

**AN AYURVEDIC MANAGEMENT OF NON-HEALING DIABETIC
WOUND- A CASE STUDY****Dr. Durgadas Kawadkar*¹, Dr. M. J. Quadri² and Dr. Sunilkumar S. Yadav³**¹PG Scholar Shalyatantra Dept., Govt. Ayurved College Osmanabad, Maharashtra, India - 413501.²Professor Shalyatantra Dept., Govt. Ayurved College, Osmanabad, Maharashtra, India – 413501.³PG Scholar, Department of Agadtantra Evum Vidhivaidyak, Government Ayurvedic College, Osmanabad, Maharashtra, India 413501.Article Received on
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413501.**ABSTRACT**

Diabetes mellitus is a clinical syndrome characterised by hyperglycaemia caused by absolute or relative deficiency of insulin. Hyperglycaemia has many causes but is most commonly due to type 1 or type 2 diabetes. Lack of insulin affects the metabolism of carbohydrate, protein and fat, and can cause significant disturbance of water and electrolyte homeostasis. Diabetic wound is a leading complication of diabetes mellitus, severity may lead to amputation of foot. In diabetic patient wound healing is delayed due to microangiopathy, atherosclerosis and proliferation of bacteria due to high blood glucose level. So proper management and to break pathology of non-healing diabetic wound is needed. In this case study,

patient is treated with preparation of *Amalaki + Guduchi + Haridra Churna* and *Yashtimadhu churna* orally along with localized cleaning and dressing wound according to plan of treatment and significant result achieved.

KEYWORDS: Diabetes Mellitus, Diabetic Wound, *Panchavalkal kwath*, Non-Healing Wound.

INTRODUCTION

A chronic wound is defined as a wound that does not heal in an orderly set of phases or in a timely fashion.^[1] Diabetes is the leading cause of complications including blindness from

diabetic retinopathy, kidney failure and resulting dialysis, non-traumatic knee amputation. Nerve damage occurs in 60-70% of diabetic population. Diabetic wound is the most dreaded complication of diabetes mellitus.^[2]

In recent decades, the number of people suffering from impaired wound healing has increased. Delayed wound healing in diabetes is due to microangiopathy, atherosclerosis and proliferation of bacteria due to high blood glucose level.^[3] The number of people with diabetes worldwide was estimated at 131 million in 2000; it is projected to increase to 366 million by 2030.^[4]

In diabetes, chronic skin ulcerations are common on the lower extremities, particularly the foot. Diabetic foot ulcers (DFU) affect 15% of diabetic patients. Of those patients with DFUs, 14–24% subsequently experience a lower extremity amputation, with the mortality rate from amputation approaching 50–59% five-year post-amputation.^[5] Studies of the pathology of diabetic foot ulceration have focused on microbial invasion, epithelial breakdown, and impaired immune function as some of the causative factors for the non-healing phenotype.^[6]

Ayurveda is a science of life and is believed to exist as long as the origin of life on this earth as is mentioned in *Charak Samhita*. Ever since the life originated, human being has been susceptible to injury, which made him to think about healing from very early stage of development. *Sushruta* has mentioned various types of *vrana* and their management, which is of prime importance in any surgical practice/procedure.^[7] In *Sushrut Samhita*, *sushruta* mentioned that *Prameha* causes *pidaka* which converted into *Vrana*. In this case study, diabetic wound treated by Ayurvedic preparation and cleaning dressing of wound.

AIM AND OBJECTIVE

To evaluate the effect of *panchavalkala kwatha* in the management diabetic non-healing wound.

MATERIAL AND METHODS

CASE STUDY

A case of 40yrs male patient visited to *shalya* OPD with complaint of non-healing wound over right lower leg below knee joint, pain, redness, purulent discharge, foul smelling since 2 months.

HISTORY OF PRESENT ILLNESS

Patient is case of controlled Diabetic mellitus (on oral antidiabetic drugs) since 5yrs. He fall himself and injured CLW to Right lower leg below knee joint before 2 moths back, patient took treatment at private hospital for that injury but wound did not healed and developed non-healing diabetic wound. Then after 2 months he came to govt. Ayurvedic hospital Osmanabad for further management.

PAST HISTORY

Known case of Controlled Diabetes Mellitus since 5yrs on regular oral hypoglycemic drugs.

No history of Hypertension or any other major illness.

Also no any other medicinal history and family history present.

following investigations are done and patient treated on OPD basis

INVESTIGATIONS

Hb – 11.5 gm%, BT – 2.00 min., CT – 4.02 Min, BSL Fasting– 80 mg/dl, PP- 130 mg/dl, Urine routine – With in normal limit, HbsAg and ICTC – Negative.

GENERAL EXAMINATIONS

All vitals parameters were within normal limits. Patient was haemodynamically stable.

LOCAL EXAMINATIONS**Inspection**

Site- lower leg below knee joint

Size- 3x2x1cm

Shape- oval

Edge- fibrous tissue

Floor- unhealthy granulation with slough

Discharge- blood with pus

Smell- unpleasant

Surrounding area- mild inflammation and congestion

State of *vrana*- *Dushta Vrana*

Palpation

Edge and Margin- Tenderness ++

Base- bone(tibia) covered with slough

Temperature- raised

Lymph node- not palpable

CRITERIA FOR ASSESMENT

Size

No discontinuity of skin/mucus membrane

¼ of previous area of ulcer

½ of previous area of ulcer

> ½ of previous area of ulcer

Pain

No pain

Localise pain during movement but relieved on rest

Localise pain even during rest

Localise pain even during rest and also towards other side

Discharge

No discharge/ dry dressing

Scanty occasional discharge or little wet dressing

Often discharge needs daily dressing

Profuse continuous discharge needs frequent dressing

Smell

no smell

bad smell

tolerable unpleasant smell

foul intolerable smell

Edge

adhere edge

smooth, even, regular edge

rough, oval edge

angry look

Floor

smooth regular with granulation tissue/ no need for dressing rough regular, mild discharge, less granulation tissue/needs dressing unhealthy, less granulation tissue / needs daily dressing unhealthy, no granulation tissue, slough (0= - , 1= + , 2=++ , 3=+++).

TREATMENT PLAN

Patient came with diabetic history and non-healing wound over right lower limb then after above investigation and examinations treatment planed that oral medication of ayurvedic preparation.

Amalaki churna + *Guduchi churna* + *Haridra churna* 5gm BD with lukewarm water
Yashtimadhu churna 5gm BD.

Daily cleaning and dressing with *Panchavalkal kwath* oral medications given for 1 month and cleaning dressing done daily first 7 days, then alternate day upto 14th days, then cleaning and dressing 3 times in week upto 30th days.

OBSERVATIONS AND RESULTS

Observations and results are given in table below-

Sign/symptoms	Day 1	Day 7	Day 14	Day 21	Day 30
Size	+++	+++	++	+	-
Pain	++	++	+	-	-
Edge	++	++	+	+	-
Floor	+++	++	+	+	-
Discharge	++	+	+	-	-
Smell	+++	++	+	+	-

IMAGES

Day 1



Day 7



Day 14



Day 21



Day 30

DISCUSSION

Wound healing is a normal physiological event which outsets immediately after injury till the formation of healthy scar, but in diabetic patient wound healing delayed due to microangiopathy, atherosclerosis and proliferation of bacteria due to high blood glucose level. Patient was taking hypoglycemic agents orally for control diabetes mellitus. In this patient, above preparation of *Amalaki + Guduchi + Haridra Churna* preparation given by *Acharya Vagbhata in Prameha chikitsa* chapter which breaks the pathology diabetic disease and itself helps and progresses in wound healing and *Yashtimadhu churna* itself has *Vranashodhan* and *Vranaropan* Property which improve wound healing Process. Along with this treatment cleaning and dressing of wound according to treatment plan also plays and major in formation of healthy wound.

CONCLUSION

In diabetic patient, commonest complication is non-healing chronic diabetic wound and which does not heal at the end amputation of limb needed. This single case study showed encouraging results in diabetic wound healing with preparation of *Amalaki + Guduchi + Haridra Churna* and *Yashtimadhu churna* along with cleaning and dressing and need to be studied in more number of patients. Hence this preparation is effective in non-healing diabetic wound.

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