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Management of *Madhumeha Janya Vrana*, Wagner Grade-2 and Cellulitis with *Gaumutra Arka* as a *Pradhana Dravya*: A Single Case Report

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ABSTRACT

Madhumeha janya Vrana, a hyperglycaemic status precipitates infections in pre-existing immune suppressed diabetic subjects. This requires oral medication, daily dressing, *prakshalana* and wound debridement. A 60 year old female with Type II Diabetes mellitus since 20 years, complaint of painful swelling with raised local temperature, blisters, purulent discharge at base of 2nd web space in dorsal aspect of left lower limb extending till ankle joint, measuring 10 x 6 cm, GRBS was 414 mg/dl with HbA1C of 12% was treated on *Vrana chikitsa* principles at SDMIAH, Bangalore. Objective was to evaluate utility of *gomutra arka prakshalana* and *jatyadi taila pichu* dressing in *madhumehajanya Vrana*. Single case report treated with *Vrana lekha* [wound debridement], daily *prakshalana* with *gomutra arka*, dry mopping, *jatyadi taila pichu* and *bandhana* for 90 days. Daily image documentation of the wound status and GRBS documentation done. Initial glycaemic control was achieved by oral medications. Systemic antibiotic, Wound debridement, dressing were helpful in infection control. *Gomutra arka* and *Jatyadi taila* accelerates granulation, maintains wound hydration thus help in wound healing. No adverse events noted.

Key Words *Madhumeha Janya Vrana, Diabetic Foot Ulcer, Gomutra Arka, Jatyadi Taila, Vrana Lekhana*

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INTRODUCTION

The case mainly focuses on the healing of *madhumeha janya vrana* using *gomutra arka* which possess *kshareeya*, *krimigna*, *shodhana* properties and is economic. Wound dressing with *jatyadi pichu* is for *vrana shodhana*, *ropana*. Diabetic control was achieved throughout the procedure while *srotoshodhana*, *shophahara* measures were adopted initially which was later

changed into *sambrumhana*, *vaikrutapaha chikitsa*.

CASE REPORT

A 60 year old female patient with K/C/O Diabetes Mellitus Type II since 20 years was brought to Shalya Tantra OPD in the month of January 2022 with complains of pus discharge in left dorsum of foot, swelling in calf region and pain in the left foot since 4 months As per **Figure 1**. The complaints were associated with

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difficulty in walking and fulfilling daily activities. So for the above complaints she approached SDMIAH, Bangalore and was admitted for further treatment.



Figure 1 Initial stage of ulcer

CLINICAL EXAMINATION

It was found that there are normal vascular activities and pulse around the ulcer associated with uncontrolled diabetes, painful swelling with discharge at base of 2nd web space extending till ankle in dorsal aspect of left lower limb with raise in local temperature and oozing blister at same site **As per Figure 2 and As per Figure 3.** The symptoms and blood glucose level reduced after administration of systemic antibiotics, hypoglycemic drugs and non-steroidal anti-inflammatory drugs.

PATIENTS EXAMINATION

Her *prakṛti* (body constitution) was *kapha-pittaja*. Her *agni bala* (Digestive power) and *Sharir bala* (physique) was *madhyama* (moderate). No specific etiological factor (occupation related or life style related) was found in history.



Figure 2 Stage of oozing blister



Figure 3 First phase of treatment

LABORATORY INVESTIGATION

Hemoglobin 10.2 g/dl, leukocytes 6400/cu mm, neutrophils 72%, lymphocytes 26%, Eosinophils 01%, Monocytes 01%, ESR 38 mm/hr, GRBS

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414 mg/dl with HbA1C of 12%. The urine analysis showed no albumin, pus cells, epithelial cells or RBCs.

The objective is to enlighten the utility of *gomutra arka prakshalana* and *jatyadi taila pichu* dressing in *madhumehajanya Vrana*.

ASSESSMENT CRITERIA

Subjective criteria:

1. Wound size- 10x6 cm
2. Wound depth-4 mm
3. Wound base appearance- reddish white
4. Drainage- 7 cc

Signs of infection-

- collection of pus
- blisters
- burning sensation
- edema over surrounding tissues
- redness over ulcer

5. Evaluation of exposed structures such as tendon, ligament and joint capsule appreciated
6. Vascular component- normal on palpation

- Objective criteria:

Wagner Grade 2 ^{1,2}

MODE OF TREATMENT

Table 1 Treatment as per Figure 3

Days	Medicine	Dosage
1-9 days	Inj metronidazol	IV TID in 100 ml infusion
	Tab Amoxiclav 625 mg	1-0-1
	Tab chymoral forte	0-1-0 A/F
	Tab orofer XT	0-1-0 A/F
	Tab glucolog M 50 mg	0-1-0
	Inj Basalog 100 IU	
	Vildipride M 50	0-1-0
	Gokshuradi guggulu	1-1-1 A/F
	Triphala churna + Haridra Churna	0-0-1tsp B/F
	Patola katuka rohinyadi kashayam	3-3-3 tsp
Gomutra arka	1-1-1 tsp	
Nithyananda rasa	2-2-2 A/F	
Therapeutic procedures done:		
1-9 days	<i>Anuvasana Basti : Manjishtha taila (40ml)+ Yashtimadhu taila (40ml) for 8 days</i>	
	<i>Vrana Prakshalana with gomutra arka.</i>	
	<i>Jatyadi taila Pichu</i>	
	<i>Lekhana karma was done on alternate days.</i>	

Table 2 Treatment ss per Figure 4

Days	Medicine	Dosage
10-27 days	Triphala churns + Haridra Churna	0-0-1tsp B/F
	Patola katuka rohinyadi kashayam	1-3-3 tsp
	Gomutra arka	1-1-1 tsp
	Nithyananda rasa	2-2-2 A/F
	Gokshuradi guggulu	1-1-1 A/F
	Tab orofer XT	0-1-0
	Vildipride M 50	1-0-1
	Tab glucolog M 50 mg	0-1-0
Therapeutic procedures done:		
10-27 days	<i>Anuvasana Basti : Manjishtha taila (40ml)+ Yashtimadhu taila (40ml) for 8 days</i>	
	<i>Vrana Prakshalana with gomutra arka</i>	
	<i>Jatyadi taila Pichu</i>	

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Lekhana karma was done on alternate days.

Table 3 Treatment as per Figure 5

Days	Medicine	Dosage
28-45 days	Aragwadadi 3 tsp +Gomutra arka 1 tsp	1-1-1B/F
	Tab Punarnava mandoora	1-1-1 A/F
	Triphala choorna 1/2tsp+haridra choorna 1/2tsp	0-0-1 B/F
	Guru Rasayana	1-1-1 A/F
Therapeutic procedures done:		
28-45 days	<i>Anuvasana Basti : Manjishtha taila (40ml)+ Yashtimadhu taila (40ml) for 8 days</i>	
	<i>Vrana Prakshalana with gomutra arka</i>	
	<i>Jatyadi taila Pichu</i>	
	<i>Lekhana karma was done on alternate days.</i>	

Table 4 Treatment as per Figure 6

Discharged medicine:	
Nithyananda rasa	2-2-2 A/F
Patolakatukarohinyadi kasaya	3tsp-3tsp-3tsp B/F
Gomutra arka	1tsp-1tsp-1tsp B/F
Gokshuradi guggulu	1-1-1 A/F
Triphala churna + Haridra Churna	0-0-1tsp B/F
diagnostic and therapeutic procedures done every alternate days.	
<i>Lekhana karma</i>	
<i>Prakshalana with gomutra arka</i>	
<i>Jatyadi taila Pichu</i>	



Figure 4 Second phase of treatment

RESULT

Within the span of 10 days the pus collection reduced significantly and the symptoms of bad odour , blisters and discharges reduced and the

GRBS was under control with the value of 168mg/dl. By the span of 30 days the healthy granulation started forming with no other complication. The ulcer started healing from the edges and at the last phase of treatment ,white slit like shape was appeared which then turned into a normal texture of skin by the duration of 3 months.



Figure 5 Completely covered with granulated tissue

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Figure 6 Almost covered with skin

DISCUSSION

Madhumehajanya Vrana has been mentioned under *Vrana chikitsa* by *Sushruta*. It can be correlated symptomatically by diabetic foot ulcer. The prevalence of diabetic foot ulcer has been certainly increasing in this era and this need utmost care, daily dressing, controlling glucose level and avoiding infection. In this case the ulcer showed *kaphaja dosha dushti* and *rasa, rakta, mamsa dhatu dushti*. The treatment was decided on the basis of predominance of *doṣa* and *dhātu* (~body tissues) involvement. Treatment was planned according to treatment principles governing vitiation of *rasavaha, Raktavāha srotas* (~macro and microchannels of blood).

Gomutra arka (distilled cow urine) is widely used in internal and external application and it consists of all the *guna* and *karma* similar to that of cow urine. It is *Katu, tikshna, usna* and *kshara*. It is *pitta vardhak* and *vata kaphahara* and specially used in *Shula* according to

Sushruta. It is also *krimighna* according to *Charaka*. It can be used internally and externally as well. These all are the *gunas of gomutra* but we generally use *gomutra arka* as there are contamination and ethical issues.³⁻⁵

Jatyadi taila is a good healing promoter and is widely used in ulcer care. It is advised for poison, burn, leprosy, eczema, erysipelas, insect bite, accidental wound and loss of decomposed muscles. In this case we applied *jatyadi taila* as a *pichu* after cleaning the wound.^{6,7}

Nithyananda rasa was given internally for regeneration of healthy tissue, to improve *rakta dhatu* and *mamsa dhatu*.⁸

Patola katuka rohinyadi kashayam is in a form of decoction which is given after food and helps in skin disease involving itching, pigmentation and burning sensation. It also does antimicrobial medicine.⁹



Figure 7 Treated ulcer

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CONCLUSION

Further research should be done over prakshalana of madhumeha janya vrana which does the shodhana and ropana karma together and helps penetrating the minutest pore in the vrana and does lekhana karma to prevent infection and collection of discharge.

Daily dressing is necessary for this type of wound, so easy availability for patients dressing should be made maintaining aseptic condition through which the patient doesn't miss the dressing and gets benefited. **As per Figure 7**

DECLARATION OF PATIENT CONSENT:

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has given her consent for her images and other clinical information to be reported. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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REFERENCE

1. Wagner FW. Classification and treatment program for diabetic, neuropathic and dysvascular foot problems. Instructional Course Lectures 28. American Academy of Orthopaedic Surgeons; 1979.
2. Wagner FW. The dysvascular foot: a system for diagnosis and treatment. *Foot and Ankle*. 1981;2(2):64-122
3. Acharya YT, editor, Shri Chakrapanidatta, commentator, Agnivesha, Charak Samhita, Sutrasthana; deerghajivitiya Adhyaya, 1/111, Chaukhamba Surbharati Prakashan, Varansi, 2014; page 21.
4. Sharma A. Susrutavimarshini hindi commentary on Susruta Samhita, Chaukhamba Surbharti Prakashan, Varanasi., Sutrasthana chapter 45 verse 217.
5. Gomutra (cow urine): a multidimensional drug review article; October 2017 International Journal of Research in Ayurveda and Pharmacy 8(5):1-6 ; DOI:10.7897/2277-4343.085231
6. Sharangadhara, Sharangadhara Samhita, English T by Shrikantha Murthi, Chaukhamba Orientallia, Varanasi, Madhyama Khanda 9/58-60.
7. Government of India ministry of Health and Family Welfare, Department of Indian system of Medicines and Homoeopathy. The Ayurvedic Formulary of India, 1(2003), 388–389.
- 8) Mishra SN, Bhaisajya Ratnavali, Hindi T By Kaviraj Govind das Sen, Chaukhamba Orientallia, Varanasi, shlipada rogaadhikara 33-41.
9. Vaidya Yadunandan Upadhyay. Vidyotini hindi commentary on Ashtang Hridaya. Chaukhamba Sanskrita Sansthan, Varanasi, Sutrasthana chapter 15 verse 15.