

ASSESSMENT OF TIKTAADI GHRIT ON NON HEALING DIABETIC ULCER

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INTRODUCTION:

Diabetes mellitus is known for its multifaceted complications, foot ulcerations. Diabetic patients are of concern with lower extremity complications. Beginning with neuropathy & subsequent diabetic wounds frequently lead to lower extremity amputation. The prevalence of foot ulcer ranges from 4% to 10% among persons diagnosed with diabetes mellitus. These ulcer frequently become infected and a cause for hospitalization. The basic reason of ulceration, it's an avenue for infection and cause progressive tissue necrosis with poor wound healing in presence of ischemia. A healthy wound in a normal body heals earlier with a minimum scar as compared to a non-healing diabetic ulcer. In order to overcome or diminish the consequence's a common treatment must be implemented.

Therefore in the present concept, all efforts are directed to keep the wound clean during the various stages of its healing. The need for cost effective, easy to handle, available to all hands modality in the management of such wound is necessary.

Acharaya sushrut explains vana as a condition in which there is discolouration and need for the regeneration of damaged tissue in the 8 explained vana vastu. Vana is described in sushrut samhita, sutrasthan and chikitsasthan with 60 treatment modalities explained in *shashitiupakram*, ghrith. Ghrith application is one of the 60 explained modalities.

Tikatadighirt, the kalp explained in *yogratnakar (utarkhand) dushta vana chikitsa*. It is mentioned that the ghrith helps in good healing of wound and to overcome the discolouration of the skin. *Tikta rasa* has its own property of *vana ropan krumighna, puya nashak, kandu nashak*.

Use of the traditional management in such conditions may help in avoiding surgical procedures, which is a key factor for patients of low socio-economic status.

CASE STUDY:

A patient 45 year old male patient, k/c/o diabetes mellitus since 6yrs visited the O.P.D with the complaint of a non-healing wound on right limb (shin bone region) just above ankle, since 2 months. The patient had history of *Agantujhetu* (~accidental trauma) and was undergoing treatment under local medical practitioner and daily dressing for almost 2 months. Patient consulted a renowned surgeon of other hospital and was suggested debridement followed by skin grafting. Since the patient wanted to recover without any surgical intervention and hence was willing for the open trial study.

P/M/H: K/C/O diabetes mellitus since 6yrs, no h/o hypertension, Kochs or any other systemic disease.

Present medication tab. GMP 2, Dose 1 O.D

P/S/H: No any surgical history

H/O ADDICTION: addiction to alcohol for more than 12 years, no other addiction.

H/O DRUG ALLERGY: No history of allergy to any specific drug.

General Examination:

Pulse - 80/min, B.P: 130/80mm of Hg, Afebrile, general condition: Fair

LOCAL EXAMINATION:

INSPECTION: Infected wound just above the right ankle at shin bone region with active foul smelling pus discharge with no active bleeding.

PALPATION: mild tenderness, with discharge on pressure.

INVESTIGATION:

Blood sugar (fasting & post prandial) fasting 134mg/dl, post prandial 188 mg/dl.

C.B.C report showing raised level of W.B.C level & ESR.

Culture sensitivity of the pus sample collected from the wound swab which did not show any specific changes or resistance to any anti-biotic.

Serum creatine: within normal limits

AIM:

ASSESSMENT OF TIKTADI GHRIT IN NON HEALING DIABETIC ULCER MANAGEMENT

TYPE OF STUDY:

Interventional open single case study

MATERIAL & METHOD:

Material:

1. Tiktadi ghrut for local application

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| Sr. No. | DRAVYA | LATIN NAME |
|---------|---------------------|--------------------------|
| 1. | <i>Kirattikta</i> | <i>Swertia chirata</i> |
| 2. | <i>Madu chushti</i> | <i>Cera fleva</i> |
| 3. | <i>Haridra</i> | <i>Curcuma longa</i> |
| 4. | <i>Yashtimadhu</i> | <i>Glycirhiza glabra</i> |
| 5. | <i>Karanj phala</i> | <i>Pongamia glabra</i> |
| 6. | <i>Karanj patra</i> | <i>Pongamia glabra</i> |

| | | |
|----|--------------------|-----------------------------|
| 7. | <i>Patol patra</i> | <i>Trichosanthes dioica</i> |
| 8. | <i>Malti patra</i> | <i>Combretum indicum</i> |
| 9. | <i>Nimb patra</i> | <i>Azadiracta indica</i> |

The above reference of *Tiktaadi ghrīt*, its content is of *Yogratnakar Uttarardhdushta vrana chikitsa adhyaya*, prepared under expert supervision by standard method of siddha ghrīt preparation for all patients at one time

Methods:

\Tikatdi ghrīt was used as local application on wound for one month. The wound was first daily cleaned with normal saline and the ghrīt was applied covered with sterile gauze piece.

Medication:

1. Tab. Gmp 2 one O.D
2. Tab. Enzoflam s.o.s
3. Inj. Amikacin 1gm intramuscular for 5 days.

METHOD OF PREPARATION: the ghrīt was prepared as per the description given in ayurvedic text.

Observations were recorded on the following parameters,

1} size of wound

- 0 = healing of wound 67% to 100%
- 1 = healing of wound 34% to 66%
- 2 = healing of wound 1% to 33%
- 3 = healing of wound 0%

2} GRANULATION:

- 0 = Pink
- 1 = Bright red
- 2 = Slough (yellowish base)
- 3 = Eschar (blackish)

3} foul smell:-

Present or absent

OBSERVATIONS:

| SYMPTOMS | DAY 1 ST | DAY 7 TH | DAY 15 TH | DAY 21 ST | DAY 30 TH |
|----------------------|----------------------------|---------------------|----------------------|----------------------|----------------------|
| SIZE OF WOUND | 10CM×4CM | 9.5×3.8 | 8.4×3.2 | 7.6×3 | 6.8×2.6 |
| GRANULATION | SLOUGH YELLOWIS BASE | PINKISH WHITE | PINK | PINK | RED |
| DISCHARGE | FOUL SMELLING | MILD | NO | NO | NO |

The application of ghr̥it in the trail showed successful results. From the observation table it is clear that there were positive changes in size, granulation tissue, discharge.

RESULTS:

At the end of the 30 day trial the ghr̥it application showed remarkable results. Wound healed approximately by 30 % in size with no discharge from the 14th day and healthy granulation tissue. The patient was satisfied as the surgical procedures advised were avoided.

DISCUSSION:

According to ayurvedic literature explained by acharya charak tikta ras has its own property of vrana ropan, puya nashak, kandu nashak, krumighna etc. Kalp tiktadi ghr̥it is made up dravyas which all have the tikta ras in common. The treatment modality explained by Acharaya Sushrut and properties of tikta rasa by Acharya Charak gave a good direction and effective use of tiktadi ghr̥it on non-healing ulcer. In Yogratnakar it is mentioned the ghr̥it is effective in dushta awastha. The use of this ghr̥it also keeps the wound margins soft, avoids fibrosis of wound edges leading to development of healthy and soft skin.

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