Case Report

Management of *Kampavata* (Parkinson's Disease) through Panchakarma: A Successful Case Study

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Abstract

Introduction: Parkinson's disease (PD) affects the central nervous system and is primarily characterized by the degeneration of dopamine-producing cells in the substantia nigra. Early signs include tremor, rigidity, bradykinesia, and postural instability, with later cognitive, sensory, sleep, and emotional issues. Ayurveda correlates these symptoms with *Kampavata*, primarily linked to *Vata* (bio-entities) imbalance. The prime aim of this paper is to study Panchakarma's efficacy in managing *Kampavata* (PD).
Case Presentation: This is a case presentation of a 55-year-old male patient who has experienced tremors in the left upper and lower limbs, numbness in the left lower limb, loss of balance for 10 years, abnormal facial expression (masked face), difficulty in speech, and sleep disturbance for 5 years. The patient was treated with Panchakarma therapy for 30 days.
Results: Following treatment, the patient exhibited significant improvement in symptoms, assessed using the PD composite scale, with the total score decreasing from 68 to 19, along with evaluated by specific examination, bradykinesia test, reflexes, functional activities, and clinical features also notably improved.
Discussion: Panchakarma therapy, rooted in Ayurvedic principles, shows promise in managing *Kampavata*, associated with PD. Conservative management focuses on Vata balance, which offers substantial comfort and enhances patient quality of life.
Conclusion: Panchakarma therapy presents a potential avenue for treating *Kampavata*, addressing symptoms associated with PD, and improving patient satisfaction and well-being. Further research is warranted to validate these findings and explore the broader applicability of Ayurvedic approaches in neurodegenerative conditions.

Keywords

Kampavata, *Mahamasha oil*, Panchakarma, PD, Zandopa powder

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Introduction

Parkinson's disease (PD) is a progressive, degenerative neurological condition that primarily impacts the motor system over time.[1] Symptoms including hyposmia, constipation, and exhaustion are part of the clinical prodrome that can be present up to 20 years before the beginning of motor symptoms due to pathologic alterations.[2] The average age at which this disease shows itself is 50.[3] All ethnic groups are affected by the illness; in most populations, it affects men more frequently than women by a factor of two.[4,5] The worldwide incidence of PD is estimated to be around 7–10 million & more than 1 million cases are suffering from PD per year in India. However, the exact etiology of the disease is still unknown. The cardinal signs include bradykinesia, lateral instability, cogwheel rigidity, and resting tremors, but the more prevalent and apparent signs are resting tremors.[6] It is

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caused by the degeneration of neurons in the substantia nigra, a brain region associated with Lewy bodies.

It is a *Vata Nanatmaja vikara* and is comparable to *Kampavata* in Ayurveda. Almost all ailments appear due to *Vata*, which is also thought to be the motivator and controller of the other two bio-entities, that is, *Pitta* and *Kapha*. *Vata* regulates all motor and sensory systems. *Vata Vyadhi* is the category for severe neurological issues, which are the state of numerous degenerative nerve system disorders. One of these is *Kampavata*. The disease of deficient *Vata*, in which tremors are the primary clinical manifestation, is called *Kampavata*. The term *Kampavata* was explained for the first time in the text *Basavarajiyam.*[7] Clinical signs of *Kampavata*, such as *kampa* (tremor)*, sthamba* (rigidity), *Chestasanga* (bradykinesia), and *vakvikriti* (speech disorder) were not discussed as a single disease during the time of *Acharya Charaka*[8] and *Sushruta*, but rather in multiple situations. Numerous names for tremors are given in Ayurvedic literature, including *Kampavata, Vepathu, Shirokampa, Kampana*, etc.[9]

The treatment of the mentioned neuropathies in *Ayurveda* is unique and strongly emphasizes *Panchkarma*, which aims to eradicate its root cause. The procedures of *Panchkarma* are especially advocated in the treatment of neurological diseases. The prime aim of this paper is to focus on and illustrate the efficacy of Panchakarma and Ayurvedic medication in managing *Kampavat*a (Parkinson) using Ayurvedic principles.

Patient Information

It is a single case of a married male patient aged about 55 years who was admitted to the In-patient Department of Panchakarma of Mahatma Gandhi Ayurvedic College Hospital & Research Center since he was suffering from clinical complaints, for example, gradual onset of tremors in both the left upper & lower limb, numbness in the left lower limb, difficulty while walking, loss of balance since 10 years & sleep disturbance, abnormal facial expression (masked face) & difficulty in speech since 5 years associated with gradually decreased in loss of appetite, unsatisfactory bowel, abdominal distension & hyperacidity in for 5 days.

History of Past and Present Illness

History.

K/C/O - Hypertension and PD.

No H/O - Diabetes mellitus.

Family History - Not significant.

Medical History

- Syndopa Plus 1 Tablet twice a day (A/F).
- Tablet Pacitane 2 mg twice a day (A/F).

Personal History

- Diet - Vegetarian, but recurrent intake of spicy food.
- Sleep - Disturbed.
- Habit - Addicted to tobacco and betel nut chewing for 8 years.
- Addiction - Alcoholic & Chronic tobacco chewer.
- Bowel - Constipated.
- Nature of Work - Worker.

Clinical Findings

General Examination of the Patient

- Pulse - 68 beats per minute.
- Blood Pressure - 110/70 millimeters of mercury.
- Temperature - 98.2 Fahrenheit.
- Respiratory Rate - 16 beats/minutes.
- Weight - 55 kilograms.
- Body Mass Index - 22.7 kg/M.

Systemic Examinations of the Patient

- Gastrointestinal system – Abdomen - Soft, no organomegaly present.
- Respiratory examination – Chest - Clear bilateral airflow is standard, with no abnormal sounds.
- Locomotor system.
- Body build - Thin.
- Gait - Shuffling with small steps.
- Walking - Difficulty with loss of balance.
- Posture - Mild stooped posture.

C.N.S Examination

- The patient was conscious and well-oriented to time, place, and person.
- Anxiety, depression, masked face, muffled speech.
- Motor function: Tremor at rest in the left upper and lower limb, moderate slowness (bradykinesia), difficulty in walking, shuffling with slight steps gait.
- Hyper reflex in biceps and triceps, diminished reflex in ankle and knee.
- Sensory system examination within normal limits.

Eightfold Examination

The findings of Eightfold are provided in Table 1.

Table 1. Details of Eightfold Examination.

Sl. No.	Eightfold Examination	Details
1	Pulse	*Vata-pittaja* pulse
2	Bowel	Unsatisfactory bowel evacuation
3	Urine	Burning micturition
4	Tongue	Mild coated
5	Voice	Diminished
6	Touch	Hot & Cold touch sensation
7	Vision	Pallor present
8	Body built	Medium

Table 2. Therapeutic Interventions.

Sl. No.	Therapeutic Intervention	Drugs with Quantity	Duration
1	*Hingwastak Churna* (powder)	5 gm twice a day (B/F) with lukewarm water for *Deepan* purpose	Initial 7 days until digestion improves
2	*Avipattikar Churna* (powder)	10 gm at night with lukewarm water for *Pachana* purpose	
3	Whole body massage	*Mahamasha oil*	From beginning to last for 30 days
4	Sudation therapy by *Nadi swedan yantra*	*Dashmool qwath* (decoction)	
5	*In Karmabasti sequence-Medicated decoction enema* (*Erandamooladi basti*)	*Erandamoola qwath* (decoction) 700 mL + *Honey* 15 mL + Rock Salt 10gm +*Kapikachu churna 5*gm *Mahamasha oil* 30 mL	For 12 days
	Medicated oil enema	*Mahamasha oil* 50 mL +*Ashwagandha oil* 50 mL	For 18 days
6	Medicated nasal drops	*Mahamasha oil 8*-8 drops in each nostril	Start at mid of *Basti karma* for 14 days
7	Capsule Neurons plus	1 Tablet twice a day (B/F) with lukewarm cow ghee	For 30 days, and these three medicines are also continued after discharge along with *Hingwastak* & *Avipattikar churna* (powder)
8	Zandopa powder	5 gm twice a day (B/F) with lukewarm milk	
9	*Maharasnadi Qwath*	15 mL twice a day (A/F) with an equal quantity of water	

Diagnosis

Based on the examination and clinical presentation of the disease, it was diagnosed as *Kampavata* (Parkinson).

Total Study Duration - 30 days.

Follow-up: After discharge, two follow-ups were conducted every 15th day.

Therapeutic Interventions (See Table 2)

Follow-up and Outcomes

In this case, therapeutic outcomes were assessed before and after treatment based on the PD composite scale in Table 3,[10] assessment was done through specific parameters of Parkinson's in Table 4, and improvement in clinical features was mentioned in Table 5.

A daily assessment of the procedural effect was done for this patient, but the primary assessment of the disease was done before treatment. After treatment, that is, on the 30th day, to date, the patient has been in touch but has no complaints now, suggesting the sustained effect of our therapy.

Some Specific Examination (See Figure 1)

Discussion

In Ayurveda, PD is understood as *Kampavata*, primarily attributed to an imbalance of *Vata dosha*, which governs movement and coordination in the body. When *Vata* becomes aggravated, it can cause symptoms such as tremors (*kampa*), rigidity, and other motor disturbances characteristic of PD. The pathophysiology of *Kampavata* involves the depletion of *Ojas* (essential energies), *Dhatus* (tissues),[11] and the obstruction of *Prana, Vyana*, and *Udana Vata* (subtypes of *Vata* bioentities), leading to impaired neural functions and nervous system degeneration. Therefore, controlling *Vata* is crucial in treating PD. Effective treatment involves removing *strotodushti* (blockages), performing *Vata Shamana* (pacifying *Vata*), *Vatanulomana* (correcting the flow of *Vata*), and administering *Rasayana* therapy (rejuvenation) through appropriate medications and treatments, which are essential for mitigating the clinical presentation of *Apatarpana's* symptoms. The pharmacotherapies behind this case or probable mechanism of action of all procedures and medicine used for this patient can be justified as a follow-up.

Whole Body Massage

Massage with *Mahamasha oil*, an Ayurvedic composition, treats various neurological and Vataj disorders. It has homeostatic, neurotransmitter, antioxidant, and anti-inflammatory properties, aiding analgesia and reducing inflammation.[12] The massage involves the rhythmic and systematic application of warm oil, penetrating deep into the tissues to promote circulation and reduce stiffness and rigidity in muscles and joints. This therapy nourishes the Dhatus (body tissues) and Ojas (vital energy), which are depleted in *Kampavata*.[13]

Sudation Therapy

Nadi Swedana with *Dashmool Qwath* is a steam therapy in Ayurveda. *Dashmool Qwath*, a blend of 10 potent herbs,

Table 3. Assessment Based on the Parkinson's Disease Composite Scale.

Sl. No.	Motor Symptoms	Total Score	Score Before Treatment	Score After Treatment (30th Day)
1	Bradykinesia	4	3	1
2	Tremor at rest	4	3	2
3	Gait	4	3	1
4	Balance/Postural disability	4	2	1
5	Nocturnal akinesia	4	3	1
6	Freezing	4	0	0
		Non-motor symptoms		
7	Fatigue	4	3	1
8	Hallucination	4	3	2
9	Cognitive impairment	4	3	3
10	Symptomatic or orthostatic hypotension	4	0	0
11	Urinary discomfort	4	2	0
12	Anxiety/Depression	4	3	0
		Treatment-related complications		
13	Dyskinesia	4	4	2
14	Dystonia	4	2	1
15	Dopamine dysregulation syndrome	4	3	2
16	ON & OFF	4	2	1
		PD-related disability		
17	Disability	4	2	1
Total score		68	41	19

Note: Grade 0 = Normal, Grade 1 = Mild impairment, Grade 2 = Moderate impairment, Grade 3 = Severe impairment, Grade 4 = Very severe impairment.

Table 4. Assessment Through Specific Parameters of Parkinsonism.

Sl. No.	Type of Assessment	Before Treatment		After Treatment (30th Day)	
A	Reflexes	Right	Left	Right	Left
1	Ankle jerk	2+	1+	1+	1+
2	Knee jerk	2+	1+	1+	1+
3	Biceps jerk	2+	3+	2+	2+
4	Triceps jerk	2+	3+	2+	2+
B	Specific tests				
1	Muscle movement coordination	Irregular		Improved	
2	Tandem walking test	Not well-executed		Execution improved	
3	Finger-to-nose test	Executed slowly		Executed normally	
4	Involuntary movement	Tremors present		Tremors reduced	
C	Assessment test for bradykinesia				
1	Buttoning time	25 seconds		10 seconds	
2	Blink rate/min(Marie signs)	05 blinks per minute		12 blinks per minute	
3	Dysdiadochokinesia test	10 movements/minute		17 movement/minute	
4	Chest expansion	0.7 centimeter		1.8 centimeter	
5	Walking time	50 meters in 2 minutes		50 meters in 1 minute	
6	Picking of pins with hand	60 second		20 second	
D	Functional assessment test				
1	Hand grip power	20 mm of hg		30 mm of hg	
2	Foot pressure	20 kg		30 kg	

Note: 0 = no response; always abnormal, 1+ = a slight but definitely present response; may or may not be normal, 2+ = a brisk response; normal, 3+ = a very brisk response; may not be normal, 4+ = a tap elicits a repeating reflex (clonus); always abnormal.

Table 5. Assessment Based on Clinical Features.

Sl. No.	Parameter	Before Treatment	After Treatment (30th Day)
1	A tremor in the left upper & lower limbs	Present	Markedly improved
2	Numbness in left lower limb	Present	Absent completely
3	Difficulty while walking	Can walk without assistance slowly with a shuffling gait with short steps	Can walk normally without any assistance
4	Loss of balance	In balanced	Markedly improved
5	Abnormal facial expression	Masked face (without expression)	Improved (with expression)
6	Sleep disturbance	Disturbed	Normal
7	Difficulty in speech	Muffled (not clear)	Improved

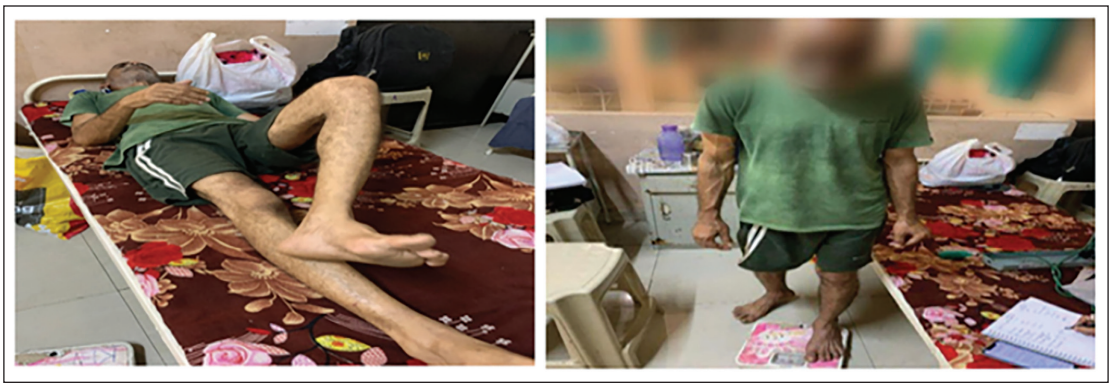

Figure 1. (A and B) Showing Specific Examination. (A) Image Showing Measuring Foot Pressure by Weighing Machine. (B) Image of Heel Shin Test.

possesses anti-inflammatory, analgesic, *Vata*-balancing, and antioxidant properties.[14] Steam from *Dashmool Qwath* targets specific body areas, penetrating deeply to enhance circulation, reduce muscle stiffness, and alleviate rigidity.[15] This therapy also mitigates neural inflammation and oxidative stress, critical factors in PD degeneration.

Medicated Enema

Medicated enemas, traditionally made with rock salt, honey, medicated oil, and herbal decoctions, reduce Vata bio-entities and nourish the nervous system. Rock salt's properties aid in the passage of medication molecules and liquefying viscid matter, while honey is an effective vehicle for drug transportation. *Mahamasha oil's* Sukshma property facilitates drug absorption at a microcellular level. L-dopa, found in Kapikaachu powder, increases dopamine levels and benefits Parkinson's patients. *Erandamool* decoction is potent in treating various *Vata* disorders. Together, these components aid in nerve cell regeneration and hydroelectric energy production, which is crucial in addressing the neuronal loss characteristic of PD.[16,17]

Mediational Nasal Drops

All ailments above the clavicular region, especially those related to the brain, respond best to Nasya as it allows direct administration of therapeutic compounds, bypassing the blood-brain barrier. *Mahamasha oil*, used in Nasya, has neuroprotective, anti-inflammatory, and antioxidant properties. Pacifying the aggravated *Vata* dosha, the primary cause of *Kampavata* reduces key symptoms such as rigidity, tremors, and bradykinesia. Additionally, it promotes nerve health by boosting blood circulation, fortifying nerves, and lessening numbness.[11]

The Probable Mode of Action of Palliative Treatment is as Follows

Maharasnadi Qwath is an herbal remedy mainly used for musculoskeletal disorders. It primarily affects the muscles, joints, nerves, and bones. *Maharasnadi Qwath* cleanses the body of impurities and calms nerve irritability and inflammation.[18] Capsule Neuron Plus can cross the blood-brain barrier with the aid of cow ghee as a carrier and contains qualities such as anti-inflammatory, antioxidant, anti-analgesic, and antistress. It also raises dopamine levels.[19] Hingawastak Churna balances pacifying Vata Kapha entities because of kindling, digestion & increased metabolism properties due to its sweet, bitter, pungent taste, dry, hot quality & sweet taste conversion.[20] Zandopa Powder is used to treat neurological conditions, including PD. *Mucuna pruriens*, a natural source of L-DOPA, the precursor to dopamine, is found in Zandopa.

One neurotransmitter essential for regulating movement, emotions, and pleasure is dopamine. In the brain, the L-DOPA in Zandopa is transformed into dopamine, restoring this crucial neurotransmitter's levels.[21] *Avipattikar churna* drugs are sweet, bitter, astringent, pungent in taste & sweet taste conversion. It was administered to help people achieve the right direction of waste product metabolism and to correct their digestion since *Avipattikar* is a potent Ayurvedic churna made of herbs that helps to enhance Agni (digestive fire) without making pitta worse, according to Ayurveda. It is also suggested as a laxative and aids with appetite stimulation.[22,23]

Conclusion

Ayurveda states that *Kampavata* is clinically similar to Parkinson's illness. Several Panchkarma techniques, including *Snehana* (whole body massage), *Swedana* (sudation therapy), *Nasya* (medicated nasal drops), *Asthapana*, and *Anuvasan basti* (medicated enema), among many more Ayurvedic formulations, have demonstrated potential in the treatment of PD patients. *Shamana aushadhi* (palliative Medicine), which alleviates aggravated doshas without eliminating them from the body, and *Shodhana Chikitsa* (bio-purificatory therapy), which aims to eradicate aggravated doshas from the body, thereby restoring balance among *Vata, Pitta*, and *Kapha*, both play crucial roles in treating *Vata* disorder and improving daily activities of living for patients with PD.

Abbreviations

A/F: After food; **BD:** 2 times a day; **B/F:** Before food; **C.N.S:** Central Nervous System; **gm:** gram; **H.S:** At night only; **H/O:** History of; **K/C/O:** Known case of; **Kg:** Kilogram; **ml:** milliliters; **mm of hg:** millimeters of mercury; **PD:** Parkinson's disease; **S. No.:** Serial number.

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Authors' Contribution

Punam Sawarkar conceptualized the data and designed the study. Sonia Mandal and Varinder Singh wrote and drafted the manuscript. Punam Sawarkar also provided valuable input in preparing the manuscript. Finally, all authors read and approved the final version of the manuscript.

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The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Ethical approval

Not applicable

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Informed consent

Informed consent for publication of the data was taken from the patient.

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