



CASE REPORT

A Case Report On Ayurvedic Interventions For Diabetic Peripheral Neuropathy

Anjitha Madhu¹, Muhasina M. Basheer², Remya Vijayan³, Seena S⁴

^{1,2}PG Scholar, Department of Panchakarma, Government Ayurveda College, Tripunithura, Kerala, India

³Associate Professor, Department of Panchakarma, Government Ayurveda College, Tripunithura, Kerala, India

⁴Professor and HOD, Department of Panchakarma, Government Ayurveda College, Tripunithura, Kerala, India

*Email: dranjitharahul@gmail.com

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Abstract

Diabetes mellitus exhibits an increased rate in India (4.3%) compared to Western countries (1-2%), with a similarly elevated complication rate. Diabetic neuropathy manifests in roughly 50% of individuals with long-standing type 2 Diabetes mellitus and mostly remains undiagnosed. Diabetic neuropathy commonly presents with symptoms such as pain, numbness, decreased sensation, tingling, burning sensations, skin ulcers, and reduced reflexes. This article discusses a case involving a patient exhibiting neuropathic signs and symptoms, who reported bilateral calf pain and numbness, along with occasional pricking pain, and burning and tingling sensations in bilateral feet. The diabetic neuropathy screening score exceeded 75%, suggesting significant functional impairment. Diabetic neuropathy can be correlated to *Prameha upadrava* detailed in Ayurvedic classics. The symptoms like *kara-pada daha* (burning sensation), *supthi* (numbness), and *soola* (pain) are present as the complications of long standing *prameha*. The patient underwent Ayurvedic treatment comprising of oral medications, Udvartana (powder massage), *Dhanyamla nimajjitha choorna pinda sweda*, *Abhyanga* (oil massage), *Jambeera Pinda Sweda* and *Madhutailika Vasti* (medicated enema) which is administered in a *Yoga Vasti* pattern. Following the completion of treatment, he showed marked improvement, with a significant decrease in pain, burning sensations, and other neuropathic symptoms like numbness and altered sensations of bilateral foot. The screening scores dropped to below 15%, indicating substantial recovery. This case underscores the efficacy of Ayurvedic therapies and the importance of stage-wise selection of treatments based on disease pathogenesis.

Introduction

Diabetic Peripheral Neuropathy (DPN) is the most prevalent complication of diabetes mellitus^[1], significantly impacting quality of life by causing disability and impairments in gait. Diabetic neuropathy typically begins with symptoms such as numbness, tingling, pain, weakness, and balance issues, starting in the toes and gradually moving upward. Once the symptoms reach the knees, they may begin to affect the fingers of the upper limbs.^[2] In the early stages, or in individuals with

prediabetes, small-fibre neuropathy is often more prominent. This causes painful sensations-such as burning, stabbing, or freezing-that tend to worsen during rest. Damage to large nerve fibres usually develops later, although this progression can vary between individuals.^[3]The clinical features of Diabetic Peripheral Neuropathy are seen scattered across the *Purvarupa* (premonitory signs), *Lakshana* (symptoms), and *Upadrava* (complications) in the Ayurvedic descriptions of *Prameha* and *Vatavyadhi*. Diabetic Peripheral Neuropathy can be more accurately correlated^[4]. Therefore, its management involves a dual approach that targets both the *prameha* and its associated complications.

CASE HISTORY

PATIENT INFORMATION

A 65-year-old Indian male patient, married, and with no history of smoking or alcohol use, visited the outpatient department of our hospital on 07/08/2024. He reported pain and numbness in bilateral calf muscles, along with occasional pricking pain, burning, and tingling sensations in bilateral feet, persisting for the past four years. He was a known case of type 2 Diabetes mellitus since 19 years and was on medications such as -tablet metformin 500 mg twice a day and tablet Glimepiride 1 mg twice a day. He felt severe pain over bilateral lower limbs below the knees while walking and consulted at an allopathic hospital. On examination, they noticed a hardened area of skin on the plantar surface of left foot, which was diagnosed as ‘corn’ and excision was done. But the condition reoccurred every 2-3 months on the same area and he underwent 3-4 excisions. One year after the excision, he experienced severe pain and numbness over bilateral lower limbs below the knees, along with unusual touch-based sensations over the foot. So, he consulted an ayurvedic physician and was advised to take vibratory perception threshold (VPT) test and took treatment there for 6 months. As he got symptomatic relief, he approached our hospital for further cost- effective management of the condition.

PERSONAL HISTORY

Diet was mixed with preference of sweet and pungent foods earlier, but is now focused on controlling sugar intake. He had good appetite but the sleep was disturbed due to numbness and pain over bilateral lower limbs. The bowel movements were often unsatisfactory, frequently accompanied by hard stools. Micturition frequency was 5-6 times during day and 1-2 times during night. He had no history of addiction and allergy.

PHYSICAL EXAMINATION

The examination revealed no abnormalities in the head, neck, chest, or abdomen.

SYSTEMIC EXAMINATION

The patient was moderately built and fully conscious. Cranial nerve examination showed no abnormalities. He had muscle wasting in the left anterior part of thigh and on palpation, grade 2 tenderness on bilateral calf muscles was found. Motor strength in both lower limbs was decreased, with a score of 3 out of 5 on the Medical Research Council Scale. Additionally, reflexes in the knees and ankles were diminished.

In the sensory examination, light touch was impaired in both lower limbs, while deep touch localization was affected in the left foot. Vibration perception was preserved only on the lateral side of the right foot and heel but absent on the left sole. The vibration response in the lower limbs was delayed by 3-4 seconds compared to the upper limbs. However, temperature perception remained intact. Romberg’s sign was also found to be negative.

Examination of the foot showed localized skin thickening and a corn-like lesion on the plantar surface of the left foot. (Fig 1)



Figure 1: Foot examination revealing corn

In diabetic peripheral neuropathy, corns indicate abnormal pressure on an insensate foot and serve as a strong predictor for future ulceration.

The patient was evaluated both before and after treatment using the Michigan Neuropathy Screening Instrument^[5], the Diabetic Neuropathy Symptom Score^[6,7], and the Toronto Clinical Neuropathy Score^[8].

INVESTIGATION

Lab report before, during and after the treatment is given in table no.1.

Table 1: Lab report before, during and after treatment

DATE	FBS	PPBS	HbA1C
8/8/24	155 mg%	270mg%	9.9 %
25/8/24	130 mg%	220 mg%	
10/9/24	110 mg%	170 mg%	

Blood routine examination before treatment is given in table no.2.

Table 2: Blood routine examination before treatment (08/08/2024)

Haemoglobin	12.6gm%
ESR	26 mm/hr
Eosinophil	10%
Lymphocytes	25%
Monocytes	5 %
Polymorphs	60%
Basophil	0%
Total WBC count	7500cells /cumm

Urine routine examination before treatment is given in table no. 3.

Table 3: Urine routine examination before treatment (08/08/2024)

Albumin	Nil
Bacteria	Nil
Cast and crystals	Nil
Pus cells	1-2/HPF
Epithelial cells	2-4 /HPF
RBC	Nil
Sugar	Green

Vibration Perception Testing Report is given in figure no. 2 and 3.

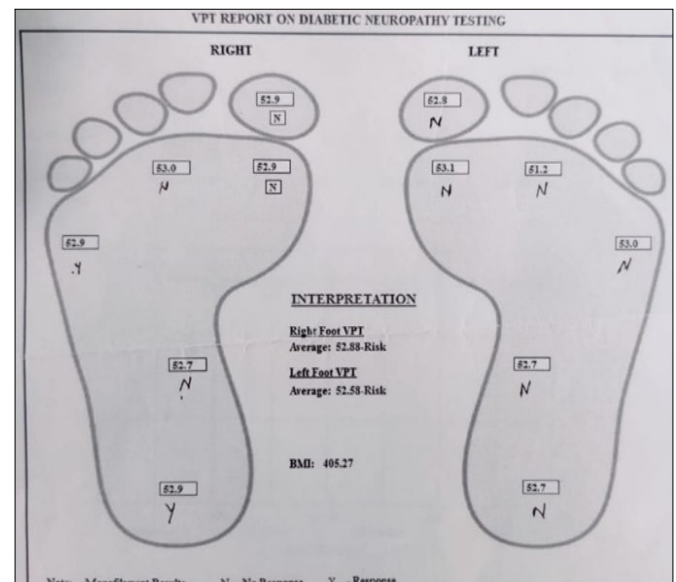


Figure 2: Vibration Perception Testing Report-before treatment

The VPT report shows significantly elevated vibration perception thresholds in both feet (Right: 52.88, Left: 52.58), indicating a marked loss of protective sensation and placing the patient in a high-risk category for diabetic peripheral neuropathy. Most testing points show "No response" on the monofilament exam, further confirming reduced sensory function. These findings suggest advanced bilateral sensory neuropathy, increasing the risk of foot ulcers and unnoticed injuries.

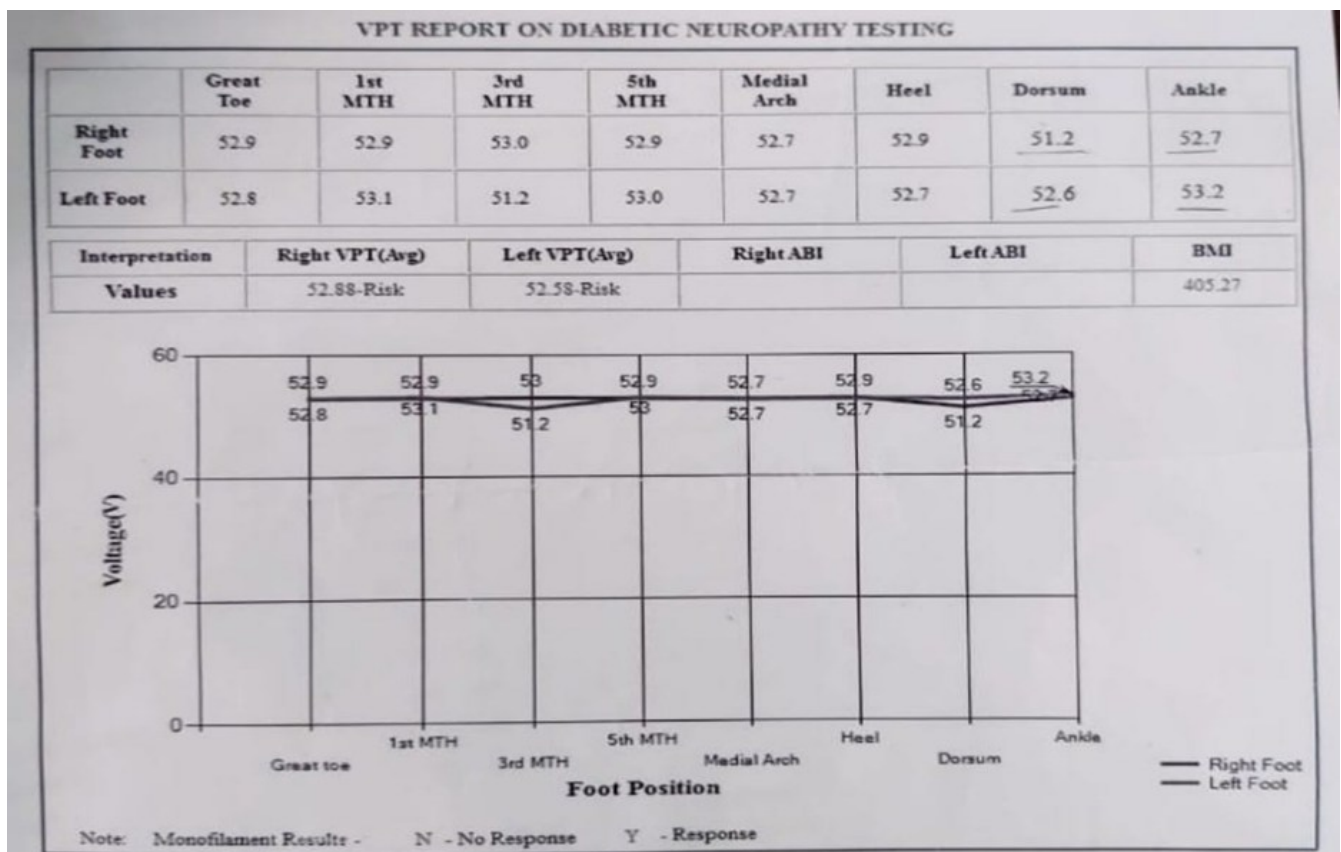


Figure 3: Vibration Perception Test Report- before treatment

These high VPT readings reflect significant sensory loss, suggesting reduced protective sensation in both feet. The graph further confirms consistently elevated values at the toes, metatarsal heads, arch, heel, dorsum, and ankle. Overall, the findings indicate advanced sensory neuropathy, increasing the risk of foot injuries, ulcers, and related complications.

Post treatment VPT was not done.

Differential Diagnosis

1. Vitamin B12 Deficiency Neuropathy

Although long-term metformin use increases the risk of B12 deficiency, this diagnosis was unlikely due to the absence of macrocytic anaemia, preserved proprioception, a negative Romberg sign, and no dorsal column–predominant sensory loss.

2. Lumbar Spinal Canal Stenosis / Radiculopathy

While lumbar degenerative disease can cause bilateral leg pain, this patient showed a symmetrical stocking-type sensory loss with distal reflex reduction. Lack of dermatomal symptoms or unilateral radicular pain made radiculopathy less probable.

3. Uremic Neuropathy

Uremic neuropathy was considered but ruled out due to normal urine findings and no evidence of renal dysfunction.

DIAGNOSIS

Diabetic peripheral neuropathy (*PramehaUpadrava*)

Considering the patient’s 19-year history of diabetes, poor glycemic control (HbA1c 9.9%), chronic symmetrical distal sensory symptoms, reduced distal reflexes, impaired light touch and vibration sensation, and abnormal standardized neuropathy scores, the most consistent diagnosis is Diabetic Peripheral Neuropathy (DPN). The characteristic stocking distribution of sensory loss and exclusion of other metabolic, nutritional, renal, and structural causes further support this diagnosis.

TIMELINE

Timeline	Event
19 years ago	Diagnosed with Type 2 Diabetes.
4 years ago	Onset of bilateral foot burning, tingling, numbness.
3-4 years ago	Recurrent corn excisions on left foot.
1 year ago	Increased pain and sensory disturbances.
6 months ago	VPT test; Ayurveda treatment started elsewhere.
07-08 Aug 2024	Presented to our hospital; baseline labs and neuropathy scores recorded.
08 Aug-06 Sept 2024	Two courses of Ayurvedic treatment.
10 Sept 2024	Improved HbA1C and neuropathy scores; symptoms reduced.
Sept 2024	Discharged with maintenance regimen.

TREATMENT GIVEN

INTERNAL MEDICINES:

Internal medicines were administered in three courses- first, second and discharge medicine, as shown in Table 4,5, and 6.

The therapeutic procedures given to the patient are listed in Table 7.

Table 4: FIRST COURSE MEDICINE - 2 weeks

SL.NO	Medicines	Dose	Time of administration
1	<i>Nisakathakadikashayam</i>	90 ml	6am,6pm before food
2	<i>Rasnerandadikashayam</i>	90 ml	11 am before food
3	<i>Tab.chandraprabha</i>	1 BD	6am,6pm before food
4.	<i>Triphalachoornam</i>	1teaspoon with hotwater	Night after food

Table 5: SECOND COURSE OF MEDICINE- 2 weeks

SL.NO	Medicines	Dose	Time of administration
1.	<i>Nisakathakadikashyam</i>	90ml	6am,6pm before food
2	<i>Tab chandraprabha</i>	1BD	6am,6pm before food
3	<i>Kanmadabhasmam capsule</i>	1BD	After food
4	<i>Dhanwantaraghritha +sahacaraditailasevyam</i>	10gm+1tsp	Night after food

Table 6: DISCHARGE MEDICINES

SL.NO	Medicines	Dose	Time of administration
1.	<i>Nisakathakadikashyam</i>	90ml	6am,6pm before food
2	<i>Tab chandraprabha</i>	1BD	6am,6pm before food
3	<i>Kanmadabhasmam capsule</i>	1BD	After food
4	<i>Dhanwantaraghritha +sahacaraditailasevyam</i>	10gm+1tsp	Night after food
5	<i>Sahacharaditaila +dhanwantaramtaila-external application</i>		

Table 7: THERAPEUTIC INTERVENTIONS

SL.NO	PROCEDURES	DURATION
1	<i>Udwarthana - with Triphalachurna</i>	14 days
2	<i>Dhanayamlanimanjithachooranapindasweda–with Kolakulathadichurna</i>	7 days
3	<i>Abhyanga - with Sahacharaditaila + Dhanwantharamtaila</i> <i>Jambeera Pinda Sweda</i> <i>Abhyanga and Dipping - Sahacharaditaila + Dhanwantharamtaila</i>	5 days
4	<i>Frying - Eranda taila</i> <i>Talam - Nimbamrithaerandam + Rasnadichurna</i> <i>Yoga vasti</i> <i>Sneha Vasti - Sahacharaditailamezhukupakam - 90 ml</i> <i>Niruhavasti - Madhutailika vasti</i>	7 days
5	<i>Saindhava- 15 gm</i> <i>Makshika - 60 ml</i> <i>Sahacharadi mezhukupakam- 60 ml</i> <i>Satapushpa kalka - 15 gm</i> <i>Erandamoola Kashaya - 240 ml</i>	8 days

The management plan was implemented in two phases of internal medication followed by Panchakarma procedures. During the first 14 days, the patient was administered *Nisakathakadi Kashayam* (90 mL twice daily before food), *Rasnerandadi Kashayam* (90 mL at 11 AM before food), *Chandraprabha Vati* (one tablet twice daily before food), and *Triphala Choorna* (one teaspoon with hotwater at bedtime after food). In the subsequent 14 days, treatment continued with *Nisakathakadi Kashayam* and *Chandraprabha Vati* at the same dosage, along with the addition of *Kanmadabhasma* capsules (one capsule twice daily after food) and internal use of *Dhanwantaram Ghrita* mixed with *Sahacharadi Taila* (10 g + 1 teaspoon at night). Panchakarma therapies were administered concurrently and included *Udwarthana* with *Triphala Choorna*, *Dhanayamla-Nimanjitha Choorna Pinda Sweda* for 7 days, *Abhyanga* with *Sahacharadi* and *Dhanwantaram Taila* for 5 days, and *Jambeera Pinda Sweda* with adjunct *Talam* application for 7 days. An 8-day *Yoga Vasti* regimen comprising *Sneha Vasti* with *Sahacharadi Tailam* (90 mL) and *Niruha vasti as Madhutailika vasti* was also administered. Upon discharge, the patient was advised to continue *Nisakathakadi Kashayam*, *Chandraprabha Vati*, *Kanmadabhasma* capsules, and night time intake of *Dhanwantaram Ghrita* with *Sahacharadi Taila*, along with external application of *Sahacharadi* and *Dhanwantaram Taila* as maintenance therapy.

Results And Observation

By the end of the treatment regime, patient experienced a notable reduction in pain, numbness, burning sensation and tingling sensation over bilateral lower limbs. *Udwartanam* and *dhanyamla nimajjitha choorna pinda sweda* provides almost 50% relief from pain and numbness. On completion of *vasti* procedure, there was a marked improvement in the altered sensation over bilateral feet. Numbness has decreased by upto 70% and pain over bilateral lower limbs has reduced by upto 80%.

The results of the assessment scores, before and after the treatment are as follows:

The patient's neuropathic symptoms and clinical signs were objectively assessed using the Diabetic Neuropathy Symptom (DNS) score, Michigan Neuropathy Screening

Instrument (MNSI), and Toronto Clinical Neuropathy Score (TCNS) before and after treatment. On the DNS score, pre-treatment evaluation revealed burning and aching pain, numbness, and pricking sensations, while unsteadiness on walking was absent; all symptoms resolved post-treatment. According to the MNSI, abnormalities were noted pre-treatment in the appearance of the feet, ankle reflexes, and vibration perception, whereas ulcerations were absent; all abnormal findings normalized after treatment. The TCNS showed pre-treatment scores indicating numbness, pain, tingling, and weakness, with reduced knee and ankle reflexes and abnormal sensory responses to pinprick, light touch, and vibration; ataxia and temperature sensation were normal.

Diabetic Neuropathy Symptom Score was given in Table 8, Michigan Neuropathy Screening Instrument score was given in Table 9, Toronto Clinical Neuropathy Score, Reflex score and Sensory Test Score were given in Table 10.

Discussion

1) ON DISEASE

According to the International Diabetes Federation, diabetes affects approximately 425 million individuals globally^[9], positioning it as one of the most critical public health challenges of the 21st century^[10]. 73 million individuals in India alone suffer from diabetes^[11]. Nerve injury is among the most prevalent issues brought on by diabetes. This occurs when diabetes affects the autonomic and peripheral nerves. Up to 50% of diabetics may develop these nerve disorders, called neuropathies^[12]. Diabetic neuropathy primarily affects the sensory, autonomic and motor nerves. Distal symmetric polyneuropathy is the most prevalent form of diabetic nerve injury. This kind of injury typically begins in the hands and feet, following a pattern similar to wearing socks and gloves. Pain resulting from injured nerves is referred to as neuropathic pain^[13]. This type of discomfort is experienced by between 30 and 50 percent of diabetic neuropathy patients. A frequent complaint is the burning sensation in the feet even in the absence of any contact or touch. Additionally, some patients experience tingling or "pins and needles" (paraesthesia) or discomfort when softly touched, which is known as allodynia. Ironically, a lot of people report having severe foot pain but also claiming that their feet are numb and touchless.

Table 8: DIABETIC NEUROPATHY SYMPTOM SCORE

SYMPTOMS	PRE-TREATMENT	POST-TREATMENT	CRITERIA FOR SCORING
Unsteadiness on walking	0	0	1= present,0= absent
Burning and aching pain	1	0	1= present,0= absent
Numbness	1	0	1= present,0= absent
Pricking sensation	1	0	1= present,0= absent
Total	4	0	

Table 9: MICHIGAN NEUROPATHY SCREENING INSTRUMENT**Table 9A:** Neuropathy Screening Questions (Right/Left Side) (Yes - 1, No - 0)

No.	Question	Right (Pre-treatment)	Left (Pre-treatment)	Right (Post-treatment)	Left (Post-treatment)
1	Are your legs and/or feet numb?	Yes	Yes	No	Yes
2	Do you ever have any burning pain in your legs and/or feet?	Yes	Yes	No	No
3	Are your feet too sensitive to touch?	Yes	Yes	No	No
4	Do you get muscle cramps in your legs and/or feet?	Yes	Yes	No	No
5	Do you ever have any prickling feelings in your legs or feet?	Yes	Yes	No	No
6	Does it hurt when the bed covers touch your skin?	No	No	No	No
7	When you get into the tub or shower, are you able to tell the hot water from the cold water?	Yes	Yes	No	No
8	Have you ever had an open sore on your foot?	No	No	No	No
9	Has your doctor ever told you that you have diabetic neuropathy?	Yes	Yes	Yes	Yes
10	Do you feel weak all over most of the time?	Yes	Yes	No	Yes
11	Are your symptoms worse at night?	No	Yes	No	No
12	Do your legs hurt when you walk?	Yes	Yes	No	Yes
13	Are you able to sense your feet when you walk?	Yes	Yes	Yes	Yes
14	Is the skin on your feet so dry that it cracks open?	Yes	Yes	No	No
15	Have you ever had an amputation?	No	No	No	No
TOTAL SCORE		11/13	11/13	2/13	5/13

Table 9B: Physical assessment

SYMPTOMS	PRE- TREATMENT		POST- TREATMENT		SCORING CRITERIA
	Right	left	Right	Left	
Appearance of feet	0	1	0	0	0 = Normal 1=Abnormal
Ulcerations	0	0	0	0	0 = Normal 1=Abnormal
Ankle reflexes	0	1	0	0	0 = Normal 1=Abnormal
Vibration perception	0	1	0	0	0 = Normal 1=Abnormal
10 g Filament test	1(Reduced- 6/10)	1(Reduced- 4/10)	0(increased to 8/10)	1(increased to 6/10)	0 = Normal 1=Abnormal
Total score	1	4	0	1	

Table 10: TORONTO CLINICAL NEUROPATHY SCORE, REFLEX SCORE AND SENSORY TEST SCORE

SYMPTOM	PRE-TREATMENT	POST- TREATMENT	SCORING CRITERIA
Numbness	1	0	0= absent, 1= present
Pain	1	0	0= absent, 1= present
Tingling	1	0	0= absent, 1= present
Weakness	1	0	0= absent, 1= present
Ataxia	0	0	0= absent, 1= present
Upper limb symptoms	0	0	0= absent, 1= present
REFLEX SCORE			0 = normal , 1= reduced, 2= absent
Knee reflex(right)	1	0	
Knee reflex (left)	1	0	
Ankle reflex (right)	1	1	
Ankle reflex (left)	1	0	
SENSORY TEST SCORE			0= normal, 1= abnormal
Pinprick	1	0	
Temperature	0	0	
Light touch	1	0	
Vibration sense	1	0	
Sense of Position	0	0	
TOTAL SCORE	11	1	

An indication that comes up early is the loss of ankle reflexes. Modern treatment focuses on regulating blood sugar, and implementing lifestyle modifications (including diet and exercise) for treating nerve discomfort in persons with type 2 diabetes (T2DM).

Tridoshas as well as ten *dushyas* such as *rasa, shonita, mamsa, meda, majja, shukra, kleda, vasa, ojas*, and *lasika* are involved in *prameha*. The various forms of *prameha*, each with its unique supremacy, arise from the dominance of *bahudravasleshma* with the *tridoshas* that enter the *vasti* (urinary bladder) in vitiated conditions^[2]. Inadequate treatment of the illness will lead to complications, or *prameha upadrava*. *Prameha* progressed through the stages of the disease in this patient, eventually developing complications such as *pada daha* and *supti*.

2) ON SAMANA MEDICINES

Nisakathakadikashyam: *NishakatakadiKashayam* is a classical ayurvedic medicine composed of 12 herbs, including *Darvi* (*Berberis aristata*), *Kataka* (*Strychnos potatorum*), *Vairi* (*Salacia chinensis*), *Khadira* (*Acacia catechu*), *Samanga* (*Mimosa pudica*), *Vidula* (*Barringtonia acutangula*), *Dhatri* (*Emblica officinalis*), *Rajani* (*Curcuma longa*), *Pata* (*Cissampelos pareira*), *Chuthabeeja* (*Mangifera indica*), *Harithaki* (*Terminalia chebula*), and *Musthaka* (*Cyperus rotundus*). Most of these herbs are characterized by *kashaya*, *tikta rasa* and possess *laghu, ruksha guna*. *Prameha* is primarily associated with an imbalance of *Kapha, Vata*, and *meda*.^[14] The formulation is effective due to its *Vatakaphahara* action, which arises from the combination of *Sheeta* and *Ushna* potency, along with *Madhura* and *Katu* vipaka. In addition to traditional ayurvedic rationale, modern research also supports that these ingredients exhibit hypoglycemic properties, contributing to their therapeutic potential in managing diabetes^[15].

Chandraprabha vati: *Chandraprabha Vati*, as mentioned in the Ayurvedic text *Bhaishajyaratnavali*, is a classical formulation known for restoring balance among the three doshas. It is indicated in 20 types of *prameha* and metabolic disorders^[16]. It also possesses *balya, vrushya, rasayana* properties, making it particularly beneficial in managing *prameha*. The presence of *silajatu* and *guggulu* helps in *chedana* and *kaphahara*^[17].

Kanmada Bhasma capsule: *Kanmada Bhasma*, when used as a *Rasayana*, possesses *katu, tikta*, and *kashaya rasa*. It possesses *vipaka* as *katu* and *veerya* as *ushna*, which help in *chedana* and *soshana* processes in conditions such as *Prameha*. Additionally, it enhances bodily strength and firmness, thereby reducing flaccidity^[18].

Dhanwantaramghrita: *Dhanwantara Ghrita* is particularly advised for use in *Prameha* and its associated complications. To

ensure the effective delivery of the drug and its therapeutic properties into the cells, an appropriate carrier is essential. Substances dominated by the *Tikta* taste influence *Pitta, Rakta*, and *Kapha doshas*, while *ghrita* acting as a bio-vehicle, efficiently transports the active ingredients to the target cells^[19].

Sahacaradi mezhukupakam was used to prevent wasting of muscles and it is effective in disorders of *Apana vata*, which is very difficult to manage^[20].

3) ON THERAPEUTIC INTERVENTIONS

a) Udwarthana with triphalachoorna

According to Acharya Charaka, *Prameha* is a *SantharpanajanyaVikara* in Ayurveda. *Choorana pradeha* is stated in the treatment of *Santharpanajanyavikaras*^[21]. *Udwarthana* is therefore chosen as the initial course of treatment. *Udwarthana*, a therapeutic dry powder massage that is also referred to as *Vimlapana, Garshana*, or *Nirmalikarana*^[22], is an important part of external cleansing therapies (*Bahirparimarjana Chikitsa*). This therapy uses herbal pastes or powders that are massaged onto the body in an upward manner (*Pratilomagati*). *Udwarthana* strengthens the body and aids in the liquefaction of *meda* and *kapha*^[23]. Acharya Charaka lists *triphala* as one of the medications for *Churnapradeha*^[24]. *Triphala Churna* is a classical ayurvedic formulation consists of three fruits such as *Harithaki* (*Terminalia chebula*), *Bibhithaki* (*Terminalia bellirica*), and *Amalaki* (*Emblica officinalis*). This mixture is well known for its *tridoshichrasayana* qualities, and it is very helpful in managing *Prameha* and effectively lowers *Tvakgata kleda* and *meda*^[25].

b) Dhanyamla nimmajjitha choorna pinda sweda with Kolakulathadi choorna

A modified version of *Sankara Sweda* that is often practiced in Kerala is called *DhanyamlaNimanjjitha churna Pinda Sweda*. This Ayurvedic treatment method uses a bolus (*kizhi*) that contains medicinal powders steeped in *Dhanyamla*, a fermented liquid. When combined with *Kolakulathadichoorna*, which is recommended in *vataroga*, heating and penetrating properties of *Dhanyamla Nimanjjitha churna Pinda Sweda* helps to treat *Kapha*-predominant conditions and *Vata-Kapha* diseases^[26].

c) Abhyangam with Sahacharaditaila and Dhanwantharamtaila

Following the initial *Rookshana* therapy with *Udwarthana*, *Abhyanga* is performed using *Sahacharaditaila* and *Dhanwantharamtaila*. *Abhyanga* strengthens the nervous system, increases circulation, and nourishes the tissues.^[26] In addition to reducing the dryness and roughness brought on by excessive *Vata*, this procedure also reenergizes the skin's sensory receptors, which enhances tactile sensitivity and

promotes a greater sensation of calm and wellbeing^[27].

26.Jarimalli P, et al. Role of Abhyanga (oil massage) in daily practice. *J Ayurveda Integr Med Sci.* 2021;6(4)

27.Sharma A, Sugandh M, Bhardwaj A, Gupta A. Role of Shirodhara and Abhyanga on serum cortisol in Anxiety: a case report. *J Ayurveda Integr Med.* 2025;16(1):100948.

Traditional Ayurvedic texts describe DhanwantharamThailam as specifically formulated to stabilize the Vata and Kapha doshas, making abhyanga an effective remedy for neurological and musculoskeletal disorders^[28].

With its broader range of medicinal herbs, *Sahacharadi Taila* can balance both *Vata* and *Kapha*, effectively managing complex health conditions, including chronic *Vata* disorders, and using its synergistic ingredients to address both physical and mental health issues^[29].

d) *Jambeerapindasweda*

An Ayurvedic *swedana* therapy called *Jambeera Pinda Sweda*, or Naranga Kizhi, uses potali with lemon (*Jambeera*) and medicinal herbs to treat neuropathies and musculoskeletal conditions.^[30] Both *Snehana* (oleation) and *Swedana* (fomentation) qualities are present in *Jambeera Pinda Sweda*^[31]. In addition to lubricating properties of *Snehana*, *Swedana* facilitates the body's detoxification and renewal by opening up the channels for doshas to be expelled.^[32] For ailments linked to imbalances in the *Vata* and *Kapha* doshas, this treatment is very beneficial. It works well to reduce symptoms like pain and stiffness because of its analgesic and anti-inflammatory properties.^[33]

e) *Yoga Vasti*

Madhumeha, a vata-predominant disease, benefits from *vasti*, the primary treatment for *vataja rogas*. *Sahacharadi mezhukupakam* was used for *Sneha vasti* because *Sahacharadi taila* works well for chronic *vata* disorders.

Madhutailika Vasti strengthens the body at the cellular level and nourish all the *dhatu*s^[34]. In order to manage diabetes and its associated consequences, *Madhutailika Vasti* was chosen.

Madhutailika Vasti^[35] is understood to promote systemic balance through multiple physiological and metabolic effects. It helps normalize aggravated doshas by aiding the elimination of accumulated waste, while also improving digestive capacity and supporting healthy metabolic function. The procedure assists in cleansing the gastrointestinal tract, relieving constipation, and strengthening the body's defence mechanisms without adversely affecting blood sugar, lipids, or metabolic markers. By enhancing Agni, it supports efficient digestion and Ama clearance, leading to the formation of

healthier *dhatu*s and contributing to overall immune modulation. *Madhutailika Vasti* is also believed to improve physical strength, support proper neurological function through better microcirculation and channel purification, and increase the body's resilience by promoting sustained tissue nourishment and regeneration.

Conclusion

In this case of distal symmetric diabetic peripheral neuropathy, integrative management with internal medications *Nisakathakadi Kashayam*, *Rasnerandadi Kashayam*, *Chandraprabha Vati*, *Kanmadabhasma*, *Dhanwantaram Ghrita* with *Sahacharadi Taila*, and *Triphala Choorna*-combined with external therapies including *Abhyanga*, *Udwarthana*, *Jambeera Pinda Sweda*, and *Yoga Vasti* produced significant symptomatic and functional improvement. The patient reported relief from burning pain, numbness, tingling, and weakness, while objective neurological assessment showed normalization of ankle and knee reflexes, restoration of vibration and light touch sensation, and resolution of foot abnormalities. Following treatment, there was a marked improvement in neuropathy scores: the Diabetic Neuropathy Symptom (DNS) score dropped from 4 to 0; the Michigan Neuropathy Screening Instrument (MNSI) symptom score fell from 11 to 2 on the right and from 11 to 5 on the left, and the physical examination score decreased from 1 to 0 on the right and from 4 to 1 on the left. Meanwhile, the Toronto Clinical Neuropathy Score (TCNS) reduced from 11 at baseline to 1 post-treatment. These findings suggest that combined internal and external Ayurvedic therapies can effectively improve both subjective symptoms and objective neurological deficits in diabetic peripheral neuropathy.

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Patient Perspective

The patient was very much satisfied with the Ayurvedic treatment, assessment and follow up. He got almost 80% relief from symptoms like pain, numbness and weakness of bilateral lower limbs. After the treatment he could effortlessly do his daily activities by maintaining a controlled blood sugar level and with moderate exercise.

Patient Consent Declaration

The authors confirmed that they obtained a consent form from the patient for the case to be reported in the journal. The patient was informed that his name and initials will not be disclosed and necessary steps will be taken to protect his identity, though complete anonymity cannot be assured.

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