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**Case Study** 

# INTEGRATIVE APPROACH TO THE MANAGEMENT OF DIABETIC NEUROPATHY USING MARMA CHIKITSA AND PANCHAKARMA THERAPIES

### V S Charantimath<sup>1\*</sup>, Bharadwaj<sup>2</sup>, Sreyas Naik<sup>3</sup>, A V Srinivasan<sup>4</sup>

\*¹Dean, Dept of Dravyaguna, ²Assistant Professor, Department of Panchakarma, ³Internee, ⁴Chairman, Sri Paripoorna Sanathana Ayurveda Medical College Hospital & Research Centre, Bangalore Rural, Karnataka, India.

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### **ABSTRACT**

The National Centre for Disease Control (NCDC) has reported that India has 6.51 crore Diabetes cases, with projections reaching 10.9 crore by 2035. Diabetic neuropathy is a prevalent complication of long-standing Type 1 and Type 2 Diabetes mellitus, affecting approximately 10.5% to 44.9% of individuals. With Diabetes emerging as a global epidemic in both developed and developing nations, effective management of its complications is the need of the hour. Diabetic neuropathy manifests as nerve damage, leading to symptoms such as hyperesthesia, paraesthesia, pain, and sensory loss. Despite advancements in glycaemic control strategies, conventional treatment remains inadequate in addressing neuropathic symptoms comprehensively. To bridge this gap, a holistic approach integrating Marma Chikitsa with Panchakarma therapies was implemented at our centre, for the management of Diabetic Neuropathy where-in 5 patients presented with symptoms of Diabetic neuropathy. This integrative intervention yielded significant improvements, demonstrating the efficacy of Marma Chikitsa in conjunction with Panchakarma therapies. Notably, patients experienced faster and more effective relief, as validated by the Modified Toronto Clinical Neuropathy Score (TCNS) assessment. These findings highlight the potential of Ayurveda-based therapies in enhancing neuropathic symptom management and underscore the necessity of adopting a holistic framework for Diabetic care.

### INTRODUCTION

The National Centre for Disease Control (NCDC) has reported that India has 6.51 crore Diabetes cases, with projections reaching 10.9 crore by 2035<sup>[1]</sup>. Diabetic neuropathy is a significant complication of Diabetes mellitus (DM), affecting approximately 50% of individuals with long-standing type 1 and type 2 Diabetes<sup>[2]</sup>. With Diabetes now recognized as a global epidemic, its prevalence is rising in both developed and developing nations. India reports a notably higher prevalence of DM (4.3%) compared to Western countries (1–2%)<sup>[3]</sup>, accompanied by an elevated complication rate. In 2019, an estimated 77 million individuals were diagnosed with Diabetes.

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However, recent insights from the Indian Council of Medical Research (ICMR) indicate a substantial increase, with 101 million people currently living with Diabetes and approximately 136 million in a pre-Diabetic state. Alarmingly, 43.9 million<sup>[4]</sup> individuals remain undiagnosed, emphasizing the urgent need for intensive screening and timely intervention.

Diabetic neuropathy manifests as nerve damage, leading to symptoms such as hyperesthesia, paraesthesia, pain, and sensory loss. Despite advancements glycaemic control in strategies, conventional treatment remains inadequate in addressing neuropathic symptoms comprehensively<sup>[5]</sup>. Diabetic neuropathy is directly associated with hyperglycaemia, with its presence, duration, and severity determining the extent of nerve damage<sup>[6]</sup>. Persistently high blood glucose levels can impair nerve fibres throughout the body, primarily affecting the lower extremities, particularly the legs and feet. This manifests Polyneuropathy, condition as

neuropathy. Autonomic Neuropathy, Proximal Neuropathy, Focal Neuropathy, And Numb Neuropathy, each with distinct clinical features. Common symptoms include pain, numbness, altered sensation. hypersensitivity, tingling, burning discomfort, and progressive sensory deficits. As the disease advances, pain may diminish, leaving persistent sensory impairment in the lower limbs.

Diabetic neuropathy can also contribute to muscle weakness. gait disturbances, hammertoe deformities. and midfoot collapse, increasing susceptibility unnoticed iniuries. Without appropriate management, infection may spread to the bone, necessitating limb amputation[7]. Therefore, routine sensory examinations and foot care education are crucial for neuropathic patients to mitigate complications.

Moreover, autonomic neuropathy presents multisystem challenges. including orthostatic hypotension. delayed gastric emptying. nausea. odvnophagia. and sexual dysfunction. while paradoxically inducing hypoglycaemia unawareness[8], complicating efforts to achieve optimal glycaemic control. Despite advancements in glycaemic control strategies, conventional treatment remains inadequate addressing neuropathic symptoms comprehensively.[3] Given these complexities, an integrative approach encompassing both conventional and holistic interventions is essential in Diabetic care.

### Diabetes and Prameha

Diabetes can be viewed under the Ayurvedic descriptions of *Prameha*, *Prameha*, one among the *Astamahagadas*<sup>[9]</sup> (eight dreadful disorders) in *Ayurveda*, is extensively discussed by *Acharyas*. It is described as a *Kulaja Vikara* (hereditary disease), exhibiting *Apatyasamkramatva* (transmission to offspring) and *Anusangi* (chronic and recurring nature). The pathogenesis of *Prameha* follows a *Tridosharabhadatva* pattern, with all three *doshas* involved in its progression. Over time, it becomes *Kalantarena Asadhya*<sup>[10]</sup> (incurable at advanced stages).

The condition leads to *Dhatu Shaitilya* (tissue laxity), particularly affecting *Medo Dhatu*, due to an increase in *Bahu Drava Kapha*, which results in *Dusya Kleda Mutra Utpatti*<sup>[11]</sup> (formation of morbid elements in urine). *Ayurvedic* literature categorizes *Prameha* 

based on therapeutic approaches, distinguishing *Sthula Balavan Pramehi* (obese and strong Diabetic patients) and *Krusha Durbala Pramehi* (lean and weak Diabetic patients). The treatment protocol varies accordingly, emphasizing *Samshodhana* (purification therapies) for the former and *Shamana*<sup>[12]</sup> (palliative therapies) for the latter.

Diabetic Neuropathy (DN) is considered as an *Upadrava* (complication) of *Madhumeha*, necessitating analysis through *Vikara Prakriti* (disease nature), *Samuthana Vishesha* (etiological specificity), and *Adhisthana* (primary pathological site). The neuropathic manifestation in Diabetes aligns with its parent disease in terms of pathology, exhibiting *Dhatukshaya* (tissue depletion) in certain cases and *Avarana* (obstructive pathology) in others. The management of DN, therefore, requires a tailored Ayurvedic approach, integrating therapies based on its underlying pathophysiology.

### Marma chikitsa

Marma philosophy is one such imperative and unique principle of Ayurveda. In Ayurvedic samhitas, science of Marma was limited to the war science and Marma points were mainly considered as only fatal points i.e., trauma to them leads to debility or even death as these are seat of *Prana* (life energy), but in present era, stimulation of these Marma by means of Abhyanga (massage), Mardana (Acupressure), Aroma therapy, Pranic healing, Herbs (Lepa), Raktamokshana (bloodletting) and Agni karma (heat application) is utilised to treat certain conditions. Marmachikitsa, a therapy practiced by few practitioners to stimulate these Marma points directly by applying pressure, vibrating tendons, pinching or application of hot and cold pastes, oils and ointment on Marma depending on the type of *Marma* had emerged as new dimension in non-pharmacological treatment of Ayurveda. The concept of Marma has its root in Vedas and from Vedic era to till date, it is still surviving due to its importance for human life. Ayurveda considers that there are 107 *Marma* points<sup>[13]</sup> in the body that must be protected. Marma science was basically considered as war science in which the knowledge of Marmas was very crucial because the protection of these parts of the body is mandatory for survival. These body regions are considered as the seat of *Prana* (life energy).

Table 1: Correlation of sensory symptoms of neuropathy in Ayurveda [14]

Symptoms	Lakshanas
Numbness	<ul> <li>Supti - Pramehapurvarupa (C.S)</li> <li>Karasupti - Vatananatmajavikaras (C.S)</li> <li>Padasupti- Kapha karma (C.S)</li> <li>Angasupti- tvakgatavata (S.S)</li> </ul>
Burning Sensation	<ul> <li>Daha - Pramehapurvarupa (C.S)</li> <li>Vidaha - Pitta nanatmajavikara (C.S)</li> </ul>
Tingling sensation	<ul> <li>Harsa -Tvakgatavata (S.S)</li> <li>Pipilikasancharam - Kaphavrutaudana</li> <li>Harsha, Pipilikasanchara-Mamsavrutavata (AH NI)</li> </ul>
Pins and needles sensation	• Suchibhiriva Nishtotham- Shonitavrutavata (S.S) also Asthiavrutavata (A.H. NI)

Table 2: Correlation of Motor Symptoms of Neuropathy in Ayurveda<sup>[15]</sup>

Symptoms	Lakshanas				
Wasting	<ul><li>Sosha- Pramehab Upadrava (A.H)</li><li>Mamsopachaya- Pramehab Upadrava (S.S)</li></ul>				
Weakness	<ul> <li>Dourbalya- Pramehab Upadrava (C.S)</li> <li>Stambha – Pramehab Upadrava (S.S)</li> </ul>				
Involuntary movements	Kampa – Pramehab Upadrava (S.S)				

### **OBJECTIVES**

As prevalence of Diabetic Neuropathy is increasing necessitating holistic approach in treatment we tried evaluating the clinical efficacy of *Marma chikitsa* – an unexplored area with conditional Treatment as Usual (TAU).

### **Materials and Methods**

This study presents a case series of five inpatients diagnosed with Diabetic Neuropathy, treated
at Sri Paripoorna Sanathana Ayurveda Medical College,
Hospital & Research Centre. Patients were selected
randomly after assessing fitness for *Marma Chikitsa*and *Panchakarma* therapies, and analyzed for overall
treatment outcomes. A cross-sectional analysis was
conducted by reviewing all sections of patient case
sheets, systematically tabulating observations and
comparing them with standardized assessment scales
used during evaluation.

The case series included four male and one female patient, aged between 40–65 years. Sampling was based on disease presentation, with symptom patterns carefully documented and analyzed to determine specific etiological correlations. Treatment interventions, including *Panchakarma* and *Marma Chikitsa*, were administered and outcomes were assessed. The results were critically examined to evaluate the mode of action of these therapies in alleviating Neuropathic symptoms.

This case series provides valuable insights into the variability of Diabetic Neuropathy and underscores the therapeutic potential of *Marma Chikitsa* and *Panchakarma* as effective and holistic interventions. The findings highlight the efficacy of these Ayurvedic approaches in addressing Neuropathic complications, contributing to the development of integrated treatment protocols for Diabetes care.

Table 3: Preliminary Patient data

<b>Patients Details</b>	Sex	Age	Symptoms	Clinical findings	Comorbidities
Subject 1	Male	65 years	Pain, numbness, burning sensation, reduced sensation in bilateral feet and left little finger, fatigue, weakness, disturbed sleep	O/E Sensory test- Touch sensation for bilateral feet reduced Reflexes - Normal Motor deficit - Negative Pain - Present in bilateral leg and feet.	H/O Non-Hodgkin's lymphoma and was on chemotherapy.

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Subject 2	Female	43 years	Burning soles  Knee joint pain  Elbow joint pain	O/E ROM (flexion and extension) Restricted due to pain in knee joints Tenderness at knee absent Normal Babinski sign appreciated	H/O Hypertension Hyperthyroidism
Subject 3	Male	50 years	Pain in bilateral lower limb Burning and pricking sensation in bilateral calf and feet Sudden weight loss of 15 kgs in two months	O/E Lower limb power grade 4/5 Reflexes intact Sensitive for fine touch in bilateral feet	
Subject 4	Male	69 years	Pain in bilateral feet Pain in bilateral shoulder Back pain Gastritis Disturbed sleep Ulcer in left foot (Diabetic ulcer)	O/E Bilateral lower limb power grade4/5 Touch sensation in bilateral feet - Diminished Babinski sign - Diminished Crepitus present in bilateral knee joint Tenderness in bilateral knee and lumbar region. Non-healing linear ulcer present over dorsum of feet.	Hypothyroidism Hypertension IHD EF 34%
Subject 5	Male	63 years	Bilateral feet pain and burning sensation, pain in heel region	O/E ROM normal	H/O Grade 1 Fatty liver, Grade 1 prostatomegaly, Nephrectomy one and half year back

The patients were subjected to *Marma* therapy consisting of activating the Marma points along with Sarvanga Marma massage and a set of Panchakarma therapies which were apt for the condition of the patient with special respect to dosha and avastha of condition. Marma therapy consists of activation of Marmas that enhances functioning of pancreas and points on which stimulating alleviates Diabetic Neuropathic pain. i.e., Hrudavam *Urumikalam Varma*<sup>[17]</sup> (four finger breadth superior to umbilicus in the midline of the body), *Nabhi marma*. [18] *Unthiverma*<sup>[19]</sup>/ (points lies in the umbilicus), Amsamarma<sup>[20]</sup>/ Puyaverma<sup>[21]</sup> (point lies at the superior end of the shoulder joint), Lohitakshamarma [22]/Kai Puja poruthuvarmam[23], Bahwimarma[24]/ *Mundagavarmam*<sup>[25]</sup> (this relieves pain of neuropathy of upper extremities), *Puratharaivisainarambu-varmam*<sup>[26]</sup> (3 angula proximal to *Manibandha*marma point lies on lateral epicondyle of humerus helps in paresthesia and numbness),/ *Kurparamarma*<sup>[27]</sup>/ *Kaimuttu Varma*<sup>[28]</sup> (point lies on the olecranon fossa of humerus, helps in itching sensation numbness paresthesia), *Ani marma*<sup>[29]</sup>/ *Naithalaivarmam*<sup>[30]</sup> (point located at anterior tibial tuberosity, helps in neuropathic pain), *Urvimarma*<sup>[31]</sup>/ *Amaivermam*<sup>[32]</sup> (point located at anterior midpoint of leg).

After *Marma* point stimulation *Sarvangamarma* massage was being conducted and patient were coupled with therapies like *Parisheka, shastikashali pindaswedana, Takradhara, Pichu, Padabhyanga, Dhanyamladhara, Padavagaha, Siravyadhana* etc.

### Table 4: Intervention given

Interventions	Marma	Panchakarma	Internal Medications	
Patients name	Muimu	F unchakai ma		
Subject 1	<ul><li> Marma Chikitsa</li><li> Sarvanga Marma massage</li></ul>	<ul> <li>Parisheka</li> <li>Sastikashalipindasweda</li> <li>Virechana</li> <li>Kala basti</li> <li>Raktamokshana</li> </ul>	Tab. Glycomet GP4 Tab. Voglibose Tab. Vildagliptin Tab. Madhumehakusumkara rasa Tab Nishamalaki Tab ChandraPrabhaVati Meharichurna	
Subject 2	<ul><li> Marma Chikitsa</li><li> Sarvanga Marma massage</li></ul>	<ul> <li>Bhaspaswedana</li> <li>Takradhara</li> <li>Padaabhyanga</li> <li>Basti</li> <li>Sthanikapichu</li> <li>Dhanyamladhara</li> </ul>	Istamet 50/500mg Glimp M2 Cresar 40 Tab. Thyronorm 25 mcg Cap. Ksheerabala 101 Tab. Ashwagandha	
Subject 3	<ul><li> Marma Chikitsa</li><li> Sarvanga Marma massage</li></ul>	<ul> <li>Shastikashalipindaswedana</li> <li>Kala basti</li> <li>Siravyadhana</li> </ul>	Tab. Istamet Tab. Gabatin 100mg Tab. Tryptophan Inj. Nervijen Tab. Gemer DS1 Asnadikashaya Nishakantakadikashaya	
Subject 4	<ul><li> Marmachikitsa</li><li> Marma massage</li></ul>	<ul> <li>Bhaspaswedana</li> <li>Shastikashalipindaswedana</li> <li>Dhanyamladhara</li> </ul>	Tab. Nishamalaki Tab. ChandraPrabhaVati	
Subject 5	<ul><li> Marma Chikitsa</li><li> Sarvanga Marma massage</li></ul>	<ul><li>Bhaspaswedana</li><li>Padavagaha</li><li>Ishtikaswedana</li></ul>	Tab. <i>Nishamalaki</i> Tab. <i>Chandra Prabha Vati</i>	

**RESULTS:** After treatment the results were estimated using a modified Toronto Clinical Neuropathy score<sup>[33]</sup>. Neuropathic complaints were well addressed and symptoms were relieved significantly.

Table 5: Result on Subjective Parameters - modified Toronto Clinical Neuropathy score

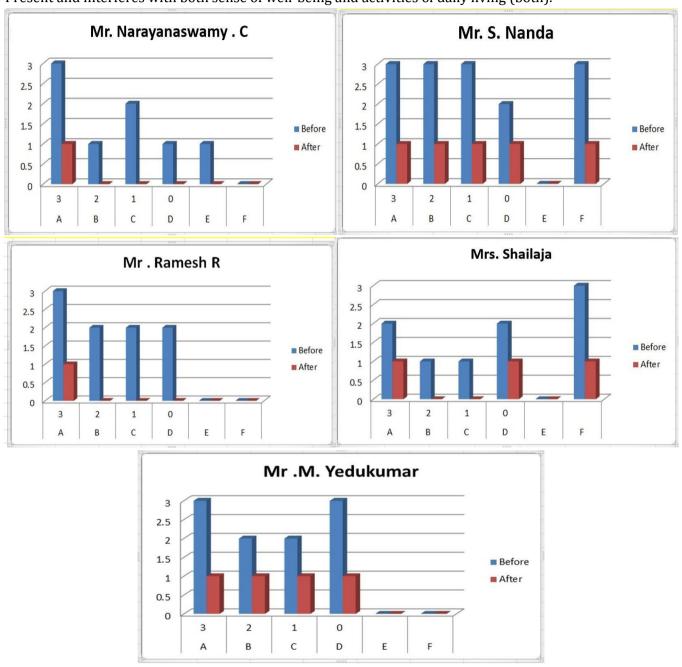
Patient name		Subject 1	Subject 2	Subject 3	Subject 4	Subject 5
Criteria						
Foot pain	Before	3	2	3	3	3
	After	1	1	1	1	1
Numbness	Before	2	1	2	3	1
	After	1	0	0	1	0
Tingling	Before	2	1	2	3	2
	After	0	0	0	1	0
Weakness	Before	3	2	2	2	1
	After	1	1	0	1	0
Ataxia	Before	0	0	0	0	1
	After	0	0	0	0	0

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Upper limb	Before	0	3	0	3	0	
symptoms	After	0	1	0	1	0	

### Where,

- 0 = Absent
- 1 = Present but no interference with sense of well-being or activities of daily living.
- 2 = Present, interferes with sense of well-being but not with activities of daily living.
- 3 = Present and interferes with both sense of well-being and activities of daily living (both).



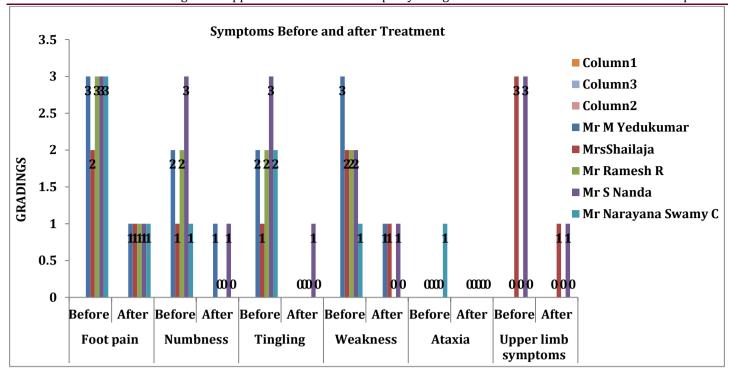
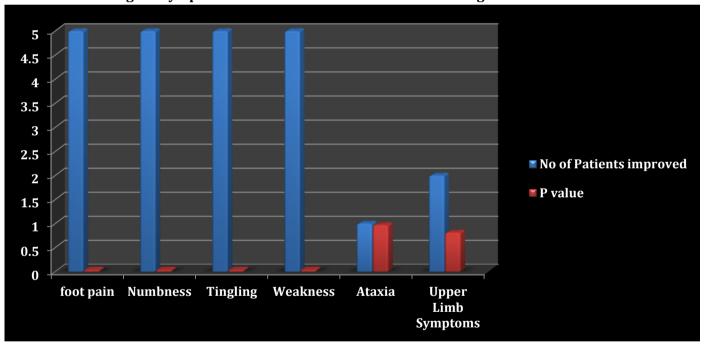


Image 1: Symptoms before and after treatment according to modified TCNS



**Image 2: Sign Test P value of each symptom** 

A Sign Test was applied to evaluate the directional change in symptoms before and after treatment. Statistically significant improvement (p = 0.0312) was observed in foot pain, numbness, tingling, and weakness, with all five patients showing symptomatic relief in these domains. No significant change was observed in ataxia and upper limb symptoms. This results add statistical validity to our clinical outcomes.

### **DISCUSSION**

Diabetic Neuropathy presents a complex spectrum of clinical manifestations that aid in

determining appropriate interventions. Neuropathy is understood in Ayurveda Madhumehajanya Vatavyadhi, manifests in clinical patterns such as pain, numbness, and paresthesia, reflecting vitiation of Vata and Kaphadoshas. Recognizing the specific type and severity of neuropathic involvement is essential for determining appropriate therapeutic interventions and improving patient outcomes. The pathology initiates with an Avarana-janya (obstructive) condition, progressing through *Srotorodha* (channel obstruction) ultimately leading Dhatu Kshaya (tissue

degeneration). The vitiation of *Kapha, Pitta, Medas, Rakta,* and *Mamsa* induces *Avarana* of *Vata,* resulting in either *Chestahani* (loss of function) or *Vimarga* 

*Gamana* of *Vata*<sup>[34]</sup> (abnormal movement), which clinically manifests as motor and sensory dysfunction.

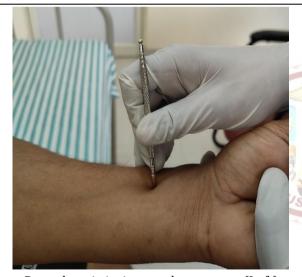
### Image 3: Marma Chikitsa Over Marma Points



Pura tharai visai narambu varmam (Right)



Ani marma /Naithalai varmam (Left)



Pura tharai visai narambu varmam (Left)



Lohitakshamarma /Kai puja poruthu varmam



Ani marma /Naithalai varmam (Right)



Kurparamarma /Kaimuttuvarmam

The presentation of symptoms varies according to *Anubandha* (associated *dosha* involvement), necessitating distinct therapeutic approaches.

- *Kaphanubandha Vata*<sup>[35]</sup> often presents with dull pain (*Shoola*), numbness (*Supti*), and progressive muscle wasting (*Shosha*).
- *Pittanubandha Vata*<sup>[36]</sup> is marked by burning pain (*Daha*), sharp pricking sensations (*Toda*), and variable intensity of *Shoola*.

The pins-and-needles sensation can primarily be attributed to *Vata* dominance. The treatment protocol for Diabetic neuropathy follows a structured approach:

- **1.** *Dosha-Dushya* **Identification** Understanding pathological involvement based on symptomatology.
- **2.** *Agni* **Correction** Since Diabetic neuropathy presents with *Bahu Dosha Avastha* (multiple dosha involvement), stabilizing metabolic fire is imperative.
- **3.** *Dosha-***Specific treatment** Intervention targeting the dominant vitiated dosha to restore balance.
- **4.** *Dhatu* **Restoration** Rejuvenative therapies aimed at strengthening the weakened tissues.

Known that *Prameha* and its *Upadrava* (complications) are *Anusangi Vyadhi* (chronic conditions with continuous affliction), achieving *Dosha-DhatuSamya* (equilibrium) is a prolonged process requiring sustained medical care. In cases of Diabetic Neuropathy marked by burning sensation and associated symptoms, *Pittavruta Vata Chikitsa* should be prioritized following *Dosha Shamana* measures. Therapies that enhance *Bala* (strength) must be administered, alongside *Rakta prasadana Oushadhis* (blood-purifying medications), *Ojakshaya Chikitsa* (therapy addressing depleted *Ojas*), and *Rasayana Prayoga* (rejuvenation therapy) tailored to patient needs.

This integrative *Ayurvedic* approach offers a comprehensive and structured intervention for Diabetic Neuropathy, addressing both symptomatic relief and long-term tissue restoration.

Here is the discussion about mode of action of Avurveda modalities.

**Parisheka**: One such procedure which has the advantage of producing *Snehana* and *Swedana* simultaneously<sup>[37]</sup>. It is categorised under *Snigdhaswednaa* or *Dravaswedana*. It helps enhancing local blood circulation, eases stress and tension, reduces pain via continuous warm liquid flow. <sup>[38]</sup>

Shastikashalipindaswedana: Though it is a Swedana procedure it has a Brimhana guna. It is Tridoshaghna sheeta, Guru, Snigdha performed as Ekanga or Sarvanga with the bolus of Shali and Balamoola

*kwatha*<sup>[39]</sup>. It also enhances nerve conduction and sensory-motor recovery, promotes anti-inflammatory and pain relief effects mitigating stiffness and heaviness. <sup>[40]</sup>

*Virechana*: Indicated in *Kevala pitta* conditions along with *kaphanubandhapitta* and *Pittasthanagatakapha* conditions<sup>[41]</sup>. *Virechana* helps as a eustress inducing agent which triggers neuro endocrine responses. The neuro hormonal modulation likely supports reductions in inflammation, blood pressure and stress.<sup>[42]</sup>

*Kala Basti*: According to Acharya *Kashyapa Kalabasti* is indicated in *Pittanubandhavata*. [43] *Taila* and *Kashaya* are readily absorbed by rectal mucosa as it bypasses first pass metabolism. It also demonstrates analgesic and anti-inflammatory properties that decrease swelling and neuralgia. [44]

**Raktamokshana:** By Raktamokshana all Raktaja disorders will be cured from root. Hence *Siravyadha* is considered as *Ardhachikitsa* in *Shalyatantra*. *Siravyadha* also have robust analgesic effect in pain caused by *Vata- kapha* conditions. [45]

**Bashpa swedana:** One of the types of *Sagni swedana* where vapours obtained by boiling liquid in a vessel through a pipe. Continuous *Bashpaswedana* shows systemic hemodynamic improvement and autonomic regulation and supports nervous system balance. [46]

**Takradhara:** Takra is Madhura and Teekshna with Sheetaveerya hence it alleviates Vata and burning pitta manifestation in neuropathy. Along with improvement in symptoms, quality of life also increases.

**Padabhyanga:** It has an important role in Diabetic peripheral neuropathy as it pacifies *Vata-pitta* conditions. Massage enhances the cutaneous nerve activation which promotes neuroplasticity, increased ankle ROM leads to better plantar sensation. [48]

**Sthanikapichu:** Pichu soaked in Pitta vatahara kashayas or Tailas calms neuropathic pain. Anti-inflammatory and analgesic effects are appreciated due to enhanced microcirculation and transdermal absorption. [49]

**Dhanyamladhara:** It is a type of *Kayaseka* included under *Dravaswedana* one of the *Sandhanakalpana* used specially in *Kapha anubandhavatarogas*. *Dhanya* is *Dahanashaka*.<sup>[50]</sup> *Dhanyamla dhara* enhances nerve conduction and sensory functions through improved neurovascular support. [51]

**Marma** therapy: Varma kalai is a way of applying pressure to specific vital points of the body. These vital points are used for self-defence and healing. Varma points are gateways to access the body's inherent self-healing mechanism as Verma points relate to functions of organs. They regulate the flow of vital energy, enzymes and toxins. Marma therapy aligns the three

Doshas vaata pitta and Kapha which are present in these points in their subtlest forms. Probable mode of action of Marma can be analysed under neuro endocrine system influence and gate control theory. Marma therapy may stimulate the release of neurotransmitters and hormones like endorphins, which can alter pain perception and promote relaxation. Pressure or stimulation of specific Marma points, can transmit signals to the brain, influencing various bodily functions.

Marma therapy might also work by influencing the "gate control theory" of pain, which proposes that the brain can modulate pain signals by stimulating specific Marma points; the theory suggests that the brain can alter its interpretation of pain sensations, potentially leading to pain reduction.

The current intervention has yielded clinically significant results in all the subjects based on the assessment done before and after treatment on the subjective parameters of Foot pain, Numbness, Tingling, weakness, Ataxia and Upper limb symptoms as per modified Toronto Clinical Neuropathy Score.

With all these modes of actions discussed and the results achieved it can be concluded that *Panchakarma* therapies coupled with *Marma chikitsa* offers apt and adequate treatment modality for Diabetic Neuropathy.

#### **CONCLUSION**

Diabetic neuropathy occurs in almost every third Diabetic. Even though wide range of drugs are empirically used to control pain in Diabetic neuropathy these drugs sometimes reduce the presenting symptoms but cannot prevent a progression of disease Thus there remains a need for a therapy which would also slow down disease progression and improve quality of life. 52 Marwa Chikitsa has demonstrated substantial efficacy in the management of Diabetic Neuropathy. The results of this study indicate both statistically and clinically significant improvements in Neuropathic symptoms following intervention. These findings underscore the therapeutic potential of Marna Chikitsa as a viable integrative approach, offering promising outcomes in enhancing neurological function and overall patient well-being. Further research is warranted to expand the scope of application and optimize treatment protocols within Ayurvedic clinical practice.

### **Conclusion and Scope for Further Study**

This study highlights the efficacy of *Marma Chikitsa* and *Panchakarma* in the management of Diabetic Neuropathy, demonstrating significant clinical and statistical improvements in symptom relief While the findings provide valuable insights, the sample size of five patients limits broader generalization.

To further validate these results, large-scale studies employing the same parameters should be conducted, incorporating a greater number of patients over a longer duration. Comparative analysis with standard pharmacological treatments would help establish the relative efficacy and integration potential of Ayurvedic interventions in Diabetic care. These future studies will contribute to the refinement of holistic treatment protocols, enhancing evidence-based Ayurvedic practice for Diabetic Neuropathy management

### **Declaration of patient consent**

Authors certify that they have obtained patient consent form, where the patient has given his consent for reporting the case along with the images and other clinical information in the journal. The patient understands that his name and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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## \*Address for correspondence Dr V S Charantimath,

Dean, Dept of Dravyaguna, Sri Paripoorna Sanathana Ayurveda medical college, Hospital & Research Centre, Bangalore Rural.

Email: <a href="mailto:rush2veeresh@gmail.com">rush2veeresh@gmail.com</a>

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