

## AYURVEDIC APPROACH TO A CASE OF PARKINSON DISEASE (KAMPAVATA) - A REVIEW

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### ABSTRACT

Parkinson's disease (PD) is the most common form of a group of progressive neurodegenerative disorders characterized by bradykinesia, rest tremor, muscular rigidity, shuffling gait, and flexed posture<sup>1</sup>. Most of these features match with the Ayurvedic description of the disease KAMPAVATA.<sup>2, 3</sup> Worldwide incidence of PD is estimated to be around 7 to 10 million<sup>4</sup>. Its peak age of onset is in the early 60s<sup>1</sup>, progressively debilitating the affected individual. Current drug therapies for human PD with Levodopa or various dopamine receptor agonists offer symptomatic relief and appear to have little effect on the neuro-degenerative process<sup>5</sup>. More than 50% of patients with PD treated over 5 years with Levodopa will develop complications such as motor fluctuations and dyskinesia's. In spite of advancement in the field of medicine, treatment of Parkinson's disease remained highly symptomatic. No curative treatment is available. Present article is intended to discuss the management principles of Parkinson disease (Kampavata) in Ayurveda.

**Keywords:** Kampavata, Parkinson disease, Ayurveda, Vatavyadhi

### INTRODUCTION

The earliest reference to 'shaking palsy' in the Western medical literature is by Galen (AD 138-201) and only centuries later, a comprehensive description was published by James Parkinson in 1817<sup>6</sup>. In Ayurveda the information about the existence of Parkinson's disease in ancient times is available. Ayurveda, the quintessence of ancient systems of health care, known to be practiced in India from 5000 to 3000 BC (exact period not known), is still in vogue. Although etiology of the disease not well known. PD is believed to be due to a combination of genetic and environmental factors. The factors as accelerated ageing, Neuro-degenerative changes, increased free

radical and iron content in the Substantia Nigra repeated head injury, environmental factors as pesticides, contribute in the pathogenesis of this disease. In Ayurveda Kampavata is described as a Vataja disorder, so the causative factors of Vata Vyadhi can be considered as etiological factors of Kampavata. They are reviewed and reclassified as, Aharaja (Dietetic factors), Viharaja (Regimen factors), Manasika (Psychological factors).<sup>7, 8, 9</sup> The drugs like phenothizine (chlorpromazine), butyrophenones (haloperidol), Rauwolfia alkaloids (reserpine), tetrabenzene, and procaine cause reversible Parkinsonism. Although generalization is hazardous, neurological disorders, as understood in the modern medicine, are considered to be 'due

to imbalance of 'vata'<sup>10</sup>. The majority of symptoms of Kampavata are also mentioned in different Avaranas, Charaka says that Avarana of Vyana and Udana by Kapha produces symptoms like Gatisanga, Vakswaragraha, Gurugatrata, Stambhana and Kampanam<sup>11</sup>. Shirahkampa<sup>12</sup> has been considered as one of the most important disease of Shirah and Nasya has been advocated for its cure. Acharya Charaka noted tremors in different organs like head<sup>13</sup>. Kampavata (parkinson's disease) is one of the rare disorders mentioned under vatavyadhi (neurological disorders). In present era many such neurological disorders which are arising in there incidence day to day. Specifically the disorder 'kampavata' (kampa-tremors) bears a resemblance to the clinical features of 'shaking palsy' or Parkinson's disease. The various synonyms used are 'kampana', 'vepana', 'vepathu' and 'spandana', all indicating tremors of varying nature and severity.

A more detailed diagnostic approach with illustration for the first time provided by the author with explaining the symptoms of kampavata viz. Karapada tale kampa (tremors in hands and legs), nidrabhanga (insomnia), Dehabhramana (postural instability), Matiksheena (dementia)<sup>14</sup>.

There are four cardinal motor symptoms of Parkinson's disease which include tremor, Rigidity, brady kinesia or postural instability (Jankovic, 2008). Other motor feature of the disease includes gait disturbances such as shuffling, freezing, festination (an involuntary quickening of gait), scoliosis and dystonia (Giladi *et al.*, 2001; Schaafsma *et al.*, 2003).

These tend to progressively deteriorate as the disease state advances. Other non-motor Complications associated with Parkinson's disease include speech and swallowing disturbances, sleep and perception disarrangement, autonomic, gastro-intestinal and neuro ophthalmological dysfunction, depression, dystonia and dementia (Chaudhuri *et al.*, 2006). Standard Parkinsonian therapy fails to address these problems, though some can be controlled by specific individual treatments (Rascol *et al.*, 2011).<sup>15</sup>

### **Prognosis:**

In Ayurveda, the prognosis of Parkinsonism is not specifically given. Most Vata diseases are not curable but the patient may be able to live with the diseases curtain degree of inconvenience and difficulties. As the disease progresses, patients develop rigidity and cannot take care of themselves. In extreme cases, death may occur from the patient's inability to breath, resulting in aspiration pneumonia or pulmonary embolism. Ayurvedic therapies available can make life much easier and increase life expectancy. Treatment with pharmacological agents or direct electrical stimulation of target areas (thalamus, sub-thalamic nucleus and globus pallidum) can provide relief in symptoms, good functional mobility for many years and a substantial increase in life expectancy<sup>16</sup>.

### **TREATMENT**

Ayurveda takes a unique approach to the management of the above mentioned neuropathies with a special emphasis on eliminating their causes by panchakarma, physiotherapy, and medicinal treatment with the help of a wide range of herbal and

herbo-mineral drugs. Ayurveda describes a large number of nootropic drugs (stimulating to mental activity, causing cerebral or intellectual activity) and nervous system tonics (i.e., rasayanas in the treatment of *vata* diseases) Being a neuro degenerative disease, Parkinsonism is treated by Rasayana or rejuvenative approach in Ayurveda.<sup>17</sup> Rasayana drugs are essentially nutraceutical agents and Medhya rasayana are specific neuro-nutrients or nerve tonics with nootropic effect. Ashwagandha (*Withania somnifera*), Brahmi (*Bacopa monnieri*), Mandukparni (*Centella asiatica*) and Bala (*Sida cordifolia*) are the common classical drugs advocated for this purpose. This is because Ayurveda considers such movement disorders under *vata* dosha and to sustain neuro-nutrition by rasayana remedies.

Panchakarma therapy is especially advocated in the treatment of neurological diseases. Using different kinds of oil massage (snehana-abhyanga) and swedana is very efficacious. Besides special treatments like shirovasti and shirodhara, vasti therapy is indicated and administered in the form of a specially planned therapeutic enema. With all this, contemporary Ayurvedic medicine claims good success in the practice of neuromedicine.

**Snehana (Oleation):** Gentle massage with medicated oils such as: Mahanarayana taila, Ksirabala taila, Sahacharadi taila, Dhanvantara taila, Mahamasa taila, Bala taila. Sarvangasveda (Steam bath) / Patrapindasveda for 3-7 days. Abhyantara sneha as bhojana, pana, nasya, basti can be given. Charaka opines that sneha is the first

line of treatment for all the *vata* vyadhis, snehana does balavardhana, agni vardhana and nourishes the shushka dhatu.

Matra basti with Sahacaradi taila 50 ml with Saindhava lavana and Satpuspa daily for 15-21 days. All of our acharyas have considered basti as best treatment for *vata*vyadhi. Due to its vast action, it has been considered as the complete or the half of the treatment<sup>18</sup>.

Nasya karma/ Brmhana nasya with Purana ghrita (old ghee) / Narayan taila /Kshirbala taila, Mashadi Kwatha Nasya 8-8 drop in both nostrils for 7 days.

Shirovasti with medicated oils (Kshirbala taila, Mahamasa taila, Mahanarayan taila) daily 45 minutes for 7 days.

Shirodhara with medicated liquids (milk/water)/ oils (Kshirbala taila, Mahamasa taila, Mahanarayan taila) daily 45 minutes for 7 days.

Vangasena Samhita: For the first time stated the principles of the treatment of Kampavata. It has been asserted that, Abhyanga, Sweda, Nasya, Niruha, Anuvasana, Virechana and Shirobasti are the useful measures.

#### **Shaman Chikitsa:-**

Following drugs are mentioned in different classics for treatment of Kampavata,

1. Nakula taila (Bhaishajya ratnavali)
2. Nakuladhya ghrita (Bhaishajya ratnavali)
3. Brihat Chagaladi ghrita (Bhaishajya ratnavali)
4. Mahanarayana taila (Bhaishajya ratnavali)
5. Triguna rasa (Sahasra Yoga)
6. Sahacharadi taila (Sahasra Yoga)
7. Rasna taila (Bhela Samhita)
8. Ksheerabala taila (Ashtanga Hridaya)
9. Varuni taila (Sharangadhara Samhita)
10. Dhaturadi taila (Sharangadhara Samhita)

11. Mashadi taila (Sharangadhara Samhita)
12. Maharasnadi kwatha (Sharangadhara Samhita)
13. Devdarvadi kwatha (Sharangadhara Samhita)
14. Sarvagakampa rasa (Rasa Ratnakara)
15. Nakula taila (Harita Samhita)
16. Masha taila (Vangasena)
17. Mahamasha taila (Chakradatta)

In conventional medicine, the treatment of PD is primarily based on increasing the levels of dopamine in SNPC. Carbidopa and levodopa, dopamine receptor agonists (pergolide and bromocriptine), and mono-amino oxidase inhibitor (selegiline) are used to maintain the levels of dopamine. The other less-used drugs are muscarinic receptor antagonists and amantadine, an antiviral agent. The common side effects of levodopa are psychiatric problems, dyskinesia, and the wearing-off-effect (loss of effectiveness). The pharmacological treatments are only symptomatic; they do not change the progression of the disease. If used skillfully, these drugs may dramatically improve the quality of daily life and functional ability. Another treatment option is surgery.

## DISCUSSION

Kampavata is one of the rare mentioned under vatavyadhis because of its crippling nature and non-availability of curative treatment, this disease has remained a great problem in the ageing society. The disease is increasing in its frequency with the world population showing an incidence of 1-2 per 1000 population and has an equal sex distribution. Currently no form of pharmacotherapy available that has shown to delay the progression of Parkinson's

disease. However the above mentioned drugs and panchakarma procedures can treat the symptoms of the condition and consequently improve the patient's quality of life.

Managing drug therapy in patients with Parkinson's disease can be complex. Although good control is often achieved in the early stages of the disease as it progresses the drugs usually need careful tailoring with respect to choice of agents and combinations used and dosage adjustments.

In very early stage of Parkinson's disease, when functional disability is minimal, the use of anti-Parkinson's drugs like, Levodopa, carbidopa etc. is often unnecessary and infact the potential side effects may be more of a problem than the condition itself.

## CONCLUSION

PD is well described in Ayurveda texts. The etiological factors, symptoms, pathogenesis and treatment are well documented in ancient knowledge. The patho physiology of PD in Ayurveda has unique approach with concept of avarana of vata with Kapha Dosha. This review is an attempt to explain the basis of principles of Ayurveda for better diagnosis and management of PD.

## REFERENCES

1. De Long MR, Juncos JL. Harrison's principles of internal medicine – 17<sup>th</sup> edition; Chapter: 366; P. 2549-2557.
2. Madhavakara. Ed Brahmanand Tripathi; Madhava Nidanam with Madhukosha teeka; Chaukambha publications Vol. 1, Chapter.22, p.no.551
3. Basavaraja acharya, Basavarajeeyam; Chaukambha publications, 2005; Chapter 6<sup>th</sup>, p. 100.

4. Parkinson's disease foundation. Available from www.pdf.org.
5. Giurgea CE. The Nootropic concept and its prospective implications. Drug Dev Res. 1982; 2:441-6.
6. Salby G. Parkinson's disease. In: Vinken PJ, Bruyn GW, ed. Handbook of clinical neurology, vol. 6. North-Holland, Amsterdam, 1968:173-211).
7. (Charak Samhita With Ayurveda Dipika Commentary Of Chakrapani Datta, Ed. Yadavji Trikarma Ji Acharya, Chaukhambha Surbharti Prakashan, Varanasi. Charaka samhita Chikitsa Sthan Chapter 28.
8. Sushruta, Sushruta Samhita, edited by Vidya Yadavji Trikarmaji Acharya, Chaukhambha Surbharti Prakashan, Varanasi, 2008, Nidana sthana 1 verse 67-69.
9. Vagbhata, Astanga Hridaya, With Commentary of Arun Dutta and Hemadri edited by Pandit Hari Sadashiv Shastri Paradkara, Chaukhambha Surbharti Prakashan, Varanasi, Reprint 2007, Nidana Sthan, Chapter 15 verse 29 )
10. Gourie-Devi M, Venkataram BS. Concept of disorders of muscles in "Charaka Samhita", an ancient Indian medical treatise - relevance to modern myology. Neurology (India) 1983; 31:13-14.
11. Charak Samhita with Ayurveda Dipika Commentary of Chakrapani Datta, Ed. Yadavji Trikarma Ji Acharya, Chaukhambha Surbharti Prakashan, Varanasi. Charaka Samhita Chikitsa Sthan Chapter 28 verse 223, 224, and 228.
12. Charak Samhita with Ayurveda Dipika Commentary of Chakrapani Datta, Ed. Yadavji Trikarma Ji Acharya, Chaukhambha Surabharti Prakashan, Varanasi. Charaka samhita Sutra Sthana Chapter 17 verse 14.
13. Charak Samhita With Ayurveda Dipika Commentary Of Chakrapani Datta, Ed. Yadavji Trikarma Ji Acharya, Chaukhambha Surbharti Prakashan, Varanasi. Charaka Samhita Shidhisthana Chapter 05 verse 57.
14. Basavarajaacharya. Basavarajeeyam; Chaukhambha publications, 2005; Chapter 6<sup>th</sup>, p.234
15. Development of a dual-hit model of Parkinson's disease by combining environmental and genetic risk factors, Mulcahy, Pádraig John 2012-06-06).
16. Jankovic, J., Goldman, L. and Bennett, W.B. Saunders, Parkinsonism in Cecil Text book of medicine, New York 2000, p- 460.
17. Gourie devi, M. And Venkataram, B.S. Concept of disorders of muscles in Charaka Samhita, an ancient Indian medical treatise-relevance in modern myology, neurology (India), p-31.
18. Brahmananda tripathi edited. Charaka samhita, Charaka Chandrika hindi commentary part 2 siddhi sthana, chapter 1, reprint 2009, chaukhambha surbharati pratishtana Delhi. P- 1170.

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