



AYURVEDIC MANAGEMENT OF DUSHTA VRANA WSR TO NON-HEALING ULCER

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ABSTRACT

The infected ulcer's healing depends on the complex interplay of many factors. Lower limb ulcers are always of great concern since *vedic* period. Present population is highly prone to non-healing ulcer due to trauma, varicose veins, hematological Disorders, life style changes, Diabetes, Adverse drug reactions, malignancy, surgical infections, burns, wound infections etc. Hence appropriate timely intervention and effective management of ulcer is necessary. In this case, A patient aged 49 years male presented with ulcer which is lateral aspect of adjacent to ankle joint the region of scar of the left leg previously healed ulcer and maggots in dorsal aspect of left foot distal to the 3rd and 4th toe. The patient was treated with ksharodaka, parataraniya kshara as krimighnachikitsa and *Panchavalkala Kashaya Parisheka* followed by dressing with karanjadi ghrita for 68 days. Following which the ulcer was then treated by *Panchavalkala Kashaya Parisheka* followed by dressing karanjadi ghrita. The treatment gave completely healed scar within 84 days and no recurrence in the 2 months of follow up. Local *Parisheka* by *Panchavalkala Kashaya* has showed antimicrobial effect which augmented the healing process, while *karanjadi ghrita* application enhanced tissue debridement and helped in formation of healthy granulation tissue. Internal *Ayurveda* medications like Cap Grab, Cap viscovas, kashayam Cardorium plus, Tab kanchanara guggulu in rejuvenation and repair by their pharmacological properties.

KEYWORD: *Dushta Vrana, varicose Ulcer, krimighna, ksharodaka, Panchavalkala Kashaya, karanjadi ghrita* Case Study.

INTRODUCTION

Treating the ulcer and wound is a great challenge to medical profession ever since *vedic* era. *Dushta Vrana* is a commonly encountered problem faced in clinical practice even in present era. The destruction/ break/ discontinuity of body tissue/ part of body is called *vrana*. Detailed description about *vrana* is mentioned in *sushruta samhita*.^[1] *Vrana* is generally classified into two groups i.e. *Sharira* are due to vitiated *dosha* & *aagantuja/ sadhyo vrana* which caused due to trauma. The scar of the wound never completely fades away, even after healing and stays as long as the person is alive.^[2] Wound healing is a natural mechanism of the body to attempt to restore the integrity of the injured body part. This wound may get infected or not heal for a long time and turn into *Dushta Vrana* (non-healing ulcer). Presence of *Dushta Vrana* can damage the condition of the patient with different complication and may even turn fatal. Ulcer in the lower limb is quite common among middle aged population where

symptoms include pain, oedema, oozing and bleeding. In the course of lifetime, almost 10% of the population will develop a chronic wound with a wound related mortality rate of 2.5%. Chronic leg ulcers affect 0.6-3% of those aged over 60 years, increasing to over 5% of those aged over 80 years.^[3] Wound infection occurs when there is the presence of replicating microorganisms within a wound with a subsequent host response that eventually delays wound healing. The potential for wound infection depends on patient's condition such as state of hydration, nutrition and existing medical conditions as well as extrinsic factors.^[4] The signs and symptoms of local infection are redness (erythema), warmth, swelling, pain and loss of function. Eventually, the local bacteria burden will increase further and become systematically disseminated resulting in sepsis which if not actively treated could progress to septicaemia and multi organ failure.^[5] even after recent advancements in medical science, the management of infective ulcer is a challenge because of prolonged healing and recurrence. Non

healing ulcers can take a heavy toll on patient's physical, mental health & social health. Our *Acharyas* knew about the severity of this condition and also had a good knowledge about its treatment. *Acharya Sushruta* mentioned 60 *Upakramas* for the treatment of *Vrana*.^[6] Among these *Upakramas*, *Kashaya*, *kshara*, *Varti*, *Kalka*, *Sarpi*, *Taila*, *Rasakriya*, *Avachoorana* are used for *Vrana Shodana and Ropana*.^[7] he mentioned various formulations to treat various types of *dushta vrana*. One among them includes *Panchavalkala* of *Nyagrodhadhi Varga* which is mentioned in *Vrana Ropana kashaya*.^[8] *Kashaya* prepared with *Panchavalkala* drugs when used topically found to be effective in treating an infective ulcer located on the leg.^[9] To treat any case of *Vrana*, *Sthanika Shodhana* and *Ropana* plays a very important role. Hence present case study focuses on the local application of *karanjadi ghrita* for *Shodhana & Ropana* of the *vrana*. Application of *Kshara* is clearly Indicated by *Acharya Sushruta* in *Dushta vrana*.^[10] *Karanjadi Ghrita* also mentioned by *Acharya Sushruta* in *Vrana Chikitsa*.

CASE REPORT

A 49-year male patient came to SKAMC & H Shalya tantra OPD with complains of pain, discharge along with foul smell and worms in the ulcer on dorsum of left foot since 7 days, complains ulcer in ankle of the left foot with pain and discharge since 2 days.

Patient was apparently healthy until he gradually developed painful swelling on the dorsum of the left foot distal to the 3rd and 4th toe. Later after 5 days the swelling opened up spontaneously with foul smell discharge along with maggots creeping out of the ulcer. Patient consulted the local hospital and their only bandaging was done and he was referred to higher center.

Patient noticed another ulcer which developed spontaneously after 2 days over dorsum of left foot lateral aspect of adjacent to ankle joint the region of scar of the left leg previously healed ulcer Patient experienced throbbing and burning pain which aggravated on walking and was relieved by rest.

Systemic examinations of the patient revealed were any major systemic disease. He was known case of Thyroid disorder since 12 year.

His vitals were stable with BP - 130/80mmhg, respiratory rate - 21/min, pulse rate - 80 bpm, temperature - 98.6°F.

Examination of ulcer

Inspection (Darshana - pareeksha)

properties	Ulcer 1	Ulcer 2
1. Site	dorsum of foot distal to 3 and 4 th toe	dorsum of foot adjacent to ankle joint
2. Number	1	1
3. Shape	Irregular	Irregular
Size	Approximately 2cm*1cm*1cm	Approximately 4cm*1cm*0.2cm
4. Edge	Inflamed edematous	Inflamed edematous

Associated Complains

Nothing contributory

H/o Past Illness bilateral varicose vein since 10 year

K/C/O Thyroid disorder since 12 year.

Family History

Not significant to present condition

Personal History

Appetite: Good

Diet: mixed

Sleep: Disturbed,

Bowel: Regular

Micturition: 3 to 4 times in a day and 1 times in night

Habits: alcohol monthly once 60ml

Exercise – nil.

General physical examination

Built and nourishment: obese

Pulse: 80b/ min,

B. P: 130/80 mm of Hg

Temperature: 98.6 oF

Respiratory rate: 21/ min

Height: 170 cm

Weight: 120 kg

Pallor: Absent

Icterus: Absent

Cyanosis: Absent

Clubbing: Absent

Edema: Absent

Lymphadenopathy: Absent

Gait: mild limping gait due to Ulcer.

Systemic examination

Central nervous system: Higher mental functions, Sensory, Motor, reflexes and Coordination intact.

Cardiovascular system: S1 S2 heard, no added sounds.

Respiratory system: Normal vesicular breathing sound heard, no added sounds.

Per abdomen: Soft, non- tender

Vrana pareeksha

Vrana Varna - rakta aruna varna

Vrana Gandha -Puti gandha

Vrana Vedana -Toda, daha

Vrana Akriti - Vikruta

Vrana Srava - tanu srava

5.Floor	Slough	Slough with unhealthy tissue
6.Discharged	Purulent	Slight purulent
7.Surrounding area pigmented and scar of previously healed ulcer was present		

Examination	Right lower limb	Left lower limb
1.Brodie Trendelenburg test	+ve	+ve
2.Tourniquet test	+ve below knee joint	+ve below knee joint
3.Modified Perthes test	-ve	-ve
4. Schwartz test	-ve	-ve
5. Moses sign	-ve	-ve
6.Homan s sign	-ve	-ve

Examination of vascularity

Artery	Right Lower limb	Left Lower limb
Dorsalis pedis	Normal	Not palpable due to thickness of grafting
Anterior tibial	Normal	Not palpable due to thickness of grafting
Posterior tibial	Normal	Not palpable due to thickness of grafting
Popliteal	Normal	Normal
Femoral	Normal	Normal

o Appearance – clear

o Reaction – 8.0

o Protein – Present (+)

o Epithelial Cells – 6-8 /h pf

o Pus cells – 1-2/ hpf

o Bacteria – absent

o Other – Amorphous Deposit Present

Venous doppler of left lower limb findings : (19/09/2022) ssv mildly dilated(4mm)incompetent perforators 7cm below knee, 3cm above ankle medially,10cm below knee posteromedial

Intervention



Investigations

□ Haematology

o Hb % - 11.7 gm %

o Total count – 7900 cells/cumm

o RBS – 123.0 mg/dl

o ESR – 97mm

B. Urea – 24.0

o Sr. Cr – 1.1

□ Urine Routine

o Colour – Pale yellow

1. Local wound care

KRIMIGHNA CHIKITSA OF WOUND 1
Under ASP, chitraka ksharaudaka Instilled in the maggots filled ulcer bed.
Removal of the dead maggots with artery forceps.
Application of chitraka pratisaraneeeya Kshara followed by wash with nibu swaras.

VRANA SHODHANA CHIKITSA FOR WOUND 1 AND 2
Panchavalakala Kashaya used in the form of prakshalana for 15-20 mins.
Dressing with karanjadi ghritha bandaging done

• On the first day, the ulcer was cleaned thoroughly with betadine and chitraka ksharaudaka instilled in maggots filled ulcer bed. Under aseptic precaution removal of the dead maggots with the artery Forceps and application of chitraka pratisaraneeeya kshara followed by wash with nibu swaras.

• *Prakshalana* with lukewarm *Panchavalkala Kashaya* on and around the ulcer was done. Dressing was done with *karanjadi ghritha* soaked sterile Gauze for the first 68 days until the slough, necrotic tissue, Purulent puss

discharge was reduced and it is continue until a healthy scar tissue was formed.

□ Cap Grab (1-1-1)

□ Cap viscovas (1-1-1)

□ Tab kanchanara Guggulu (2-0-2).

□ Kashayam Cardorium plus 2tsp bid

□ Rest for few days

□ Avoid contamination of dressin

□ Pathya ahara vihar

➤ Laghu ahara (shali, mudga, patola, ushna jalapana)

➤ Fruit (dadima, amlaki)

- ❑ Vihara
- Laghu vyayama
- ❑ Apathya ahar vihar
- Ahara (katu, tikshna, udad, masha, dadhi, mamsa payasa)
- ❑ Vihara
 - Standing for long hours
 - Divaswapna
 - Ratrijagrana

RESULTS

With the step wise management of this case, wound successfully healed completely within 68 days.

Wound healing progress: On first consultation the patient was having non healing painful ulcer on the dorsum of the left foot distal to the 3rd and 4th toe [Fig 1]. On the Same day the wound was Debrided with the help of Artery Forceps and Sharp Scissors [Fig 2-3] and with regular dressing with *karanjadi ghritha* after *Panchavalkala Prakshalana* there was Almost Complete Absence of exudates, Slough and Necrotic tissue [Fig 4] by day 68. Local symptoms like pain, and swelling were significantly reduced. By the 48th day of regular treatment, she achieved the features of *Shuddha Vrana* (clean wounds) like *Jihvatalabh* (red coloured wound floor due to healthy The Scar was healthy even on 2 months follow up granulation), *Mridu* (soft) [Fig 5]. [Fig 6] Complete wound healed by 68th day.



DISCUSSION

Acharya Susruta dedicated a whole Chapter in *Chikitsa sthana* for Treatment of *Dushta Vrana*. He advocated *Shasti Upakrama*, among which appropriate treatment needs to be selected based on the condition of the *Vrana*. In this case, *Vrana Praksalana* with *Panchavalkala Kashaya* was carried out. This *prakshalana* helped in mechanical debridement as it washes away the exudates, slough and unhealthy tissue from the ulcer with least pain. It also helped in relieving pain and swelling. Its proven management which increases circulation and permeability by tactile stimulation and histamine release; resulting in absorption of drug and local nourishment of the affected part.^[13] this can also be compared to pulsed lavage of modern method. Pulsed lavage, a modern method is found to be quite efficient in removing bacteria in a wound.^[14] many Studies are done on efficacy of *Panchavalkala kashaya* and the Results revealed that *Panchavalkala* water extract showed great antibacterial activity on both gram - negative and gram-positive bacteria.^[15]

Sushruta indicated application of *Kshara* for wound debridement in the management of *Dushtavrana* (non healing ulcer).^[15] The *ushna guna* of *Kshara* helped in *Vedanasthapana* (Reduced pain) by pacifying the *vata*. The *chedya*, *bhedya* and *lekhya* properties of *ksharodaka* helped in completely removing the slough and necrosed tissue. The *shodana* property of *karanjadi ghrita* helped transform the *dushta vrana* to *shudha vrana*. *Kshara* also possess properties like *krimighna*, *vishaghna*, *kushtaghna* which helped to remove infection and foul smell from the ulcer. Application of alkaline preparation like *Ksharodaka* has provided the autolytic debridement of wound. also, pus is an acidic compound. *Ksharodaka* neutralizes it and helps in tissue Debridement.^[16] *karanja ghrita* which is mentioned by Acharya Sushruta is specifically indicated for *Ropana karma* (healing) has helped in speeding up the healthy granulation and forming a healthy Scar.

These careful interventions have not only controlled the spreading of ulcer but helped in complete healing. Internal medications were prescribed considering the *Vyadhi*. Patient complied and followed all the interventions without any discontinuity and no adverse reactions were noted during the treatment.

CONCLUSION

The case study showed that even a highly infective ulcers can be best treated with holistic approach of *Ayurveda*. This single case study shows that phase wise treatment by local application of *karanjadi ghrita* have definite role in healing of Infective Ulcer. Further, it is need of the hour to treat more cases of Infective Ulcer adopting the similar treatment protocol for its scientific recognition.

A management of an infective ulcer with *Panchavalkala Kashaya Parisheka*, *karanjadi ghrita* as

topical application with internal medications was found to be highly effective in controlling the inflammation and completely healing of the ulcer.

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