



The Role of Poogatrim Basti In The Management of Madhumeha Janya Upadrava With Special Reference To Diabetic Neuropathy: - A Single Case Study

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Abstract:

Madhumeha (Type 2 Diabetes Mellitus) is a syndrome characterized by disrupted metabolism and hereditary immune mediated involvement, which worsens with the appearance of life-threatening complications such as neuropathy, nephropathy, and retinopathy, as well as pathological changes involving small and large vessels, leading to myocardial problems and cerebrovascular accidents. This case study is about a 58-year-old man who went to the *Panchakarma* in Patient Department at SDM College of *Ayurveda* and Hospital in Hassan. Diagnosed with type 2 diabetes Since 5 years, experiencing discomfort and a burning sensation in bilateral lower limb, as well as a lack of sensation in b/l lower limb. HbA1C 12.9, PPBS 380mg/dl, FBS 263 mg/dl, and a daily dose of 96 units of insulin. In this clinical study *Pooga trim Basti* has given along with other therapies & diet in diagnosed Diabetic Patient and their result shown statistically significant improvement in the sign and symptoms. This novel combination was found to be effective in this case, but further study should be carried out to establish this treatment modality.

Keywords: *Madhumeha Janya Upadrava*, Diabetic Neuropathy, *Pooga trim Basti*, *Basti*

Introduction: -

*Madhumeha*¹ was identified by the Indian medical system as a *Dosha* imbalance (*Vata*, *Pitta*, and *Kapha*). According to current medical research, *Madhumeha* is associated with diabetes, which is characterized by hyperglycemia and disruption of water and electrolyte balance. It is classified as *Ashta mahagada*² (difficult to treat) in *Ayurveda* (*Brihatrayi*). It is also linked to a lifestyle-related metabolic illness, as junk food intake, daytime sleep, a lack of exercise, and sedentary behaviours can all lead to diabetes symptoms. *Madhumeha* is now a fairly frequent pathological disorder that affects more than 20% of the world's population. *Madhumeha* can be managed with beneficial *Ahara Vihara*, *Yoga*, *Sodhana karma*, and the use of numerous *Ayurveda* formulations; however, *Panchakarma* has lately gained prominence in the management of *Madhumeha*. *Madhumeha* (diabetes) is a metabolic condition characterized by high blood sugar levels, frequent urination, excessive thirst and hunger, and other symptoms. *Madhumeha*² was classified as *Sadhya*, *Yapya*, or *Asadhya* by *Ayurveda*, based on the *Dosha* involved. *Ayurveda* identified several etiological variables that contribute to illness conditions; including *Bija Dosha*, aging, a disrupted lifestyle, stress, anxiety, hormone imbalances, and eating an unhealthy diet. *Madhumeha*'s key pathogenic elements include

Bahudravasleshma and *Bahubaddhameda*. When *Nidana Sevana* aggravates *Kapha*, *Meda Dhatu* becomes vitiated, and diabetes pathogenesis may occur.

Patient information and relevant clinical findings:

- **Case reports:** This case of 58-year-old man who went to the *Panchakarma* Out Patient Department at SDM College of *Ayurveda* and Hospital in Hassan.
- **Chief complaints:** Severe pain, numbness and burning sensation in bilateral upper and lower extremities, hyperesthesia since 6 months. Anorexia, constipation since 6 months.
- **H/O present illness:** Since ten years, the patient has been diagnosed with Diabetes Mellitus Type 2. Since 6 months, he has gradually experienced discomfort, numbness, and a burning feeling in both his upper and lower extremities, particularly his lower extremities. Since two months, the patient has been unable to move or do everyday chores. The VAS scale was set at 5/10. The patient tried allopathic medication for 5 years without success.
- **H/O Past Medical illness:**
K/C/O: DM Type 2 since 5 years. A daily dose of 96 units of insulin in divided dose.
- **H/O Past Surgical illness:** not significant
- **Family History:** Not Significant
- **Addiction History:** Ex Alcoholic
- **Treatment History:** Patient has a history of Allopathic medicines but had no relief. Patient was taking oral hypoglycaemic agents.
- **Personal History**
 - G.C – Poor
 - Appetite – Decreased
 - Diet –Mixed
 - Urine - Increased frequency and amount
 - Bowel – Constipated
 - Thirst – Excessive
 - Sleep - disturbed due to burning
- **On examination**
 - General Examination
 - Pulse - 82/min
 - B.P. - 170/120mmHg
 - RS- B/L lower limb Crepitus
 - CVS-Normal Heart Sounds
 - CNS-Conscious & well oriented to Time, Place, and Person.
 - Per Abdomen-Soft but mild tenderness present over Epigastric region, Umbilical region.
 - Pallor- Absent
 - Tongue- Coated
 - Icterus - Not present
 - Lymph nodes - Not palpable
 - Cyanosis - Not present
 - Oedema- Not present
 - JVP – Not raised
 - Height-170cm
 - Weight- 95kg
- Neurological Examination Diminished tendon reflexes were observed in four extremities especially in Biceps and Ankles. There was glove and stocking par aesthesia, and distal weakness of the hands with lower extremities. Loss of Grip of lower Limb.
- Clinical Findings NCV study was done. It showed Sensory plus Motor Axonal Peripheral Neuropathy affecting bilateral Lower Limb.
- FBS-236mg/dl

- PPBS-380mg/dl

- HbA1C- 12.9 %

- **Differential Diagnosis:** Diabetic Peripheral Neuropathy, Osteoarthritis, Autoimmune Disorders, and Chronic Demyelinating are all examples of diabetic peripheral neuropathy. Poly neuropathy is a kind of neuropathy. Except for blood sugar, the patient's biochemical and haematological parameters were normal, with diminished biceps, ankle reflexes, and vibration sensibility to a 125-Hz tuning fork. Diabetic peripheral neuropathy is characterized by glove and stocking parenthesis, diminished ankle reflexes, and abnormally decreased vibration sensibility to a 125-Hz tuning fork. Hence the major diagnosis in this case was diabetic peripheral neuropathy.

Time	Insuline dose
Morning (8.30AM)	22 unit
Afternoon(11.30AM)	20 Unit
Evening(8 PM)	16 Unit
Night(10PM)	38 Unit

Systemic examination

EXMINATION	RIGHT LEG	LEFT LEG
Slr	Negative(-)	Negative(-)
Faber's	Positive(+)	Positive(+)
Coin pick test	Negative(-)	Negative(-)
Redness	Negative(-)	Negative(-)
Swelling	Positive(+)	Positive(+)
Temperature	Positive(+)	Positive(+)

Diagnosis: Based on the detailed history and clinical examination it has been diagnosed as a case of Diabetic peripheral neuropathy was considered as the primary diagnosis.

TREATMENT PROTOCOL**Table 1: Different therapy procedures performed, their ingredients and the duration**

Procedure	Ingredients	Duration
Udvathana ³ (~Hot protency power massage all over the body) and Parisheka ⁴ (~Pouring medicated fluid on body)	<i>Tripahaladi choorna</i> ⁵ and <i>Dashamoola Kashaya</i> ⁶	2 nd -4 th day
Sarvanga Abhyanga ⁷ + Sastik Sali panda sweda ⁸	Abhyanga with <i>Aswagandha bala taila</i> ¹⁶	5 th -11 days
Pooga trim basti ⁹	<i>Anuvasana</i> -Pippalyadi taila 80 ml <i>Niruha</i> - honey-80ml <i>Sandhava lavana</i> -10gm <i>Sneha</i> - Pippalyadi taila 80 ml <i>Kalka</i> -Poogatrim powder 20gm <i>Triphala</i> 10gm <i>Kasaya</i> - Poogatrim Kasaya 350ml	2 nd -11 th day Modified <i>Yoga basti</i> method.
Shirodhara ¹⁰ (~Pouring medicated fluid on forehead)	<i>Takra</i> , <i>Amalaka</i> ((<i>Emibilica officinale</i>), <i>Musta</i> (<i>Cyperus rotundus</i>) and <i>Jatamamsi</i> (<i>Nardostacyes jatamandsi</i>)	2 nd to 9 th day
Oral medication	<i>Siva gulika</i> ¹¹ 1-0-1 after food.	2 nd to 11 th day
Pada Avagahana ¹²	<i>Dhanyamla</i> (1 lit) & <i>Dashamoola Kashaya</i> (1 lit).	2 nd -7 th day

Basti was administered as modified *yoga Basti* schedule:

DAY 1	DAY 2		DAY 3		DAY 4		DAY 4		DAY 5		DAY 6		DAY 7	
A	N	A	N	A	N	A	N	A	N	A	N	A	N	A

A-Anuvasana *Basti*

N-Niruha *Basti*

Diets and yoga advised:

8 am	<i>Mudgamalaka yusha</i> 400g	General yoga
11 am	<i>Laja Manda</i> 200g	
1 pm	<i>Yava roti</i> + <i>palya</i> (2) 150gm + <i>Mudga yusha</i> 200 ml	
4 pm	<i>Veg soup</i> 200ml	
8 pm	<i>Mehari khichdi</i> 300g, <i>Mudga yusha</i> 200ml	
	<i>Water intake</i> 2L/day	
4-5 pm	<i>Pranayama</i>	

Table 2: Medications and therapies prescribed during discharge (12th to 40th day)

Medication	Dosage
<i>Ayaskriti</i> ¹³	15ml twice daily in empty stomach with <i>Ushna jala</i> as <i>Anupana</i> (adjuvant) Use for head massage twice daily
<i>Shiva gulika</i> ¹¹	1 gm twice daily after food
<i>Mehaabahya</i> ¹⁴	250 mg twice daily after food bed time

ASSESSMENT CRITERIA:¹⁵**Assessment of pain:¹⁵**

Score	Pain
0	None
2	Mild
4	Moderate on rest but dreadful on pressure application
6	Dreadful
8	Sever
10	Pain as bad as it could be

Assessment of Tingling sensation¹⁵

Tingling sensation	Score
No tingling sensation	00
Tingling sensation only on feet	01
Numbness in whole lower limbs	02
Numbness on other parts of body along with lower limbs	03

Assessment of Burning Sensation¹⁵

Burning sensation	Score
Burning sensation	00
Burning sensation only in foot soles	01
Burning sensation in whole lower limbs	02
Burning sensation in all over the body	03

Assessment of Symptoms before Treatment

Symptoms	Before treatment
Tingling sensation	03
Burning sensation	02
Pain	04

Outcome: The patient was observed before and after treatment, i.e. "*Duiguna parihara kala*." The efficacy of therapies was assessed using the Scale. Both scores showed substantial changes before and after therapy.

Follow up for the period of 1 month were done

Symptoms	Before treatment	After treatment
Tingling sensation	03	00
Burning sensation	02	00
Pain	04	02

Discussion:

Poogatrim basti⁹ Each 10g of *Pooga trim* has 5g of *Shuddha pooga* (areca catechu) as the principal component, as well as 1 gram of *Khadira* (acacia catechu), *Katuohini* (picrorrhiza kurroa), *Saptarangini* (salacia chinensis), *Bhoonimba* (swertia chirayita), and *Jamboo twak* (syzygium cumini). *Tannins*, *Arecaatannin*, *Gallic acid*, trace levels of *terpineol*, *lignin*, *alkaloids* such as *Arecoline*, *Arecaidine*, and *Guvacine* all have Vasoconstricting characteristics. *Sodhita pooga* balances *Kapha* and *Pitta dosha* and cleanses the intestines of undesired bacteria such as tape worms, parasites, intestinal worms, and so on. *Kashaya*, *Madhura*, *Ruksha*, and *Sheeta* are the names. It is anti-inflammatory, anti-oxidant, analgesic, anti-ulcer, and neuro protective. It's an excellent masticatory component since it acts as a natural mouth freshener and eliminates plaque from the teeth. It is a powerful digestive stimulant, diuretic, menstrual flow regulator, and laxative. According to nutritional study, *Kramuka/Pooga* is the richest source of organic chromium salts. *Pooga's* detoxifying properties contribute significantly to scarifying the deep-seated *Medhas*. So *Poogatrim basti* plays an important function in cleaning out dangerous microorganisms and restoring the beneficial gut micro biota.

Udvarthana³ a *Bahirparimarjana Chikitsa*, conducted in *Pratiloma gatis Bahya Rookshana* karma its influence on *Kapha & Vata* disease by promoting liquefaction of *Kapha&Meda*, improves metabolism.

Takra dhara¹⁰ with *Amlaki*(*Emibilica officinale*)&*Jatamansi*(*Nardostacyes jatamandsi*) and *Musta*(*Cyperus rotundus*)powder, in *Takradhara* aids in *Rakta gata vata*(~Increase the blood pressure),*Anidra*(*Insomnia*), *Avasada*, *Vatapittajadisorder*,*Ojakshaya*(~Low immunity),*Smriti Nasa*(~Loss of memory)

Our skin is the medium in *Abhyanga*⁷ since it has the most surface area compared to the other senses. Skin has the highest capability for receiving and responding to various impulses. All of the advantages of *Abhyanga* are connected to the stimulation of the autonomic nervous system and the central nervous system, either directly or indirectly.

Aswagandha bala Taila¹⁶ has a *Doshavilayana* (liquefaction of *Dosha*) and *Srotoshodhana* effect, which aids in the relief of *Vata Margavarana* (channel blockage). It will reach *Sukshma Srotas* (minute channels), hence calming *Vata dosha*. *Ushna*, *Ruksha*, and *Tikshna* (sharp) qualities effectively soothe *Sheeta* (cool) and *Snigdha* (unctuous) aspects of *Kapha*.

Rice harvested in 60 days (*Shashtika Shali*⁸) *Sarvanga* is used for *Pinda Sweda*, which is conducted using a bolus of cooked *Shashtika shali*, *Balamoola kwatha*, and *Ksheera*. *Shashtika's* major characteristics are *Snigdha*, *Guru*, *Sthira*, *Sheeta*, and *Tridoshaghna*. It possesses *Brimhana Guna* despite being a *Swedakarma*.

Pada avagahana¹²with *Dhanyamla*¹⁷ & *Dashamoola*⁶.*Dhanyamla* is very helpful in relieving *Daha*, it alleviates *Vata and Kapha* by external & internal use and relieves excessive thirst.

Conclusion: *Pooga*

trim basti, in conjunction with other treatments and dietary changes, has a considerable impact on *Madhumeha upadrava* parameters. Based on the results of this clinical investigation, it is feasible to infer that this new Treatment is a successful treatment for *Madhumeha upadrava*. The current study focused on a specific topic. As a consequence, a large-scale study with a large sample size might be explored to confirm the therapy in *Madhumeha upadrava* patients.

Acknowledgments: The authors would like to thank the department of *Panchakarma's* personnel, postgraduate academics, and therapists for their assistance.

Conflict of interest: None declared

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