiotics. Due to this, we get resistant strains of micro-organisms which make the use of antibiotics futile. The problem of non-healing, infected wounds also has solutions that have been described long back by our Acharyas. One such solution is Dhoopana of infected wounds.

The word ‘Dhoopana’ means fumigation. The process of ‘Vrana Dhoopana’ involves fumigation of infected wounds by medicinal drugs. These drugs possess the properties of cleansing and disinfecting the infected wounds thereby, promoting their fast healing by reducing symptoms like Srava (discharge), Vedana (pain), Durgandhi (foul smell) etc. which indicate state of infection in Vrana.

Aims_and_Objects:

Evaluation of cleaning, healing, and disinfecting action of Vrana Dhoopana in the wound

Materials and Methods:

Effect of Nimbadi Dhoopa on Dushtavrana was assessed by study in the patients with Dushtavrana (infected
wound). For this purpose clinical study was carried out mainly into following phases –

- Preparation of Dhoopana box and combustion chamber.
- Selection of patients.
- Clinical trials.
- Assessment of wound.

For present clinical study 60 patients of Shakhagata Dushta Vrana were selected from O.P.D. and I.P.D. department of Shalyatantra of college. These patients were selected irrespective of their age, sex, religion, educational, marital and socioeconomic status. Detail history of all patients was obtained as per prepared pro-forma. Routine investigations were done like haemogram, urine routine, B.S.L. random, and others as required.

- Group A (Trial Group / Nimbad Dhoopa) – Nimbad Dhoopana done for 15 minutes prior to vrana karma. Vrana Karma done with Vrana shodhana taila.
- Group B (Control Group / Vrana shodhana taila) - Vrana Karma done with Vrana shodhana taila.

In both the groups, wound was cleaned with betadine prior to Vrana karma.

Inclusion criteria –
- Diabetic wounds
- Non healing ulcers
- Post debridement wounds
- Infected sutured wounds
- Infected wounds with maggots
- Infected wounds due to trauma (which fail to heal within 7 days)
- Infected burn wounds

Exclusion criteria –
- Gangrenous wounds
- Septic shock patients
- Squamous cell carcinoma

e) Withdrawal criteria-

1. Aggravation in symptoms within 7 days.
2. Patients who refused to continue the treatment.

The criteria of assessment for Dushta Vrana are based on the basis of changes in the signs and symptoms of Dushta Vrana. The clinical signs and symptoms were noted before the treatment. After that respective therapy was given till appearance of signs of Shuddha vrana with a maximum period of 30 days.

Nimbadi Dhoopana was done as follows:

1. Powders of Nimba patra, Vacha, Hingu niryas and Saindhav Lavan were taken in equal amount. Goghrita was added to the above mixture in the same amount as that of the individual drug. All the above mentioned contents of Nimbad Dhoopa were mixed thoroughly.
2. In the combustion chamber, combustion of the above mixture was done. This resulted in the formation fumes of the Nimbad mixture.
3. The limb (Shakha) bearing the infected wound was introduced inside the Dhoopana box through the ‘U’ shaped openings at both sides of the box.
4. The combustion chamber too, was now placed inside the Dhoopana box so that the infected wound was exposed to the Nimbad Dhoopa. In this way, Nimbad Dhoopana of the infected wound was done for 15 minutes prior to dressing. The assessment done was as follows:

- Vedana (Pain)
- Srava (Discharge)
- Varna (Colour)
- Gandha (Smell)
- Kandu (Itching)
- Akruti (Shape)

Observations:
DHOOPANA BOX
COMBUSTION CHAMBER

INFECTED WOUND
AFTER DHOOPANA

Result:
Symptomwise percentage relief in both groups:

A) For group A i.e. Trial group:
- 80.60% relief in Vedana criterion,
- 82.11% relief in Srava criterion,
- 80.80% relief in Varna criterion,
- 92.01% relief in Gandha criterion,
- 85.03% relief in Kandu criterion,
- 91.91% relief in Akriti criterion for group A (Trial group).

B) For Group B i.e. Control Group:
- 72.88% relief in Vedana criterion,
- 74.39% relief in Srava criterion,
- 71.97% relief in Varna criterion,
- 89.03% relief in Gandha criterion,
- 83.11% relief in Kandu criterion,
- 87.16% relief in Akriti criterion for group B (Control Group).
The total percentage relief in Group A i.e. Trial Group is 85.41% while the total percentage relief in Group B i.e. Control Group is 79.76%.

Discussions:

Significant results were obtained in Trial group where the wound was subjected to Nimbadi Dhoopa. This may be because Dhoopa has Agni, Vayu and Aakash mahabhoota adhikya. Agni has Kapha and Kleda nashaka properties while Vayu and Aakash have Sookshma Sroto Gamitva property. Hence, the action of the contents of Nimbadi Dhoopa takes place in every nook and corner of the Vrana. Anti microbial action of Nimba, Rakshogchna property of Vacha, Stimulant action of Hingu and desloughing action of Saindhav lavana and Ghrita together result in early conversion of Dushta Vrana into Shuddha Vrana

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