

Case study

Ayurvedic Management of Parkinson's disease: A Case Report

ABSTRACT

Parkinson's disease is a neurodegenerative condition which affects the basal ganglia and substantia nigra and presents with differing combinations of bradykinesia, rigidity, tremors and loss of postural reflexes. Parkinson's disease has an annual incidence of about 0.2/1000 and a prevalence of 1.2/1000 worldwide. Parkinson's disease is a chronic progressive disease that adds substantial physical, emotional and financial burden to victims and their families. Modern science's management of this condition has shown its limitations with severe side effects. With the changing demand and awareness among people, the role of *Āyurveda* is an emerging reality. A 65 years old male patient priory, diagnosed with Parkinson's disease came to our P.D Patel Ayurvedic hospital, Nadiad with chief complaints of continuous tremors in his right extremities and difficulty in walking for one year. Before he came to us, he took conventional medicines for the same complaints but didn't get satisfactory results. Here he was consulted and diagnosed as having *Kampavāta*, and he was admitted and treated accordingly with *Śodhana* (pacifying) and *Śamana Cikitsā* (purifying Treatment). The present study reveals that this treatment protocol is effective in managing patients with Parkinson's disease. Extended follow-up and more patients are required to reach any conclusion. Still, in this case, it can be stated that this Treatment is a hope for the patients of Parkinson's disease who are not benefited from conventional medicaments.

Keywords: Parkinson's disease, Ayurveda, *Kampavāta*, *neurodegenerative*

INTRODUCTION

Parkinsonism is a syndrome consisting of a variable combination of tremor, rigidity, bradykinesia and a characteristic disturbance of gait and posture.¹ It was first described in detail by Dr. James Parkinson in 1817. Parkinson's disease (PD) generally commences in middle or late life and average age of onset is about 60 years. The pre-motor or prodromal phase of PD may start as early as 12–14 years before diagnosis.² It leads to progressive disability with time. Prevalence is higher in men than women (M:F-1.5:1).³ About 80% of Parkinsonism is idiopathic.⁴ Probably multiple interacting environmental risk factors and genetic susceptibility play a role. Modern science treats this disease condition with dopamine supplements and symptomatic medicines, but they have their limitations with severe side effects. With the changing demand and awareness among people, the role of *Āyurveda* is an emerging reality.

CASE REPORT

This is a Clinical study.

A 65 years old male patient prior diagnosed with Parkinson's disease came to our P.D Patel Ayurvedic hospital , Nadiad with chief complaints of continuous tremors in right extremities and difficulty in walking since 1 year along with anxiety, depression, headache and dribbling of saliva from 3 months. Before he came to us, he took conventional medicines e.g. dopamine supplements for the same complaints but didn't get any satisfactory result. Here he was consulted and diagnosed as *Kampavata* and he was admitted and treated accordingly with *śodhana* and *śamanacikitsā*.

For literature review the material has been collected from Ayurvedic texts e.g. *Caraka saṁhitā*, *Suśruta saṁhitā*, *Aṣṭāṅga hṛdaya*, *Bhāvaprakāśa*, *Basavarājīyaṁ* with different commentaries, Research articles, Modern texts and National research databases

Table 1.Shows chief complaints with duration

Complaints	Duration
• Continuous tremors in right upper and lower limb	Since 1 year
• Difficulty in walking	Since 1 year
• Stiffness and restricted movement of neck	Since 6 month
• Anxiety, depression, headache and dribbling of saliva	Since 3 month

On examination

- Respiratory system : Chest-bilaterally symmetrical, Air entry- both sides normal
- Cardiovascular system : S1, S2 heard, no Murmur sound heard
- Gastrointestinal system : Per abdomen - soft, no tenderness no organomegaly were found on palpation
- Central nerves system :

Neuropsychiatric :

- Anxiety
- Depression
- Expressionless face

- Slurred speech
- Motor function:
- Tremor at rest in right upper and lower limb
- Rigidity in right upper and lower limb
- Slowness of movement
- Festinating gait
- Hyper reflexia in right knee, ankle, planter, biceps, triceps and supinator jerk

Sensory function: NAD

- ✓ Medical History: He was diagnosed to have Parkinson's disease before 1 year and he was taking following allopathic medicines since last 1 year.
- Tab. Syndopa plus 1 tab/5 time/day
- Tab. Rasagiline 1 tab once a day with this medicines, patient was not get satisfactory results. Therefore he came to P.D. Patel Ayurved Hospital, Nadiad for Ayurvedic treatment.

Patient admitted on 12/10/2022 in the P. D. Patel Ayurveda hospital and treated in the I.P.D. with the following treatment

- **Sarvaṅga Abhyaṅga** (massage with medicated oil)with **Nārāyaṇa Tailaṃ** and **SarvaṅgaSvedana**(full body steam)with **Nirguṇḍī patra** for 2 days just after admission
- On 3rd day –after **Abhyaṅga** and **Svedana** he got **Mṛdu Virecana** (mild laxative) (**Eraṇḍa Tailaṃ**40ml + **Dīnadayāla Cūrṇa** 5gms with **Drakṣa Kwātha**) with that he had 12 vegain **Virecana**.
- **SarvaṅgaAbhyaṅga**with **Nārāyaṇa Tailaṃ**and **Svedana**with **Nirguṇḍī patra**wascontinued after completion of **SamśarjanaKrama**(diet regimen)
- **Nirūha basti**(enema with medicated decoction)of **Daśmūla kwātha**was given for 3 days after completion of **SamśarjanaKrama** .
- **Mātrabasti** (enema with medicated oil)of **Nārāyaṇa Tailaṃ** 40 ml was given daily after 3 **Nirūha bastis**
- **Nasya** (nasal drops) with **Nārāyaṇa Tailaṃ** 8-8 drops at morning daily
- **Grīvābasti**(warm oil put on neck) of **Nārāyaṇa Tailaṃ**30 minsdaily

- *Upanāha svedana*(warm medicated leaves tied up on knee joint)with*Nirguṇḍī patra*for 30 minsdaily
- **Following Oral Medicaments were given:**
 - *Balāmūla kwātha*(decoction of *Sida Cordifolia*) 40 ml twice a day
 - *Yogarāja guggulu*3 tablet trice a day
 - *Kapikacchu cūrṇa* (powder of *Mucuna Pruriens*) 5 gm trice a day and *Aśvagaṇdhā cūrṇa* (powder of *Withania Somnifera*) 3 gm twice a day with one glass of milk
 - *Ābhyāntara snehapāna* (oil administered orally) with *Nārāyaṇa Tailaṃ* orally 20 ml mixed with *Balāmūla kwātha* twice a day

Above all treatments were given for 40 days.

RESULT

Table 2. The table shows the result before treatment and after treatment

Before Treatment	After Treatment (after 40 days)
• The patient had continuous tremors	→ are decreased, and it occurs only in the morning for a few minutes.
• Stiffness and restricted movement of neck	→ the patient doesn't feel after Treatment
• The patient took Tab. Syndopa plus 1tab/ 5 time/ day (Levodopa IP 100mg & Carbidopa IP 25mg) and Tab. Rasagiline (Rasagilinemesylate 1 mg) 1tab/ once/day	→ medicines are reduced- Tab. Syndopa plus ½ tab/twice/day and Tab. Rasagiline is now stopped.
• Associated symptoms -headache, anxiety, depression, dribbling of saliva and slurred speech	→ Now not present.

Follow-up: After discharge, patient comes on every 14 days for follow up till date. He has continued the same oral medicaments. No relapses of symptoms were found.

DISCUSSION

Parkinson's disease and Āyurveda

'*Kampa*⁵ and '*Vepathu*⁶ terms are mentioned as disease condition in *Vātavyādhi*'s chapter and also included in *Vāta nānātmaja vyādhi* (*Vāta* specific disease).

Karapādatalekampodehabhramaṇedukhite |

Nindrabhaṅgomatiḥ kṣīṇākampavātasyalakṣaṇam || (*Basavarājīya*) Clinical features of *kampavāta* listed above can be correlated with the symptoms of Parkinson's disease. *Kampavāta* is one the *Vāta* prominence disease. Therefore line of Treatment should be draw according to *Vāta vyādhi*.

After the admission of the patient in I.P.D., After *Sarvaṅga Abhyaṅga* (whole body massage) with *Nārāyaṇa taila* and *Sarvaṅga Svedana* (whole body sudation) with *Nirgundi patra* for three days, *Mṛdu virecana* (mild purgation) was given to the patient. After completing *Saṃsarjana Krama*, we continued *Abhyaṅga* and *Svedana* to the patient. *Snehana's guṇa* is *snigdha* and *guru* which subsides *Vāta's rūkṣa* and *laghu guṇa*. *Swedana's guṇa* is *Uṣṇa* which subsides *Vāta's śīta guṇa*. *Mṛdu virecana* with *snehadravya* is indicated in the *Vātavvyādhi's* Treatment in Ayurveda classics.⁷

Nārāyaṇa taila⁸ has been administered in the patient as *Nasya* (medicated oil administered by nostrils), *Matrā bastī* (medicated oil administered by Anal route), *Grīvābastī* (medicated oil put on the neck), and *ābhyāntara snehpana* (medicated oil administered orally). *Nārāyaṇa taila's guṇa* is *snigdha* (unctuous), *sthira* (stability) and *uṣṇa* (hot) which subside *Vāta's rūkṣa* (dry), *cala* (wavering) and *śīta* (cold) *guṇa*. *Vāta's cala guṇa* is more aggravated in Parkinson's disease, resulting in manifesting *kampa*, a specific characteristic of this disease.

Kapikacchu cūrṇa⁹ and ***Aśvagaṅdhā cūrṇa***¹⁰ are *snigdha* (unctuous) and *sthira* (stability) in *guṇa* (properties), which subside *Vāta's rūkṣa* (dry) and *cala* (wavering) *guṇa*. And they both are *uṣṇa virya* (comprised hot potency), which reduces *Vāta's śīta* (cold) *guṇa*, which is responsible for manifesting the rigidity in joints, which is also a vital characteristic of this disease. Both *cūrṇas* are given along with milk. All together act as *Vāta nāśaka* and *balya* (strengthen). It is already proven that in Parkinson's disease, Dopamine levels decrease.¹¹ Here ***Kapikacchu cūrṇa*** is a natural source of L-dopa which will be beneficial in this disease condition.

Yogarāja guggulu¹² is given orally to the patient which contains *Rasnā*, *Triphalā*, etc. which work along with *guggulu* (*Commiphora wightii*) to remove excess *Vāta* from the joints, nerves and muscles. It rejuvenates and strengthens neuromuscular systems.

We gave ***Balāmūla kvātha*** to the patient, In *Ca.su. 25- ācārya Caraka* has mentioned that *balā* is *balya* (strengthen) and *Vātaharaṇām* (reduce excess *vāta*)¹³. It is used as a tonic and to activate the function of the nervous system by increasing blood circulation. It gives strength to nerves, which will ultimately be helpful in Parkinson's disease.

CONCLUSION

Kampavāta, an Ayurvedic disease entity can be compared with Parkinson's diseases on account of the similarity in symptomatology. Ayurvedic protocol- *Śodhana* (pacifying) along with *Śamana Cikitsā* (purifying) can create miracles in patient's life because of ability of evacuation, excellences in efficacy and enormity of the procedures to target *Doṣas* eradication and pacification. The present study reveals that this treatment protocol effectively manages the patient with Parkinson's disease suffering for one year. Extended follow-up and more patients are required to reach any conclusion. Still, in this case, it can be stated that this treatment is a hope for the patients of Parkinson's disease who have not benefited from conventional medicaments.

Ethical Approval:

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

Consent

As per international standard or university standard, patient(s) written consent has been collected and preserved by the author(s).

References

-
- ¹Archith boloor ,Ramdas Nayak. Medicine. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers(P) Ltd.2018
- ² Postuma RB, Aarsland D, Barone P, Burn DJ, Hawkes CH, Oertel W, et al. Identifying prodromal Parkinson's disease: Pre-motor disorders in Parkinson's disease. *Mov Disord.* 2012 Apr 15;27(5):617–26. <https://doi.org/10.1002/mds.24996>
- ³Archith boloor, Ramdas Nayak. Medicine. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers(P) Ltd.2018
- ⁴ Postuma RB, Aarsland D, Barone P, Burn DJ, Hawkes CH, Oertel W, et al. Identifying prodromal Parkinson's disease: Pre-motor disorders in Parkinson's disease. *Mov Disord.* 2012 Apr 15;27(5):617–26. <https://doi.org/10.1002/mds.24996>
- ⁵*Agniveśa. Caraka Saṁhitā* with 'Ayurveda *Dīpikā*' Commentary by *Cakrapāṇī*-Edited by Acharya YT, Chaukhambha Surbharati Prakashan, Varanasi-221001,2013
- ⁶*Agniveśa. Caraka Saṁhitā* with 'Ayurveda *Dīpikā*' Commentary by *Cakrapāṇī*-Edited by AcharyaYT, Chaukhambha Surbharati Prakashan, Varanasi-221001,2013
- ⁷ *Agniveśa. Caraka Saṁhitā* with 'Ayurveda *Dīpikā*' Commentary by *Cakrapāṇī*-Edited by AcharyaYT, Chaukhambha Surbharati Prakashan, Varanasi-221001,2013
- ⁸Das G. *Bhaiṣajya Ratnāvalī*—edited by Mishra BS, Volume-3, Chaukhambha Sanskrit Sansthan, Varanasi-221001,2009
- ⁹Sharma PV. *Dravyaguṇa Vijñāna*, Volume- II, 17th edition, Chaukhambha , Varanasi-221001,1996
- ¹⁰Sharma PV. *Dravyaguṇa Vijñāna*, Volume-II, 17th edition, Chaukhambha Bharati Academy, Varanasi-221001,1996
- ¹¹ Saikia, Angana & Paul, Sudip. (2018). Importance of Dopamine in Parkinson's disease. *Advances in Tissue Engineering & Regenerative Medicine: Open Access.* 40. 10.15406/atroa.2018.04.00077.
- ¹²Das G. *Bhaiṣajya Ratnāvalī*—edited by Mishra BS, Volume-3, Chaukhambha Sanskrit Sansthan, Varanasi-221001,2009
- ¹³*Agniveśa. Caraka Saṁhitā* with 'Ayurveda *Dīpikā*' Commentary by *Cakrapāṇī*- Edited by AcharyaYT, Chaukhambha Surbharati Prakashan, Varanasi-221001,2013