



## EXTENSIVE EFFECT OF GOMUTRA, DHUPANA & JATYADI TAILA ON CHRONIC NON-HEALING DIABETIC ULCER – “A CASE REPORT”

### Ayurveda

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### ABSTRACT

Ulcer (*Vrana*) is an injury to the body that typically involves laceration or breaking of a membrane of the skin and usually damage to underlying tissues. Presence of infection and diabetes are important factors which impair wound healing and attains chronicity which is called chronic non-healing diabetic ulcer. Classics of *Ayurveda* especially *Sushruta* while explaining ulcer & its management has quoted *Dushta Vrana* (chronic ulcer) which is difficult to heal. *Dushta Vrana* is a long standing ulcer where removing debris enabling drug to reach healthy tissue is more important. A fifty four year male patient, milk maid by occupation visited to KLE Ayurveda hospital, Belagavi having non-healing ulcer at lateral aspect of right leg from knee to heel of since 3 months. Classical *ayurvedic* intervention which include *Pariseka* (Pouring liquid) with *Gomutra* (Cow's urine) and *Sphatika Jala* (alum water) were planned. Subsequently, *Dhupana* (Fumigation) with *ayurveda* drugs and dressing was done with *Jatyadi taila* for a period of 1 month. Local treatment along with anti-diabetic medication showed higher efficacy in *vrana shodhana* (Wound cleansing) and *vrana ropana* (wound healing) with fine scarring without producing any adverse events and there is relief in signs and symptoms of *Vrana*.

### KEYWORDS

Chronic non-healing Diabetic ulcer, *Dhupana*, *Gomutra*, *Jatyaditaila*, *Sphatikajala*.

### INTRODUCTION

*Vrana* is an injury to body that typically involves laceration or breaking of a membrane of the skin and usually damage to underlying tissues. The ulcer is healed by three ways. First is primary intention, second is Secondary intention & third is tertiary intention (delayed primary intention). Sometimes the ulcer refuses or fails to heal, this type of wound is called as chronic non healing wound.

In *Ayurveda*, chronic non healing ulcer can be said as *Dushta vrana* where the wound is contaminated. It will be having cadevorous look, irritating smell and are noticed by extreme pain and burning sensation. Besides these, swelling, redness, itching, pustules are seen around the ulcer. There will be amorphous secretions of impure blood. The wound will remain unhealed for a prolonged period.

Better wound healing with minimal scar formation and controlling the pain effectively are the prime motto of every surgeon for a wound management from its manifestation to normal rehabilitation. In spite of the advances that have been made, the management of chronic wounds is still a challenge for the clinician. *Acharya Sushruta* was quite aware of the importance of wound management and has described *Shashthi Upakramas* (sixty measures) for management of wound to achieve good approximation, early healing without complication and acceptable scar. Among with these, *Pariseka*, *Dhupana* and *Bandana* have their own specific indication in the management of *vrana*. These are non-invasive procedures without major complications, does the *shodhana* of *Dushta Vrana*, remove all slough/dead tissue and *vrana* becomes *Shuddha* and thus enhances wound healing. *Acharya Sushruta* has mentioned in the management of wound that, *pariseka* can be done with *mutra*, *taila* (oil), *ksharajala* (alkaline water) etc. *Dhupana* can be done with herbal drugs or animal products and at the end *bandana* (dressing) can be done to keep the wound clean. In this case, for the wound management, *Pariseka* with fresh *Gomutra* (urine of same cow) and *sphatika jala* (alum water), *dhupana* with herbal ingredients and dressing with *Jatyadi taila* were performed to get a better healing.

### CASE REPORT

A male patient aged about 54 years, visited to *Shalya Tantra* OPD of KLE Ayurveda Hospital with the chief complaints of non-healing diabetic ulcer at lateral aspect of right leg from knee to heel of since 3 months. Patient had met with an accident 3 months back. Patient took treatment in private nursing home for the same. Later surgeon advised for amputation of right leg for non-healing ulcer. Patient had a strong deny on amputation as disfigurement and is going to cause mental, emotional and economical stress. With a strong hope and belief in *ayurveda*, patient got admitted in KLE *ayurveda* hospital.

On examination of ulcer, floor of the ulcer had necrotic tissue. Margins were necrotic, irregular with bleeding [Fig.1]

During admission, wound management was done daily with *Pariseka* of fresh *Gomutra* (procured on daily basis from village area) followed by *Sphatika Jala* (alum water). Later *Dhupana* (daily 2 hours after *Sphatikajala parisheka*) with *churnas* (powder) of herbal drugs such as *Kushta*, *Devadaru*, *Daruharidra*, *Vacha*, *Vidanga*, *Raala*, *Khadira* & *Nimbatwak* which is mixed with *Goghrita* for 10 minutes. Later, dressing with *Jatyadi taila* was done once in a day 4 hours after *Dhupana*. Internal medications such as *Guggulu tiktaka ghrta* 10ml BD, *varunadi kashaya* 10 ml two times a day were given for 10 days [Table no. 1].

**Table No.1: Showing treatment protocol followed in the case**

During Admission [1 month]	
External treatment	Internal treatment
1. <i>Gomutra Pariseka</i>	1. <i>Guggulu tiktaka ghrta</i> 10ml BD
2. <i>Dhupana</i> with herbal drugs	2. <i>Varunadi kashaya</i> 10 ml BD
3. Dressing with <i>Jatyadi taila</i>	-

### RESULTS:

The clinical features of *dushta vrana* were improved and the ulcer was healed completely at the end of one month leaving minimal scar [Fig. 2]. And in the follow up for a period of 1 month, the patient has shown no signs of recurrence.

**Fig: 1- Before Treatment Fig: 2- After Treatment**



### DISCUSSION ON RESULTS:

*Gomutra* used in the management of wound possess antimicrobial activity due to the presence of certain components like volatile and nonvolatile ones. Presence of urea, creatinine, *swarna kshara* (aurum hydroxide), carbolic acid, phenols, calcium, and manganese has strongly explained the antimicrobial and germicidal properties of *gomutra*, it has bactericidal by increasing the bacterial cell surface hydrophobicity. Higher amounts of phenols in fresh cow's urine than makes it more effective against microbes. Hence, it helps in better healing. A clinical study was conducted on *sphatika jala*, where statistical results showed significant reduction in the time required for

complete healing of the ulcer compared with placebo group because of its antibacterial and antimicrobial activity. *Dhupana* with herbal drugs helped in maintaining the dryness in the wound. Most of the ingredients used in *Jatyadi taila* are *Shothahara*, *Vedanasthapana* and *Ropaka* which are important requirements of a healing wound. The ingredients of *Jatyadi Taila* like *Haridra*, *Karanja* are *Kushthagana* and *Krimighna*, hence it was also found helpful to check wound infection. The *Neema* (*Azadirachta indica*) and *Daruharidra* (*Berberi aristate DC*) of *Jatyadi taila* are proven drugs to check bacterial growth and promotes wound healing. *Jatyadi taila* dressing fastens the healthy granulation tissue formation and re-epithelialisation starts soon in the chronic/non-healing diabetic ulcer and help in healing of edges of wound. *Guggulu tiktaka ghruta* have anti-inflammatory and anti-ulcerogenic properties helps in correcting the pathology. Also *varunadi kashaya* have *lekhana* (scrapping) action helps in effective healing.

## CONCLUSION

On the basis of this case study, it can be concluded that, local *pariseka* with *Gomutra* and *sphatika jala*, *Dhupana* with herbal ingredients and *Jatyadi taila* dressing found to be effective in the management of *Dushta vrana*. *Gomutra* and *sphatika jala* possesses high efficacy in *vrana shodhana* and *vrana ropana* with fine scarring without producing any adverse effect and relief in signs and symptoms of *dushta vrana*. *Ropana* effect of *jatyadi taila* resulted in proper and early healing of *dushta vrana*. In view of no any adverse effects and affordable economically by all, it can be recommended in combination for the treatment of chronic non healing diabetic ulcer.

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