

DIABETIC FOOT AND IT'S AYURVEDIC MANAGEMENT – A CASE STUDY

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ABSTRACT

India is the diabetic capital of the world gaining the status of a potential epidemic. 25% cases of diabetes mellitus turns into grievous complications like a diabetic foot. 5% of the entire lower limb surgeries are known to be amputation of the foot due to a diabetic wound (*Dushtavrana*). The treatment of diabetic foot requires a team of physician, a surgeon and an endocrinologist and measures are taken to control the sugar of the patient, however, to prevent further aggravation and worsening of the patients condition, foot amputations is considered as the final decision. However, *Ayurvedic* intervention proves to be a silver lining in the dark cloud of diabetic complications. This case study will reveal the management of diabetic foot through *Bahya parimarjan along with internal medications*. A female patient of age 48 years came with the complaint of non healing wound over right foot (plantar aspect) just below 5th toe of foot since 8 weeks. Patient was the diagnosed case of uncontrolled diabetes mellitus and on antidiabetic drugs from last eight years. After required investigations and local examination of wound, patient was planned and treated (*Ksharavarti, Jatyadi taila, Panchvalkala kwatha*) *Ayurvedic* formulatins as described in texts of *Ayurveda*.

KEYWAORDS: Diabetic foot, Shodhana, Ropana, Pancha valkala kwatha, Kshara varti, Jatyadi taila.

INTRODUCTION

Foot complications are common in people with diabetes. High blood glucose levels for longer durations damage blood vessels leading to reduced blood flow to the foot. This poor blood circulation contribute to the formation of ulcers and impairs wound healing. Elevated blood glucose levels over a period of time can damage the nerves of foot decreasing persons ability to notice pain and pressure. Loss of sensations further leads to develop pressure spots and accidentally injure the skin, soft tissues and bones. Nerve damage poor circulation and chronically high blood glucose levels increase the risk of foot complications. Vascular compromise should be considered a relative contraindication to a surgical approach and amputation may not be an easy option as wound healing will be poor. According to Sushruta, meda and rakta along with other dosha and dushya lead to the formation of premeha pidika which later converted to non-healing wounds or dushtavrana.

CASE STUDY

Chief complaints: wound in the plantar aspect of right foot just below 5th toe.

Associated complaints: pain and pus discharge.

History of present illness: Patient was a known case of diabetes. Two months ago she got wound in right foot. She approached Hi Tech Hospital, She got admitted and underwent treatment (debridement and regular dressing of the wound) for about 21 days. Later she was advised to undergo amputation of right foot. Patient was not willing for amputation. Hence she approached SKAMCH & RC for the conservative management.

Past history: Not a known case of Hypertension/ Bronchial Asthma/ Hypothyroidism/ other systemic disorders.



Local Examination

Examination of Wound in the Right Lower Limb Shape and Size of the Ulcer
Oval in shape, approximately
2cm length, 1.5 cm width, 3cm deep

Number- 1

Position- plantar aspect of right foot just below the 5th toe.
Edge- punched out edge.
Floor and Base- not traceable, deep cavity opens into the dorsum of right foot on probing.

Local Examination

Discharge- pus discharge associated with foul smell present


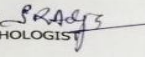
Surrounding Skin- Normal, no discoloration or pigmentation, no signs of ischaemia

Regular Medications

Tab. Glisen mf2 1-0-1 before food

Investigations

Hb-11.2g%
FBS- 226 mg/dL
PPBS- 393 mg/dL
CT- 8' 56''
BT- 2' 35''
HIV 1 & 2- non reactive
HbSAg-nonreactive

		Reg. No. A405B4	Date 23/01/2019
Centre For Hi-tech Diagnostics Services and Multi-Speciality Polyclinic integrated with Physiotherapy & Research 82/10, Rajkumar Road, 4th 'N' Block, Rajajinagar, Bangalore-560 010 Phone : 080-2332-6001 (30 Lines) 2313 3838 / 39 / 40 / 41 / 42 / 43, 2313-8846, 2313-4847 E-mail : dr.venkatappa@kanvadiagnostic.com Test Name Website : www.kanvadiagnostic.com		Name MRS . ZUBEDA-G231	Sex Female
		Age 47 Year(s)	
		Corporate NON CORPORATE	
		Ref. By. DR ANJALI	
			UHID
		Biological Reference Interval	Page 1 of 1
CLINICAL BIOCHEMISTRY REPORT			
GLUCOSE FASTING (Hexokinase)			
GLUCOSE FASTING (Hexokinase)	226.0 mg/dl	Normal	: <100 mg/dl
		Impaired	fasting glucose : 100 - 125 mg/dl
		Provisional	diagnosis of diabetes : >126 mg/dl
GLUCOSE 2HR POST PRANDIAL (Hexokinase)			
GLUCOSE 2HR POST PRANDIAL(Hexokinase)	393.0 mg/dl		80 - 140 mg/dl
Verified By : JYOTHI			
		FOR 	
		PATHOLOGIST	
		Reported On : 23/01/2019 12:58	
----- End of Report -----			
DISCLAIMER The result obtained relate only to the sample given/received & tested. A single test result is not always indicative of a disease, it has to be correlated with clinical data for interpretation. Sample processed on the same day as collection/received date unless specified otherwise. Tests prefixed with a '*' do not come under the purview of NABL			

Treatment

3-1-2019	<i>Dressing of the wound with Jatyadi Taila on opd basis</i>
4-1-2019 to 7-1-2019 <i>Pain and Pus discharge persist, tenderness persist, slough present.</i>	<i>On opd basis Tab Kaishore guggulu 2 bd Tab Gandhaka Rasayana 1 bd Vrana prakshalana with panchavalkala kashaya Kshara varti was inserted daily for 4 consecutive days Followed by dry dressing of the wound</i>
8-1-2019 to 11-1-2019 <i>Mild pus discharge noted,tenderness reduced,size of the wound reduced,healthy granulation tissue noted.</i>	<i>On opd basis Tab Kaishore guggulu 2 bd Tab Gandhaka Rasayana 1 bd Vrana prakshalana with panchavalkala kashaya Followed by dry dressing of the wound</i>

12-1-2019 to 2-2-2019 <i>Mild pus discharge noted,tenderness reduced,size of the wound reduced, healthy granulation tissue noted.</i>	<i>On OPD basis Tab Kaishore guggulu 2 bd Tab Gandhaa Rasayana 1 bd Vrana Prakshalana with Pancha Valkala Kashaya daily Followed by dressing of the wound with Jatyadi taila</i>
3-2-1019 to 27-3-2019 <i>Pus dicharge absent,tenderness absent,size further reduced.</i>	<i>Dressing of the wound with Jatyadi taila every alternate days</i>

**Probing done on 4-1-2019****Vrana Prakshalana with Panchavalkala Kwatha**



Kshara Varti Insertion



Dressing of the Wound



Wound as on 14-01-2019



Wound healed at 4-4-2019

RESULT

Wound completely healed
Completely Healed Wound As On 4-4-2019

DISCUSSION

- The treatment of diabetic foot with above ayurvedic drugs is found satisfactory.
- In this case we have used both external and internal medications.
- Kshara in the form of varti is indicated in gambhiravast for shodhana of vrana.
- Panchvalkala decoction has shodhana property, therefore daily washing of wounds with freshly prepared decoction leads to shodhana of vrana by removing the slough through the height maintained during prakshalana.
- Jathyadi taila is already proved as a good vrana ropaka when the vrana is shuddha so it is used here which helps in healing of wound.

Kaishore guggulu and Gandhaka rasayana acts as vrana shodhana and ropana which helped in faster healing

CONCLUSION

- As diabetic wound is a challenging case in nowadays practice, by proper understanding of avastha and doshic involvement in vrana, we can treat the condition with appropriate ayurvedic treatment.
- Dushtavrana is deerghakalanubandhi so all the tridoshas are involved and diabetic wound can be considered under as it is also a non healing wound.

So proper shodhana and ropana of vrana both externally and internally treatment is necessary in management of diabetic wound

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