ORIGINAL RESEARCH (A case study)



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Role of Navjivan Rasa and Ropana Tailm in the Management of Venous Ulcer

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Abstract

In modern aspect recurrence of venous ulcer, after conservative treatment, is very high. Direct venous surgery is difficult due to absence of suitable prosthetic graft and difficulty in reconstructing venous valve. The healing of wound still remains a major problem to the surgeon as well as to the patient.

In *Ayurveda* the primary aim of the treatment is to give an effective and safe approach to this perplexing problem. *Shonit Sanghat Bhedana, Marg Vivruanan, Bandh Chhinnana, Twak Mansa Sthirikaran, Lekhana, Lasikapuy* and *Shleshma Upshoshan* are the *Karmas* (propertities)of *Katu tikta Rasa*. Therefore, we have selected *Katu* and *Tikta Raspradhana Kalpa* which are *Navjivan Rasa & Ropana Tailm* for *Antaparimarjan & Bahiparimarjan* respectively medicaments of venous ulcer.

In using *Ayurvedic* medicinal remedy we avoid surgery and its complication with saving of time and money. In the following article an attempt will be made for proper understanding of the historical aspect of the *Dushta Vrana (Infected wound)*, its etiopathology, methodology of ulcer healing, in the light of *Ayurvedic* and modern knowledge.

The clinical study was conducted on two patients who were selected randomly and divided in two groups. First experimental group treated with *Navjivan Rasa* and *Ropana Tailm* and second control group treated with Diosmin 300mg BID. The clinical assessment was done on the basis of grading criteria with basic symptomatology pain, local temperature, discharge, color and smell. *Navjivan Rasa* and *Ropan tailm* possess sufficient efficacy in *Vran shodhana* and *Vran ropana* and shows better results in healing of venous ulcer.

Keywords

Dushta Vrana, Navjivan Rasa, Ropana Tailm

INTRODUCTION

The knowledge of wound (*Vrana*) is known since antiquity. The concepts of principles of *Vrana* (wound) such as causes, classification, stages, examination, treatment, bandaging, complication, etc. told by *Aacharya Sushruta* remain unchanged even in this 21st century. A wound (*Vrana*) which refuses to heal or heals very slowly, inspite of best efforts by *Chikitsa Chatushpada viz.*, *Bhishaka*, *Dravya*, *Upsthata* and *Rogi*, is known as *Dushta Vrana* (Infected wound)^[1].

A chronic infected wound (*Dushta Vrana*) leads to various types of ulcers. *Dushta Vrana Lakshanas (symptoms)* are that they are narrow mouthed, hard, depressed, having sever pain, wide mouthed, hot, with burning sensation at site, suppuration, redness, discharging pus, itching, swelled boils, frightful, full of pus and exposes the muscles, vessels and ligaments ^[2, 3]. As per *Karyakaran Sidhhant* venous ulcers are correlated with *Dushta Vrana* as these ulcers shows all above mentioned characteristic (Signs and Symptoms) of *Dushta Vrana*.

Venous ulcer is severe clinical manifestation of chronic venous insufficiency. It is responsible for about 70% of chronic ulcer of the lower limb ^[4, 5, 6]. The pathogenesis starts with dysfunction of venous valves causing venous hypertension which stretches the veins resulting in ulcer formation. If not treated properly the ulcer may get infected leading to cellulitis or gangrene and eventually it may need amputation of the part of limb. Epidemiological data suggests that 1.5 -3.0 per thousand of the population have active leg ulcers and the prevalence increases up to 20 per thousand people over 80 years of age ^[7]. A recent effective health care bulletin on compression therapy for venous leg ulcers concluded "There is wide spread variation in practice and evidence of unnecessary suffering and cost due to inadequate management of venous leg ulcers in the community⁸. If the conservative management like compression stocking, foot elevation, antibiotics and regular dressing of wounds fails then surgical treatment like skin grafting, sclerotherapy, laser ablation or surgical correction of superficial venous system follows ^[4,5,6]. However, recurrence of venous ulcer is common. We must try to establish some advanced cost effective treatment with the help of *Ayurveda* by considering venous ulcers is form of *Dushta Vrana*.

Aacharya Charaka, Sushruta, Vagbhata, Bhavprakasha, Yogratnakar and *Sharangdhara* explained properties of *Shadarasa's* which shows that without consideration of *Rasas* we are unable to do any treatment and even in our daily routine life we must take proper quantity and sequence of *Rasas* to live healthy life. While studying properties of *Rasas* it is observed that *Katu* and *Tikta Rasa* plays an important and surprising role in *Vrana Shodhana* and *Vrana Ropana*⁹. In our study we have selected the *Navjivan Rasa* explained in *Rasyog Sagar*¹⁰ as *Antahparimarjan* medicament and *Ropan Tailm*¹¹ explained in *Sushrut Samhita* for *Bahirparimarjan. Ropan Tailm* contains *Tagar, Agaru, Haridra, Devdaru, Priyangu, Lodhra* and all drugs are *Katu Tikta* in *Rasa*.

MATERIALS AND METHODS

The present study was done by randomly selecting patients and divided into two groups. First experimental group treated with *Navjivan Rasa & Ropana Tailm* and second control group correlated with Diosmin 300 mg¹⁶. Diosmin is vascular protector and it strengthens venous tone and acts on venous circulatory system. It reduces venous distension and venous stasis. In microcirculation it normalizes capillary permeability and reinforces capillary resistance ¹³.

Drugs: Navjivan Rasa 500mg, Ropan Tailm, Normal saline, Diosmin 300mg, Koshna jala. Ingradianent of Navjivan Rasa^{10,12,13,14,15}

Details of all ingredient of *Navjivan Rasa* are given in table no.1 &2 and it was prepared by the process described in *Sharangdhar Samhita* in S.V.N.H.T.'s Ayurved College's Pharmacy of *Ras Shastra* and *Bhaishjya Kalpana*.

Bhavana Of Chitrak ,Aardrak Swaras,Nagvalli Swaras will be given and Vati Of Navjivan Rasa was prepared by the processes described in Sharangdhar Samhita.

Ropan Tail^{11,12,13,14,15,17}

Ingredient of *Ropan Tail* are given in table no.3 & was prepared by the process described in *Sharangdhar Samhita* in *S.V.N.H.T.'s Ayurved* College's Pharmacy of *Ras Shastra* and *Bhaishjya Kalpana*.

Drug Name	Family Name	Ras	Virya	Vipak	Karma
<i>Kupilu</i> (Strychnos Nux Vomica)	Loganiaceae	Katu, Tikta	Ushna	Katu	Shothahar, Strotorodhahar, Kandughna
<i>Chitrak</i> (Plumbago zeylanica)	Plumbaginaceae	Katu	Ushna	Katu	Dhatupushti, Dipan, Strotorodhahar
<i>Pippali</i> (Piper longum)	Piperaceae	Katu	Anushna	Katu	Shothahar, Shulaghna, Aampachak.
<i>Marich</i> (Piper nigrum)	Piperaceae	Katu	Ushna	Katu	Pramathi, Kledahar, Lekhan

Table 1 Details of Navjivan Rasa

<i>Shunthi</i> (Zinziber officinale)	Zinziberaceae	Katu	Ushna	Madhur	Shothahar, Strotorodhahar, Vatashamak.
<i>Guggul</i> (Commiphora mukul)	Burseraceae	Katu	Ushna	Katu	Medakarshan, Kledhara, Vranashodhan
Nagawalli	Piperaceae	Katu Tikta	Ushna	Katu	Jantughna, Putihar, Shothahar, Vedana sthapan

Table 2 Details of Navjivan Rasa

Drug Name	Colour	Sparsh	Ras	Karma
Loha Bhasm	Reddish Brown	Soft	Niras	Shothahar
Abhrak Bhasm	Reddish	Soft	Niras	Yogwahi, Vrana Healing
Ras Sindur	Red	Soft	Niras	Nadibalavardhak, Yogwahi

Bhavana of Chitrak ,Aardrak Swaras,Nagvalli Swaras will be given and Vati Of Navjivan Rasa was prepared by the processes described in Sharangdhar Samhita. **Ropan Tail**^{11,12,13,14,15,17}

Ingredient of *Ropan Tail* are given in table no.3 & was prepared by the process described in *Sharangdhar Samhita* in *S.V.N.H.T.'s Ayurved* College's Pharmacy of *Ras Shastra* and *Bhaishjya Kalpana*.

Drug Study

Tab Venex 300mg¹⁶

Pharmacological Name: Diosmin Company: Elder Pharma Ltd. Dosage: 300mg, 1 tab, bid, after meals. It reduces venous distension and venous stasis

Navjivan Rasa^{10,15}

Rasa Sindur	- 1 part
Abhrak Bhasma	- 1 part
Loha Bhasma	- 1 part
Shudha Kuchala	- 1 part
Shudha Chitrak	-1 part
Trikatu	- 2 part

Navjivan Rasa is an *Ayurvedic* medicine with herbal and mineral ingredients in tablet form. It is used in rejuvenation and antiaging treatment.⁸.

Dose: 500mg, bid, after meals. *Ropan Tail*¹¹ It is useful in chronic wounds, infected wounds. It contains *Tagar*, *Agaru*, *Haridra*, *Devdaru*, *Priyangu*, *Lodhra* all drugs of *Katu Tikta Rasa*. Showing good results on *Vrana Shodhan* and *Vrana Ropana*.

Dose: For local application as per the requirement.

Duration of treatment

6 weeks.

Follow up

Duration one month after completion of clinical study at the interval of 7 days.

Method of study

Group A (experimental group)

1 patient was selected and treated with *Navjiivan Rasa* orally.

Group B (control group)

1 patient was selected and treated with Tablet Venex 300mg.

Place of work

OPD & IPD of Shalya Tantra Department, S.V.N.H.T's Ayurved Mahavidyalaya, Shrishivajinagar, Rahuri, Dist. Ahmednagar.

Selection Criteria

Inclusion Criteria

- Venous ulcer of the lower limb.
- Only single ulcer

- Age 16 to 70 yrs of age group
- Sex both male & female
- Patient belonging to all socioeconomic groups
- Size of ulcer up to 6 cm in length with depth 0.5cm
- Exclusion Criteria

• Peripheral arterial disease, Neuropathy, Trauma, Malignant ulcer, Autoimmune disease: Systemic Lupus Erythematous, Patient with Human immunodeficiency virus infection, Patient with Tuberculosis, Patient with Diabetes mellitus, Patient with Hypertension, Patient having Systemic sclerosis, Patient having Multiple ulcers, Patient with HBs Ag positive, Patient with Marjolin ulcer, Patient with gangrene, Patient with D.V.T.

Investigation

• CBC, ESR, Blood Sugar Level, BT,CT, Tridot, Hepatitis B, Urine routine, Venogram (if needed), Color Doppler (if needed).

Methodology

• Under all aseptic precautions procedure will be performed as shown in table no.4.

Drug name	Family Name	Ras	Virya	Vipak	Karma
Tagar (Valleria	Valerianaceae	Katu,Tikta,Kashaya	Ushna	Katu	Vedana
wellichi)					Sthapana, Vrana
					Ropan
Agaru (Aqullaria	Thymelaceae	Katu,Tikta	Ushna	Katu	Vedana Sthapana
agalocha)					
Haridra	Zinziberaceae	Tikta,Madhur	Ushna	Katu	Vrana Shodhan
(Carcuma longa)					
Devdaru (Cedrus	Pinaceae	Tikta	Ushna	Katu	Shothaghna
deodara)					
Priyangu	Verbenaceae	Tikta,Kashaya,	Ushna	Katu	Vrana Shodhan
(Callicapra		Madhur			
Macrophylla)					
Lodhra(Symplococeae	Kashaya	Sheeta	Katu	Vrana Shodhan
Symplocos					Vrana Ropan
racemosa)					

Table 3 Ingredient of Ropana Tailm

Table 4 Procedure for treatment

GROUP A EXPERIMENTAL GROUP	GROUP B CONTROL GROUP			
Dressing with (normal saline) NS	Dressing with NS			
• Ropan Tail application and then cover with sterile	Cover with sterile bandage			
bandage				
• Vati of Navjivan Rasa 500mg BD for 6 weeks with	• Tab Venex 300mg BD for 6 weeks			
Koshna jala.				
• A firm elastic blue line bandage is applied specially	• A firm elastic blue line bandage is			
	applied specially			
Advice-	Advice-			
• Leg Elevation,	• Leg Elevation,			
High protein diet.	High protein diet.			
e.g. Soya, Pulses, etc	e.g. Soya, Pulses, etc			

DISCUSSION

Even though healing is a physiological process, it is inhibited by various factors. Abnormal Doshas cannot be treated with a single drug all the times. Therefore, number of drugs of different properties is described as Vranshodhaka and Vranropaka in the management of Dushta Vrana. Navjivan Rasa and Ropana Tailm which contain Katu and Tikta Rasa are more useful. Dushta Vrana is one of the Vrana which needs treatment for its healing. To achieve the main goal of healing it is necessary to remove the maximum Dushti by the virtue of Shodhana, Kledanashaka, Dahahara and Vranropana. Navjivan Rasa and Ropana Tailm are *Aampachaka*, Tridoshhara, Krimihara, Vishahara, Puynirharana (as shown in table no.1,2,&3). Allevating these inhibitory factors is the goal of Shodhan Chikitsa and has to be followed further.

CONCLUSION

Navjivan Rasa and *Ropana Tailm* could be used in the management of venous ulcer as a

successful therapy. Use of Katu Tikt Rasa for Shonit Sanght Bhedana, Vrana Shodhan and Vran Ropana shows very effective role in venous ulcer healing. Topical application of Ropana Tailm acts as debriding agent removing slough and necrotic tissues and subsequenty paves way for smooth and uninterrupted healing of ulcer. It reduces pain, burning sensation and itching. It also decreases discharge, oedema and helps in gradual improvement in the wound bed and granulation tissues. The semi occlusive dressing of Ropana Tailm provides moist environment that enhances epithelialization, prevent scab formation and can be easily removed from wound surface without causing pain or damage to the growing epithelium. Hence, from present clinical study it can be speculated that Navjivan Rasa and Ropana tailm possess sufficient efficacy in Vrana Shodhana and Vrana Ropana in venous ulcer without producing adverse effect. any

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