

## ***A CASE STUDY ON COMPREHENSIVE AYURVEDIC MANAGEMENT OF INFECTED ULCERS LOCATED AT GRAFT-RELATED ZONES***

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### **ABSTRACT**

Skin grafts are done upon a raw wound and thus the acceptability of the grafted skin on the wound is unpredictable. When wounds are further complicated by necrotizing fasciitis, it becomes indeed a challenge to manage such wounds. This is a case study where multiple wounds located at graft donor and graft lost sites, complicated by necrotizing fasciitis was treated with *Ayurvedic* medication. A comprehensive *Ayurvedic* management of local and systemic interventions was planned and executed, including *shodhana, shamana, rasayana, satvavajaya and vaikrutapaha* measures. No modern biomedical or Allopathic medicines were used at any time during the management of the case.

**Keywords:** *Chronic wounds, Skin Graft, Necrotizing fasciitis, Shodhana, Shamana, Rasayana*

### **INTRODUCTION**

Possibility of Skin being a dressing for a raw surface is considered as the optimum and that is why raw wound that is extensive is always covered or grafted with skin. Skin grafting is the act of applying small sections of skin harvested from a healthy donor site and transplanted to an injured area of skin to repair a defect. However, graft loss is not uncommon and vexing.

Necrotizing fasciitis is a rare, life threatening spreading infection, with high mortality rate due to its complications. Necrotizing fasciitis

is defined as a spreading inflammation of the skin, deep fascia and soft tissues with extensive destruction and toxemia. Major share of etiology of this disease are polymicrobial infection. The incidence of necrotizing fasciitis has been reported to be 0.40 cases per 100,000 population. As it progresses rapidly, it is a surgical emergency condition. This is a dreadful condition as often it may end up in amputation of the affected body part.

In this case, the causative organism was *Pseudomonas*, a gram negative bacillus. This case

study offers an overview of the *Ayurvedic* treatment plan and strategic execution in a case of infective ulcers in a skin graft treated necrotizing fasciitis.

### CASE REPORT

A Female patient aged 68 years was admitted in the *ShalyaTantra* ward of our hospital on 7<sup>th</sup> October 2015 under IPD NO: 104824 for the complaints of post skin graft wound (Non-healing). The patient presented with four infected ulcers. Two were located at graft donor sites, right and left anterior thigh. Two were at graft recipient-lost zones, medial and lateral aspects of right ankle and foot.

The patient not a known case of diabetes or hypertension, but a known case of varicose veins since 30 years, started having complaints of aching pain, itching and discoloration of lower limbs for 20 years. She managed with yoga and regular exercise rather than taking medicines.

4 months back, patient happened to work in unhealthy and unhygienic conditions when her symptoms such as itching and pain got aggravated. Further, she noticed reddish discoloration and swelling of both lower limbs asso-

ciated with high grade fever. She then consulted a surgeon, was diagnosed as having necrotizing cellulitis and was treated with surgery. As the condition progressed to septicaemia, they advised amputation which the subject refused and went to another modern hospital for further treatment. There she underwent debridement of necrosed tissue twice under spinal block within a span of 10 days.

Then she was advised to undergo skin graft and skin grafting was done on the dorsum of right foot, the donor site being right thigh (anterior) and left thigh (anterior). But the wound failed to heal and both donor as well as recipient sites became infected. She underwent medications for the infection and for wound healing but got minimum relief. She was advised a second attempt of skin grafting which the patient refused. She then got discharged from there and got admitted in our hospital for further management.

VITAL DATA ON THE DAY OF ADMISSION:

BP- 130/84 mm of Hg, Pulse- 96/min, temperature- 102 F, weight- 56kg, height- 170cm, respiratory rate- 20/min

### TREATMENT GIVEN

#### a) *Shamana* treatment: Systemic internal medicines

1. *Tab. Kaishora Guggulu* (450mg) 1tds
2. *Tab. Gandhaka Rasayana* (250mg) 1tds
3. *Manjishtadi Kwatha* 4tsf Bd
4. Supportive care: *Tarpana- Laja manda Mudga yusha and Krisara.*

First 2 weeks

**b] Shodhana: Systemic cleansing**

1. *Manjishtadi Ksharabasti* for 7 days (after physical condition of the patient became stable and infection was controlled).

**c] Shamana and Rasayana: Systemic internal medicines and rejuvenators**

Next 2-1/2 months (from 4/11/15)

1. *Tab. Kaishora Guggulu* (450mg) 1tds

2. *Tab. Gokshuradi Guggulu* (450mg) 1 Tid
3. *Bhargavaprokta Rasayana* 1 Tsf, Tid With Hot Water
4. *Aragvadhadi Kashaya* 4tsf Bd
5. *Haridra Khanda* 1tsf Bd With Honey
6. *Cap. Guru Rasayana (Shilajathuloha rasayana)* 4 Tid

**d] Satvavajaya: Psycho-supportive and systemic soothing adjuvants**

External Treatment

1. *Takradhara* for head
2. *Balamoola Ksheera Parisheka (sarvanga except wound)*

} 7 days

**e] Vrana shodhana, ropana: Local external treatment/medicines for wound**

1. Cleaning and dressing under aseptic conditions
2. *Triphala Kwatha Parisheka* (wound irrigation) – for *shodhana* (cleansing), to control pain and infection
3. *Jatyadi Ghrita* – for *shodhana* (cleansing), to alleviate *pitta*, to control inflammation and to reduce burning sensation
4. *Jatyadi Taila* – for *shodhana* (cleansing) and *ropana* (healing)
5. *Yashtimadhu Taila* – for *ropana* (healing)

5. *Raktachandana Choorna lepa* after Healing: *Vaikrutapaha* – for normalizing skin colour

**DISCUSSION**

At the time of admission, the patient had features of sepsis with poor general condition. However, the vitals were stable. At this initial stage, diagnosis was made as *dushta vrana (pitta-kapha-rakta dominant)* and treatment plan was focused to arrest the progression of infection and provide supportive care. This was achieved by cleaning and dressing twice daily under strict aseptic conditions and internal medications *Kaishora Guggulu* 1tds, *Gandhaka Rasayana* 1tds and *Manjishtadi Kwatha* 4tsf Bd for 2 weeks.

Once the infection was controlled and patient's general condition was improved, further step aimed at *lekhana* and *shodhana* (cleansing) of wound. *Manjishtadi Ksharabasti* was administered for 7 days along with routine wound dressings. *Rasayana* (systemic rejuve-

nators) was added since all chronic and complicated illness cause *dhatukshaya*. Internal medicines were changed to a] *Kaishora Guggulu* 1tds b] *Gokshuradi Guggulu* 1 Tid c] *Bhargavaprokta Rasayana* 1 Tsf, Tid With Hot Water d] *Aragvadhadi Kashaya* 4tsf Bd e] *Haridra Khanda* 1tsf Bd With Honey f] *Cap Guru Rasayana* 4 Tid.

There was an evident slow transition phase of *dushtavrana* (non-healing infected ulcers) improving to the *lakshanas* of *ruhyamana vrana* (healing ulcers) by the above combination of medicines as *shamana-oushadhis* and *basti* as *dosha-shodhana* treatment. *Basti* (medicated retention enema) is indicated in site of *vranas* confined to *adhonabhi*. Moreover, rationality behind selecting *lekhana basti* is that the wound showed hypertrophy of the tissues.

Patients with chronic non healing ulcers are known to suffer from depression. Hence addi-

tionally, *takradhara* to head and *sarvanga bala-moola ksheera parisheka* (except wound sites) was administered as *vata-pitta shamaka* and as a psychologically supportive treatment, which showed positive subjective changes.

Finally, the internal medicines which possessed both *shodhana* and *ropana* property simultaneously were prescribed for wound healing. Marked improvement in healing of all the wounds were carefully noticed and recorded.

It took close to 3 months for the wound to exhibit the signs of *rudavrana* (healed ulcer). When the wound was completely healed with no signs of inflammation, patient was discharged. She was advised to continue the same oral medications for next 2 weeks and prescribed *yashtimadhu taila* and *raktachandana choorna* for external application over the healed sites.

**Table 1:** Findings of ulcer examination before and after treatment

CRITERIA	EXAMINATION FINDINGS ON THE DAY OF ADMISSION	EXAMINATION FINDINGS AFTER TREATMENT
NUMBER	4	0
SITE	I.&ii. Anterior thigh left and right iii.&iv. Right ankle & foot - medial and antero- lateral	Healed ulcers
COLOUR OF THE FLOOR OF THE ULCER	Yellowish – red	Scar formed
SHAPE	Irregular	Nil
SMELL	Present, Offensive	Absent
DISCHARGE	Present, Purulent, Thick	Absent
MARGIN	Irregular	-

EDGE	Punched out/ inflamed	-
FLOOR	Covered with slough	-
GRANULATION TISSUE	Absent	-
SURROUNDING AREA	Inflamed, skin appendages lost	Pigmentation with hypertrophied scar
SIZE OF ULCER	a) 11.5 x 5cm (left thigh anterior), b) 13.2 x 5.6( right thigh anterior), c) 5 x 4.3cm (right foot medial), d) 8 x 4cm (right foot antero-lateral)	a) Healed b) Healed c) Healed d) Healed
BASE	Indurated	-
BLEEDING ON TOUCH	Absent	Absent
TENDERNESS	Present, severe	Absent
INDURATION	Present	Absent
LOCAL RISE IN TEMPERATURE	Present	Absent
SENSATION	Present, hypreaesthesia+	Normal
VACULARITY	Dorsalis pedis, Tibialis posterior, Popelital, Femoral- palpable with normal volume	Normal
LYMPHNODES	Enlarged – inguinal group	Not palpable

**IMAGES:**



Image 1a. During Treatment    Image 1b. After Treatment    Image 1c. After Treatment  
Site: Left Thigh Anterior



Image 2a. Before Treatment      Image 2b. During Treatment      Image 2c. After Treatment  
Site: Right lower limb lateral aspect

## CONCLUSION

This was a challenging case in a patient who refused to take a second chance of skin grafting and approached us for *Ayurveda* as an alternative therapy. This case is presented here to highlight a remarkable clinical success achieved by independent, multipronged *Ayurvedic* management in refractive ulcers at graft-related zones. The *Ayurvedic* treatment has proved to be effective in managing the disease without complications. No modern biomedical medicines were used at any time during the management of the case.

## REFERENCES

1. Agnivesha. Caraka Samhita. Vaidya Jadavji Trikamji Acharya, Editor. Varanasi: Chaukhamba Surbharathi Prakashan; 2013. pp.738.
2. Susruta. Susruta Samhita. Vaidya Jadavji Trikamji, Editor. Varanasi: Chaukhamba Sanskrit Sansthana; 2012. pp.824.
3. Vagbhata. Ashtanga Hridaya. [Dr. T. Sreekumar, Trans]. Vol 1. Thrissur: Hari-sree hospital publications; 2007. pp.435.
4. Somen Das. A concise textbook of surgery. 7<sup>th</sup> ed, Kolkata: S. Das; 2012. pp.1358.
5. Hamilton Bailey, John McNeill Love's. Short Practice of Surgery. R. C. G. Russell, Norman S. Williams, Christopher J. K. Bulstrode Editors; 24<sup>th</sup> ed. Oxford: Edward Arnold Publishers Ltd.; 2004.

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