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Case Study

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# THE AMPUTATION PREVENTION INITIATIVE IN THE MANAGEMENT OF DIABETIC ULCER THROUGH AYURVEDA MANAGEMENT BY GAURADYA GRUTHA - A CASE STUDY

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#### **ABSTRACT**

The medicines available in modern medicine today all have one or more disadvantages. As a result, satisfactory outcomes cannot be attained. Always wound healing is a challenge to a surgeon and it has drawn attention of a large number of Scientists all over the world. In spite of so many advances in surgical field wound management still remains a subject of research. In the management of vrana, Shasti Upakramas are explained and they are nothing but different options of treating the vrana on the basis of yukti of vaidya. Among Shasthi Upakramas lepa is important treatment protocol for Vrana Shodana and Ropana. Shodhana and Ropana of vrana; is generally prescribed for all types of Vrana and this should be used like a mantra without any questioning as it is prevalent in scripture and shows the result. However, the ultimate treatment mentioned by Sushruta is

Shastrakarmawhich is not in practice sine more than 2000yrs, Because of the surgical complications. Therefore, The management of diabetic ulcer consist of determining and repairing the underlying cause of ulcer disease, good wound care, prevention of ulcer recurrence.

**KEYWORDS:** Gauradya grutha, Diabetic ulcers, Picchu.

#### INTRODUCTION

Definition of wound is destruction or break or rupture or discontinuity of body tissue or part of body. In Ayurveda according to sushrutha vrana are classified in to two types on the basis of their origin and etiology. A fresh wound is clean wound that's repairs faster as compare to infected wound with minimum scar. The healing mechanism is reconstruction property of wound to its normal anatomy with minimal changes. Many factors like Daibetcs, Bacterial infections, Immune deficiencies, Improper diet and other factors like vascular efficiency or previous radiation decrease healing mechanism. Proper treatment increase healing property.

Diabetic foot ulcer are commonly caused by repetitive stress over an area that is subject to high vertical or stress in patients with peripheral neuropathy. Peripheral artery disease, when present also contributes to the development of foot ulcers.

## **Etiology**

The Diagnosis of infection is primarily based on clinical conditions such as Erythema, Edema, Pain, Softness, warm and Discharge from pus.

## Daibetic ulcers are divided into 2 groups, namely

- 1. Non Limbal threatens: Cellulitis < 2cm and does not extend to bone or joints.
- 2. Limb threatening: Cellulitis >2 cm and has bone an joints and systemic infection.

## **Assessment**

- Xerosis
- Maceration
- Blisters
- Pre-ulcerative lesions
- Loss of protective sensation
- Peripheral edema
- Temperature comparison between feet

## **Pathogenesis of Ulceration**

## The most common pathway to Ulceration

Neuropathy factors -> pedal deformity -> Trauma (pressure, Friction, sharing forces on soft tissue).

## Other risk factors

- Previous Ulcers
- Poor glycemic control

- Nephropathy
- Smoking

#### **Prevention Recommendations**

## By Necessity

- ✓ The comprehensive Diabetic foot examination
- ✓ Visual foot inspection
- ✓ Blood test (For other infection)
- ✓ Metabolic Profile (For blood Glucose)

## Scan local area by

- ✓ Computer Tomography (CT) scan
- ✓ Magnetic resonance imaging(MRI) scan
- ✓ X ray

## **CASE REPORT**

A 50-year-old male patient has complained of Non healing ulcer at foot and itching, pain, some time pus discharge. Patient was type 2 Diabetic since5 years. He went to a local doctor and took an antibiotic tablet for that for 7 days. Later, he noticed that the pain, and itching sensation not reduced. So he came to our hospital in quest of an alternate treatment.

According to his account, patient having mixed symptoms of diabetic and neuropathic with low immune system.

Past History: No history of HTN, Surgical illness and drug allergy. but due to stressful schedules, there was no proper wound care.

## **Personal History**

Appetite- Good

Diet- Mixed type

Sleep- Reduced since, 4-5 days.

Micturition- Normal

**Bowel- Normal** 

Addiction- No Addiction

# **Family History**

Paternal- not specific

#### Asthavidha Pariksha

Nadi - Kapha-vata

Mala - Samyak

Mutra - Daha

Jivha - Alpasama

Shabda - Prakrutha

Sparsha - Ushna

Druka - Prakrutha

Akruti - Madhyam

## **Treatment Given**

Formulation used for the study – Gauradya Grutha.

Method of preparation of Gaurathya grutha: The drugs are Haridra, Sthira, Murva, Sariva, Candana, Madhuparni, Padmakesara, Padmaka, Utpala, Usira, Meda, Amlaki, Haridra, Vibhitaki, Panchavalkala, Gheee. Vata Kaphagna, Pitta samaka drugs. Detoxes action, Regulation of Immuno modulator, Anti oxident, Metabolic Correction. Anti Atherosclerosis Property.

Ghee Acts as a Pittavata hara, Rasasukra – Ojo hitakara, Niravapana, Mrudukara, Svaravarna prasadana.

Therapeutic uses: Grutha is considred to be Agnivardhana, but Pitta samak.

## **RESULT**

During his follow-up after 15 days, his complaints of intermittent pain and burning sensation were gradually reducing & patient was improving symptomatically. He was advised to repeat the application of picchu. There were no specific symptoms also.

Signs & Symptoms	Mean Before Treatment	Mean After Treatment	% of Changes
Pain	3.00	1.67	44.33
Itching sensation	2.00	1.40	30
Burning Sensation	3.00	0.1	96
Odour	2.00	1.0	50
Size of the Wound	2.00	1.40	30

Tenderness	2.00	1.13	43.5
Discharge	1.0	0.75	25
Floor of Granulation	1.0	0.75	25

# **REPORTS**

Date	Clinical features	Impression
15/9/2022	Pain, Burning, Itching Sensation. Odour, Tenderness	Red granulation tissue. Minimal serous discharge. Slough absent. Signs of inflammation are minimal. Smell absent.
29/9/2022	Reduced Symptoms	Essentially normal study.



## **DISCUSSION**

The action of the drugs is studied under two headings, as the subjected of study is dushta vrana and the purpose is aimed at Shodhana to reach the stage of shudha vrana eventually effecting ropana. The doshagnatha of Gauradya Grutha vrana pichhu kapha vata shaman. Kapha and vata are mainly held responsible for Dushta vrana. The pus formation is due to vitiated kapha where as prasara of pus is due to vitiated vata.

The drug is having Ushna guna, Ushna veerya with vata hara which is effective in lekhana and vedanahara. The stages is chronic with slough, pus and blood which are exacerbated by kleda at the region.of Gaurady Grutha vrana picchu application owing to its katu and ushna property remove excess of kleda and thereby resulting in shodhana having urga gandha similar to that of helps in removal of foul smell. The role of pruthvi mahabhutha in the condition being affected by dusta should be considered in the manifestation of foul smell. Thikta rasa by its virtue has directed effect as vrana shodana and has direct pacifying action on ralta vikara and in dushta vrana there is predominant vitiation of raktha dhathu which is the root cause for dushtatha.

#### **CONCLUSION**

Treatment Should be based on Bcterial culture resuls and the anti- toxicity capability. Negative pressure wound therapy or wound closure with a vacuum using a sponge on the wound covered with an airtight dressing, then a vaccum is installed. Dressing with medicated Decotions. Because dressing is a material used topically on the wound to protect the wound and help wound healing.

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