

AYURVEDIC TREATMENT OF PARKINSON'S DISEASE - A CASE STUDY

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Article Received on
24 August 2024,

Revised on 14 Sept. 2024,
Accepted on 04 October 2024

DOI: 10.20959/wjpr202420-34183



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ABSTRACT

Parkinson's disease is defined as Chronic, progressive neurodegenerative disease characterized by both motor and non-motor features. The most important signs and symptoms of Parkinson's disease occur when the nerve cells in basal ganglia, an area of brain that controls the movement become impaired or die. When these neurons die or get impaired, they tend to produce less amount of important chemical in the brain called as Dopamine which causes symptoms like tremors, muscle Rigidity, Akinesia and postural disability, Cognitive, Behavioral and other psychological symptoms. In *Ayurveda* this disease can be correlated with the *KampaVata* which is characterized by *Sarvanga Kampa* and *Shiro Kampa*. *KampaVata* is one among 80 types of *Nanatmaja Vata Vikaras*. *Kampa* is due to pathological *Chala Guna* of the *Vata*. Treatment is to normalize the *Vata* by *Shamana* and *Shodhana* (Purificatory) *Chikitsa*. A case of 62-

year-old male presenting with the symptoms of Severe Tremors, Postural instability and difficulty in performing daily activities who was provisionally diagnosed as *KampaVata* was successfully treated with *Snehana* (Oliation) and *Brihmana* line of management in the form of *Kayaseka*, *Shirovasti*, *Masha Atmaguptadhi*, *Yapana Vasti*.

KEYWORDS: Parkinson's disease, *KampaVata*, *Snehana*, *Swedana*, *Yapanavasti*.

INTRODUCTION

Parkinson's disease is a chronic progressive disease of the nervous system characterized by the cardinal features of Rigidity, Bradykinesia, Tremor and Postural Instability.^[1] The exact cause of the Parkinson's disease is not exactly known.

Genetic predisposition, infections such as Encephalitis, Prolonged use of Antipsychotic drugs, Arteriosclerosis, Neurotoxins etc. can affect the substantia nigra in the basal ganglia leading to the destruction of Dopamine producing neurons. The Vagus nerve may play a crucial role in pathogenesis of Parkinson's Disease which has been hypothesized that Alpha-synuclein aggregates from in the enteric nervous system, and spread via the autonomic system to the Central Nervous system.^[2] The Parkinson's Disease commonly seen in old age, but an estimated 4-5 percent of people with Parkinson's disease are diagnosed before the age of 50.^[3]

Parkinson's disease and *KampaVata* have the similarities in presentation. *KampaVata* is one among the *Vataja Nanatmaja Vyadhi* explained in *Charaka Samhita*^[4] and same is explained as *Vepathu* by various other Acharyas. In *Madhava Nidana* (Cause), *Sarvanga Kampa* and *Shirokampa* are explained as *Vepathu*.^[5] In *Basavarajeeyam* symptoms such as *Karapadatale Kampa*, *Deha Bhramana*, *Nidrabhanga* and *Ksheenamati* are explained under *KampaVata* *KampaVata*^[6] *Snehana Swedana* and *Basti Chikista* helps in treating the *Vata dushti*. A 62-year-old men with *KampaVata* was adopted here with *Kayaseka*, *Shirovasti* and *Masha Atmaguptadi Yapana* followed by *Shamanoushadhis* which has given maximum improvements in both physical and mental parameters after the treatment.

CASE REPORT

Male patient of age 62 years who is not a k/c/o Hypertension/ Diabetes Mellitus/Thyroid disfunction was apparently normal 3 years back. Patient started complaining of pain in lower limbs and patient found difficulty in walking due to stiffness in lower limbs. The pain also started radiating to bilateral upper limb within span of 1 week. Gradually patient started presenting with forward bending of the body, difficulty in holding objects for which patient became dependent on others for performing the house hold work, taking bath and combing hair. Patient also started experiencing delusions, difficulty falling asleep and always thinking in subconscious mind. Next patient started having the complaints of slow and reduce speech, reduced facial expression and blinking of the eyes since 2 years for which patient took medicines but didn't get relief. Gradually patient started difficulty in passing stools (once in 2

days) along with tremors in both hands since 1 year. Now patient complain of Severe Tremors in upper and lower limbs, difficulty in walking, performing the daily activities, pain in the shoulder joint and involuntary movements in upper limbs which got aggravated since 6 months for which patient visited *Devakana Panchakarma Center Paivalike*.

Past history

Nothing specified

No H/o DM/ Hypertension / Trauma or any other medical illness.

Medical history

- 1) Syndopa Plus 1-1-1
- 2) Parkin 1-0-1

Family history

Nothing specific.

Personal history

Appetite: Reduced

Bowel: Constipated (2days once)

Micturition: 4-5times/day, 2-3 times at night

Sleep: Disturbed

Habits: Tea-coffee 2-3 times/day

General examination

Moderately built, Afebrile, Other parameters like Pallor was present, icterus, Clubbing, Cyanosis, Lymphadenopathy, Edema was absent with Stooped posture and Festinated gait.

Systemic examination

CVS: S1 S2 Heard, No murmur.

GIT: P/A Soft, non-tender, no organomegaly.

RS: NVBS heard, No added sounds.

CNS: Higher Motor Function

Consciousness - Conscious

Orientation to time – Intact

Orientation to place – Intact

Orientation to person – Intact

Memory immediate – intact

Memory recent – Intact

Memory remote – Intact

Intelligence – Moderate

Hallucination – Absent

Delusion – Present

Emotional disturbance – Present

Speech Disturbance – Present

Dysarthria: slow speech, difficult in articulation.

Cranial nerve examination

All the Cranial nerves are intact except Facial nerve where frowning of forehead is reduced and Spinal Accessory where Shrugging of shoulder with and without resistance is not possible.

Sensory system examination

Superficial	Deep	Cortical
Touch – Intact	Touch – Intact	Tactile localization- Present
Temperature – Intact	Temperature – Intact	Tactile discrimination – Present
Pain – Intact	Pressure sense - Intact	Stereognosis – Present Graphesthesia - Present

Motor system examination

Muscle Bulk	Right (in inches)	Left (in inches)
Upper limb		
Arm	9.5	9
Forearm	7.5	7.5
Lower limb		
Thigh	16	16.5
Calf	10	9.5

Tone

Rigidity seen in Upper limb and Lower limb.

Co-ordination

Romberg Sign – positive

Upper limb: Finger to nose test – possible

Finger to finger test – possible

Rapid alternate movements – B/L upper limb – difficult to perform

Lower limb: Heel shin test – not possible

Tandem walking – not possible

Involuntary movements – Present in both upper limb

Gait – Festinating gait

Superficial reflexes	Deep reflexes
Corneal reflex – positive	Biceps jerk :2+
Abdominal reflex – positive	Triceps jerk: 2+
Plantar reflex – positive	Supinator jerk: 2+
	Knee jerk: 2+
	Ankle jerk: 2+
	Clonus – Patella – Absent
	Clonus – Ankle – Absent
	Jaw jerk: 2+

Locomotor system examination

Cervical spine	Lumbar spine
Inspection: Spine curvature – Stooped posture Palpation: Tenderness – absent Range of movements: Flexion: mild painful Extension: mild painful Left lateral bending: mild painful Right lateral bending: mild painful Left rotation: mild painful Right rotation: mild painful	Inspection: normal Palpation: tenderness absent Range of movements: Flexion – unable to perform Extension – unable to perform Left lateral bending – unable to perform Right lateral bending – unable to perform Left rotation – unable to perform Right rotation – unable to perform

All Joints are normal with no swelling, no tenderness, no deformity.

Ashta stana pareeksha

Nadi: 70 per minute

Mala: once in 2 days

Mutra: 5-6 times/day

Jihwa: Alepita

Shabdha: Prakruta

Sparsha: Anushna Sheeta

Drik: Prakruta

Akriti: Madhyam

Lab reports

Hb % ----- 13.5gm/dl

RBC Count ---- 4.5Mill/mm³

WBC Count ---- 7000/mm³

Platelet Count ---- 2Lacs/mm³

RBS ----- 114gm/dl

S.Creatinine ---- 0.9mg/dl

Total Bilirubin ----- 0.8mg/dl

TSH ---- 4 µIU

Vitamin B12 ----- 280pg/ml

S.Ceruloplasmin ---- 25mg/dl

Diagnosis

Majority of the symptoms co-related with the *KampaVata* which can be considered as Parkinson's Disease in Modern Science.

It fulfills the following criteria's:

Tremor

Bradykinesia

Rigidity

Postural instability

Intervention

Table 1: Showing the treatment given in 2 Phases.

Date	Treatment Given	Observation/Result
05-01-2024 to 11-01-2024	* <i>Shirobasti</i> with <i>Danwantara Thaila</i> * <i>Kayaseka</i> with <i>Danwantara Thaila</i> Orally	*Stiffness in Hands reduced comparatively. *Pain in the shoulder joint present. *Patient feels lightness and more active.

	<i>Gandharwahastadi Kashaya</i> - 15ml twice daily with 60 ml of water	
12-01-2024 to 19-01-2024	<i>*Masha Atmaguptadi Yapana Basti</i> Orally <i>*Badradaewadi Kashaaya</i> -15ml twice daily with 60 ml of water <i>*Kapikachu Choorna</i> -10gms twice daily with Milk	*Tremors in B/L Upper Limbs reduced. *Patient is able to sit for longer duration. *Pain over shoulder joint reduced. *Slurred speech reduced. *Patient is able to balance and walk few steps v himself.

Table 2: Showing the chart of *Masha Atmaguptadi Yapana Basti* given for 8 days.

Days	1	2	3	4	5	6	7	8
Basti	A	A	N	A	N	A	N	A

Anuvasana Basti – Danwantara Thaila

N- Niuha Basti – Following ingredients are added.

Madhu = 100ml

Saindhava Lavana = 5 grams

Danvantari Taila = 100ml

Rasnadashamoola Grutha = 100ml

Mashatmaguptadi Ksheerapaka = 300ml

Follow Up Medications

Ashwagandharista – 6tsp BID with 6tsp of warm water (After Food)

Badradarvadhi Kashaya- 15ml with 60ml lukewarm water BID

Rasnadashamoola Gruta- 10ml HS with Milk

Kapikachu Choorna- 10gms BID with Milk

OBSERVATION AND RESULT

Significant reduction in the symptoms after treatment in Tremor, Bradykinesia, Rigidity and Speech. The Tremors reduced from grade 4 to grade 2 after the treatment. There was an improvement in speech from grade 3 to grade 1. Rigidity got relieved from grade 3 to grade 1, Bradykinesia also reduced from 4 to grade1.^[7]

SN	Results	Before Treatment	After Treatment
1	Tremor	4	2
2	Bradykinesia	4	1

3	Rigidity	3	1
4	Speech	3	1

DISCUSSION

The Majority of the *Lakshana's* of Parkinson's Disease can be co-related with the classical symptoms of *KampaVata* told in *Ayurvedic* literature. The main Pathogenesis involved in *KampaVata* is *Dhatukshaya*, hence *Nirupathambita Vata Vyadhi Chikista Vata Vyadhi Chikitsa* is adopted.^[8] So *Brihmana* line of treatment in the form of *Kayaseka* with *Danvatara Taila* is given.

Kayaseka helps in *VataShamana* and *Jara Vyadhi Nashana*. Parkinson's disease common in older age, here *Kayaseka* helps to regulate the normal function of *Vata* and *Kapha* and also gives strength to the body.^[9] *Shirobasti* is also known as *Masthiskya*, a procedure where large amount of *Sneha* is retained on the head for longer period.

In case of Parkinson's Disease where both mental and physical functions are deranged, *Shirobasti* helps in relaxing and re-vitalizing the Central Nervous System by Balancing the hormonal functions that regulates the emotional behaviors and sleep disturbances.^[10]

Yapana Basti having the qualities of *Mamsa Balajanana*, *Shula hara*, *Janu Uru Jangha Graham*, *Sadyobalajanana*, *Rasayana* etc. helps in strengthen the muscles and has neuroprotective action.^[11] *Basti Chikista* helps to normalize all 5 *doshas* namely *Apana Vayu*, *Samana Vayu*, *Vyana vayu*, *Udana* and *Prana Vayu* later corrects vitiated *Kapha* and *Pitta Doshas* finally bringing equilibrium in the various systems of the body.^[12] *Basti* has a special qualities to stimulate Gut Brain System. *Yapana Basti* in this way shows both *Shodhana* and *Rasayana* action, thus helps in Parkinson's Disease.

CONCLUSION

KampaVata and its *Chikitsa* (Treatment) principles has been adopted in this case as majority of the symptoms are similar to that of Parkinson's disease. *Bahya Chikista* along with the *Panchakarma* treatments can give very good result in various *Vata Vyadhi*. *Sarvanga Kayaseka* and *Masha Atma Gupatadi Yapana Basti* bringing back the vitiated *Vata Dosha* to normalcy and *Brihmana* nature of *Yapana Basti* helped in rejuvenation of body and strengthening the neurological functions of the body. *Shamana Oushadhis* that were adopted like *Ashwagadharista* along with combined effects of *Kapikachu* are useful in improving the day to day activities of patient as it balances *Vata Dosha* and *Kapikachu* powder contains L-

DOPA which makes it special in the management of Parkinson's Disease.^[13] As the Parkinson's disease is neuro degenerative this study paves a way for further research in larger samples to understand the various other *Panchakarma* procedures in treating this condition.

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