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ABSTRACT

Wound healing has always been a significant challenge in both ancient and modern medicine. Long before the advent of surgical advancements, *Acharya Sushruta*, the pioneer of *ShalyaTantra*, laid the foundation of wound care through the profound concept of *Vrana Vinischayartham*. When a wound lingers beyond its natural healing course, burdened by the vitiation of *Doshas*, it manifests as *Dushta Vrana*—a chronic, contaminated lesion demanding meticulous care. Modern medicine identifies *venous ulcers*—also known as stasis or varicose ulcers—as a stubborn clinical entity arising from chronic venous insufficiency. These ulcers, predominantly affecting the lower limbs, mirror the Ayurvedic description of *Dushta Vrana*, presenting with symptoms such as severe pain (*teevra vedana*), purulent discharge (*puti puya*) and offensive odor (*putisrava, gandha*). Ayurveda, through the lens of the *Shashti Upakrama*, offers a holistic and time-tested approach to wound care. Among the sixty modalities, *Taila* application stands out for its *shodhana* (cleansing), and *ropana* (healing) properties. *KampillakadiTaila*, a potent medicated oil mentioned in Gada Nigraha has known for their antimicrobial and wound-healing actions. This study is an exploration into the therapeutic potential of *Kampillakadi Taila* in managing venous ulcers.

KEYWORDS: Dushta Vrana, Shashti Upakrama, Venous Ulcer.

INTRODUCTION

Venous ulcer is the common and recurrent form of leg ulcers occurring due to malfunctioning or damage to valves of the veins. It has a higher mortality rate and causes economic strain on both individuals and nation. Venous Ulcerations accounts for 60%-80% of all chronic wounds and are most commonly found in the lower extremities.^[1] The prevalence of chronic venous ulcers in the leg is 1.08% and incidence upto 1.33 % in the world.^[2] Incidence of venous ulcer is more common in young adults and patients working as labourer which demands working in standing position for a longer time. If this ulcer is not treated properly, it may get infected leading to cellulitis. Conventional treatments of wounds are with either systemic or topical antimicrobial therapy, Hyperbaric Oxygen Therapy, Negative pressure wound therapy(vacuum-assisted closure) and skin grafts which are expensive and may have complications. Venous ulcers are having 54% to 78% chances of recurrence and can show a cyclical pattern between healing and recurrence.^[3]

Ayurveda defines *Vrana* as a condition which affects skin, muscle, tendon as a result of which the scar remains

forever. *Dushta vrana* is composed of two words; *Dushta* +*Vrana*, a chronic form of ulcer occurring due to vitiation of three *doshas*. Venous Ulcer can be correlated to *Dushta Vrana*.

Kampillakadi taila mentioned in *Gada Nigraha* is said to have *vrana shodhana* and *ropana* property.^[4] So this study is taken up to review the efficacy *of kampillakadi taila* in *dushta vrana*.

DISEASE REVIEW

Causes^[5]

Vata, Pitta, and *Kapha* being aggravated by their respective causative factors get lodged in *Twak, Mamsa, Sira, Snayu* etc and gives rise to *Vrana.*

Clinical features^[6]

Dushta vrana, according to Acharya Sushruta, is a chroniculcer, manifested in any part of the body, caused either by the *doshas* or trauma. When caused due to the *doshas*, it is called *Nija vrana* and when caused because of trauma; it is called Agantuja vrana. The *nija vrana* exhibits signs & symptoms in accordance with the Dosha affected. Sushruta Samhita gives a detailed description of

the various features of *Dushta vrana*. The one which is *Atisamvrita*(excessively covered), *Ativivrita*(excessively uncovered), *Atikathina*(too hard), *Atimrudu*(too soft), *Utsanna*(excessivelyelevated), *Avasanna*(excessively depressed), *Atyushna*(calor), *Atisheeta*(cold to touch), differently coloured, ugly looking, suppurative, painful, associated with different types of discharges and which is chronic; is called a *Dushta vrana*.

Samvruta	Narrow mouthed
Kathina	Hard
Avasanna	Depressed
Vedonarvan	Severe pain
Vivruta	Wide mouthed
Ushna	Hot
Daha	Burning sensation
Paka	Suppuration
Raga-	Redness
Puyasravya	Discharging pus
Manojnadarshana	Ugly sight
Kandu	Itching
Shopha	Swelling
Pidaka	Boils
Mrudu	Soft
Putimamsasirasnayu	Full of pus, muscles,
	vessels, ligament
Bhairava	Frightful

Chikitsa

Sushruta described sixty different types of management of *Vrana*. He describes these *Shashti upakramas* under the seven different types of *upakrama* (management) of vrana shopha.

Among these seven *upakramas*, *Shodhana* and *Ropana* are two such modalities which aims at purification of the wound followed by healing.

This measure of management is for debridement of the infected wound and to support the healing process. There are thirteen measures under this.

1. Sandhana 2.Pidana 3.Shonitasthapana 4.Nirvapana 5.Utkarika 6.Kashaya 7.Varti 8.Kalka 9.Sarpi 10. Taila 11.Rasakriya 12.Avachurnaa 13.Dhumpana.

Among these, *taila* is one of them which refers to the process of applying medicated oil for therapeutic purpose. Many types of *Siddha Taila* are used for different types of *Vrana* for the purpose of *Shodhana* and *Ropana*. *Shodhana Taila* is indicated in *Dushta*, *Utsannamamsi* and *Alpasravi Vrana*.

Kampillakadi taila is one such formulation mentioned in *Gada Nigraha* having *Vrana Ropana* and *Shodhana* property.

Preparation of Kampillakadi Taila

- 1 part each of *Kampillaka*, *Vidanga* and *Daruharidra twak churna* was pounded well and triturated with water to prepare *kalka*.
- It is combined with *tila taila*(4parts) and water(16parts).
- The above mixture is cooked in *mandagni* till *taila siddha lakshana* is obtained.





Procedure of Kampillakadi taila application

• Wound will be cleaned with sterile gauze and normal Saline followed by *panchavalkala kashaya prakshalana* and debridement will be done if at all necrotic or slough tissues are present.

• Sufficient quantity of *Kampillakadi taila* will be applied over *the Vrana*.

• Sterile pad will be placed followed by bandaging of wound, appropriate rest is given to the limb.

Probable mode of action of Kampillakadi taila

Kampillakadi taila has *Kampillaka*, *Vidanga* and *Daruharidra twak churna* as ingredients.

Kampillaka: It has *vrana shodhana* as one of the synonym which means it purifies the ulcers. Acharya Charaka enlist Kampillaka as one of the Phalini dravya with Katu rasa, Laghu, Rooksha, Teekshna guna, Ushna veerya, Katu vipaka and possess vrana ropana action. Acharya Sushruta quoted Kampillaka in Shyamadi varga with special indication in Dushta vrana. It has antioxidant, antimicrobial, anti-inflammatory and antibacterial properties which helps in the process of wound healing.

Vidanga: It has *katu, kashaya rasa* and *laghu, rooksha, teekshna guna* and *ushna veerya* and *katu vipaka* which does the *Kapha* and *vata shamana*. It also has *krimighna* action as prabhava.

In addition to this, a chemical constituent of *Vidanga*:Embelin and Ethanol has properties of epithelization of wounds with a high rate of wound contraction and collagenation.

Daruharidra: It has tikta, kashaya rasa, laghu, rukshaguna, ushna veerya and katu vipaka which helps in Vrana Shodhana, ropana, shotohara and vedanasthapana which does Kapha and pitta shamana. Dhanwantari Nighantu has Vranajith as one of the important functions of Daruharidra.

In addition to this, a chemical constituent of *Daruharidra*: Berberine and oxycanthine has properties like Anti-inflammatory, Antioxidant, Antimicrobial and Analgesic actions.

CONCLUSION

Venous leg ulcers are a relatively common type of chronic and complex wound that pose a significant burden on healthcare systems and severely impact the quality of life of affected individuals. These ulcers often result in chronic pain, reduced mobility, and emotional distress. Moreover, they are associated with prolonged treatment periods and high recurrence rates. The presence of persistent inflammation, infection, and poor tissue regeneration contributes to delayed wound healing.

Despite the availability of various modern treatment modalities, many venous ulcers remain resistant to conventional therapies. Therefore, incorporating Ayurvedic approach of wound management is beneficial in such scenarios.

The use of *taila* dressings, particularly those processed with herbs possessing *Vrana Shodhana* and *Ropana* properties, has shown promising outcomes.

Shodhana promotes wound debridement, reduces infection, and creates a conducive environment for new tissue formation. This cleansing action is vital in preparing the wound bed for healing.

On the other hand, *Ropana* accelerates the tissue repair process by enhancing cellular regeneration and restoring tissue integrity.

Medicinal herbs like *Vidanga* and *Daruharidra*, which are incorporated into these formulations, contribute additional therapeutic benefits. *Vidanga*, known for its *krimighna* and healing properties, supports wound contraction and epithelialization. Similarly, *Daruharidra*, enriched with bioactive compounds like berberine and oxycanthine, exhibits potent anti-inflammatory, antimicrobial, antioxidant, and analgesic effects. These pharmacological properties play a crucial role in enhancing wound healing, preventing infections, and improving the overall outcome.

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