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Case Report

Lasuna rasayana in management of parkinsonism-a case report

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ABSTRACT

Parkinsonism is a disease with insidious onset and slow progression. It is one of the most common extrapyramidal disorders seen in clinical practice. Parkinsonism can be correlated with Kampavata in Ayurveda based on similar symptomatology. This case presents an intriguing scenario of Parkinsonism, with the patient having undergone allopathic medication for the last two years. Additionally, Ayurvedic treatments and Rasayana therapy have been introduced as complementary measures. The patient underwent Avaranagna and Vatavyadi chikitsa, incorporating practices such as Agni deepanam, Amapachanam, Snehana svedanam, Shodanam, and Rasayana chikitsa for a holistic therapeutic approach. Patients assessment was conducted using modified Hoehn and Yahr scale, Schwab and England ADL scale, Parkinson's disease composite scale and PDQ 39 scale on the 0^{th} day and 42^{th} day. Quality of life scale PDQ-39 SI score was improved from 53.25 pre-treatment to 35.79 post treatment. Following 42 days of treatment incorporated with ayurvedic treatment procedures, coupled with Rasayana therapy, demonstrated a notable amelioration of symptoms, a reduction in disability, and an enhancement in the overall quality of life

Keywords: Parkinsonism, Kampavata, Rasayana chikilsa, Quality of life, Case report

INTRODUCTION

Parkinsonism is the second most common age-related neurodegenerative disease It is one of the most common extrapyramidal disorders seen in clinical practice. PD occurs at a frequency of 1% in people older than 60 years and 0.3% of the general population.[1] The disease is characterized by the loss of pigmented neurons, in the substantia pars compacta of the midbrain and in the locus coeruleus and the presence of ubiquitin-positive and alpha synuclein-positive inclusions called Lewy bodies in the degenerating neurons.[2] Parkinsonism is a disease with insidious onset and slow in progression. It is a neurologic condition that causes motor manifestations-bradykinesia, rigidity, resting tremor, flexed posture, and nonmotor symptoms such as depression and dementia.[3] Parkinsonism presentations and kampavata are comparable. Among Vataja Nanatmaja Vyadhi Caraka as mentioned Kampavata, while other Acharyas explain the same as Vepathu Madhava Nidana, as explained Vepathu as a separate chapter characterized by Sarvanga Kampa and Shiro Kampa.[4,5] In Basavarajeeyam, the symptoms of Kampavata offer a diagnostic hint for Parkinson's disease, which is characterized by symptoms such as Karapadatale kampa, Deha Bhramana, Nidrabhanga, and Ksheenamati.[6]

In this instance, the patient had been prescribed Syndopa CR tablets, for addressing Parkinsonian symptoms. Despite the administration of this medication, the patient continued to experience challenges in performing routine daily activities. While admitted to Vaidyaratnam ayurveda college hospital (VACH), ayurvedic treatment was initiated with a primary focus on restoring the balance of disturbed doshas, ama pachana, avaranaghna, and Rasayana therapies. The goal of these interventions is to enhance the patient's quality of life and mitigate the progression of the disease.

CASE REPORT

This case pertains to a 73-year-old retired upper-middle-class man from the government sector, previously employed as a teacher. He was admitted to VACH on October 8, 2023.The patient presented with a spectrum of symptoms encompassing bilateral hand tremors, impaired memory, slurred speech, movement difficulties, slowness of activity, fatigue, and irregular and obstructed bowel movements over the past two years. The onset of complaints was gradual, with initial manifestations of fine tremors in the hands becoming most pronounced during periods of rest or while engaging in delicate tasks like holding utensils or using small tools. Initially attributing these symptoms to aging or fatigue, the patient remained unaware. Following a bout of COVID-19, the symptoms escalated, marked by increased challenges in rising from bed or transitioning from a seated to a standing position. Subsequently, there was a progression to loss of recent memory, slurred speech, slowed movements, walking difficulties, intentional and postural tremors, stooped posture, frequent dizziness, and issues with vehicle riding. In 2022, the patient sought consultation with an allopathic doctor, leading to a diagnosis of Parkinsonism. Management included medication and physiotherapy, yielding some relief. The current admission to VACH seeks further interventions and comprehensive care for ongoing symptoms.

Past history

H/o DM 9 years, H/o allergic asthma 30 years.

Medical history

Syndopa plus 1-1-1, Clopivas 75, 0-0-1, Pacitane 2 mg 1-0-0

Psychosocial history

The patient faces disrupted sleep due to vivid dreams and nightmares, resulting in excessive daytime sleepiness. This condition has led to withdrawal from daily activities, social interactions, work, and leisure pursuits.

General examination

He exhibited a moderate build and maintained a neat, tidy, and cooperative demeanor. The examination revealed muscle stiffness accompanied by intentional and postural tremors. Additionally, he displayed a slightly stooped posture, while facial expressions remained intact. His gait was characterized by festination and reduced arm swing. Notably, there were no signs of pallor, icterus, cyanosis, clubbing, or lymphadenopathy. Vital signs were within normal limits, with a height of 161 cm, weight of 65 kg, and a BMI of 25.07 kg/m^2.

Systemic examination: nervous system examination

Patient was right-handed person with slurred speech oriented to time, date and person; patient displayed symptoms of anxiety, accompanied by intact immediate and remote memory, while recent memory showed impairment. Bilateral rigidity of muscles was evident in both the upper and lower limbs, with preserved muscle power, although there was a reduction in hand grip on the left side. Superficial and deep reflexes were within normal limits, and both the cranial nerve examination and sensory system examination revealed no abnormalities. Notably, cerebellar signs such as ataxia of gait, hypotonia, staccato speech, and nystagmus were absent. The patient exhibited intentional tremors, and the Finger Nose Test was feasible albeit with tremors. During tandem walking, swaying was observed, and dysdiadochokinesia was possible. The Romberg's test yielded a positive result. Extra-pyramidal signs, including bradykinesia, muscular rigidity, and monotony of speech, were present. A positive response was elicited during the glabellar tap.

Diagnostic assessment

The MRI brain scan results revealed mild generalized cerebral atrophy along with chronic ischemic changes affecting the bilateral fronto-parietal and periventricular white matter. The patient's constitution aligns with 'Vata Kapha Prakriti,' featuring samana Vayu, apana Vayu, vyana Vayu, and udana Vayu, alongside pachaka pitta and tarpaka kapha as the vikrithi. The affected dushyas encompass rasa, mamsa, and majja. Saram and samhananam are characterized as madhyama with avara satwam. Notably, the patient demonstrates Amla, Lavana, and Katu Satmya, exhibiting Abyavaharana Sakthi and jarana Sakthi as avara. The Srothas involved include Rasavaha, Annavaha, Majjavaha, and Purishavaha. The case was diagnosed as Parkinsonism with secondary brain atrophy and ischemic changes. In Ayurveda, the diagnosis was identified as Kampavata.

Therapeutic intervention

Detailed description about internal medicine and external procedure administered are provided in Table 1 and 2.

Table 1: Internal medicines.

Internal medicines	Dose	Time
Maharasnadi Kasayam	15 ml ksh + 45 ml with luke warm water B. D	Twice daily before food
Dhanvantharam gulika	1. B.D	With kashayam
Gandharvahasthadi kashayam	15 ml ksh + 45 ml with luke warm water	Pathi kashayam
Doorvadi keram		External application

Table 2: External treatments.

Date	Treatment given	Observations and results
10/10/23-14/10/23	Udwarthanam with Kolakulathadi choornam	Rigidity reduced comparatively, on 5th day after udwarthanam patient was having itching and skin irritation
15/10/23-19/10/23	Abyangam + Udwarthanam with Kolakulathadi choornam and doorvadi keram	Patient feels lightness of body, sleep was improved, Appetite improved, Itching and skin irritation subsided
20/10/23-29/10/23	Vicharana snehapana with Rasa Thailam sevyam and Yava porridge	Samyak Snigda lakshana seen
30/10/23	Abyangam with Doorvadi kerathailam and steam bath	C/O tremors in B/L upper limbs persist. Difficulty in getting up from bed or transitioning from a sitting to a standing position reduced, seeing of vivid dreams, and nightmares reduced
31/10/23	Virechanam with Avipathi churnam (20 gm)	
2/11/23-11/11/23	Lasuna Rasayanam (10ml Lasuna swarasa with 15 ml Rasa thaila)	Tremors in B/L upper limbs reduced. Patient is able to walk comparatively better, feeling of falling down while walking reduced
12/11/23	Virechanam with Avipathi churnam (25 gm)	

Table 3: Comparison between the pre-treatment and post-treatment.

Variables	Pre-treatment	Post-treatment
Assessment tools		
Modified Hoehn and Yahr scale[13]	Stage 3	Stage 2
Schwab and England ADL scale[14]	30%	50%
Parkinson's disease composite scale[15]		
Bradykinesia	Score 2 (Moderate)	Score 1 (Mild)
Tremor	Score 3 (Severe)	Score 2 (Moderate)
Gait	Score 2 (Moderate)	Score 1 (Mild)
PDQ 39 (Lower score indicate better quality of life)[16]		
Mobility	75	62.5
Activity of daily living	54	37.5
Emotional well being	66	56
Stigma	25	20
Social support	16.6	8.3
Cognition	81.25	43.75
communication	41.6	33.3
Bodily discomfort	66.6	25
PDQ-39 SI[17]	53.25	35.79

Patient's assessment was conducted using modified Hoehn and Yahr scale, Schwab and England ADL scale, Parkinson's disease composite scale and PDQ 39 scale on the 0th day and 42th day. Following 42 days of treatment, notable improvements were observed. The patient exhibited enhanced walking ability, a decrease in the sensation of falling while walking, and reduced tremors in both upper and lower limbs. Furthermore, difficulties in getting up from bed and transitioning from a sitting to a standing position were diminished. The frequency of vivid dreams and nightmares also decreased, contributing to an overall improvement in the patient's quality of life. A detailed comparison between the pre-treatment and post-treatment outcomes is provided in Table 3.

DISCUSSION

As the aging process unfolds, there is a notable exponential increase in Vata dosha. Consequently, the geriatric age group faces an elevated risk of Vatavyadhi. The primary etiological factors contributing to Vatavyadhi include Dhatukshaya (depletion of tissue) and Margavarana (obstruction of channels). In Basavarajeeyam, Kampavata manifests symptoms such as Karapadatale Kampe, Nidrabhanga, and Ksheenamati, all of which align with classical Vataja Lakshanas.

In addition to the mentioned symptoms, the patient also exhibits Vaak-Swara Graha (difficulty in speech), Dourbalyam (weakness), and Guru Gatrathvam Adhikam

(heaviness of the body), indicative of the Lakshanas of Kaphavrita Udana Vata.[7] Furthermore, Gati Sangasthadadhika (difficulty in walking) is identified as a Kaphavrita Vyana Vata lakshana.[8] Therefore, the treatment approach focused on the removal of Kapha Avarana initially.

Udvartana, with its ability to enhance Twakgatagni, facilitates the optimization of Uttarottara Dhatwagni functions. Additionally, it contributes to Ama pachana and Avaranagna.[9] The internal administration of Maharasnadi Kashayam, Dhanvantharam Gulika, and Gandharvahasthadi Kashaya, as a pathi Kashaya, proves beneficial for Ama pachana, Agni deepana, and Vatanulomana. Considering the patient's geriatric age and the challenge of Klesha Asaha, Snehapana was cautiously prescribed as Vicharana Matra Snehapana. The Vicharana involved the use of Rasa Taila and Yava porridge as an effective means of drug delivery to deeper structures within the blood-brain barrier. Thereby facilitating the entry of active principles of the formulations into brain. Virechanam was administered with Avipathi Churnam, eliciting the occurrence of six vegas in the patient. Following the Sodhana procedure, the patient was provided with one day of rest, during which Peyadi was incorporated into the diet to facilitate the normalization of Agni. Rasayana therapy, when administered to individuals whose bodies have not undergone purification, proves ineffective, much like attempting to color a dirty cloth.[11] Subsequently, Lasuna Rasayana was administered. Acharya Vagbhata has emphasized the significant role of Lasuna as a Rasayana in the treatment of Vata Avaranas.[12]

Lasuna rasayana

Lasuna was immersed in Rasa Tailam overnight, a mixture of 10 ml of Lasuna Swarasa and 15 ml of Rasa Tailam was ingested each morning, with this course of treatment lasting for 10 days. The patient's appetite was carefully observed, and dietary recommendations were provided. The patient was advised to consume Dadima (pomegranate) juice while thirsty, Sali Odhana with buttermilk curry at afternoon, and in the evening, Yava porridge was suggested. Following the administration of Lasuna Rasayana, a Virechana procedure was undertaken. This precautionary measure was implemented as Lasuna has the potential to provoke Pitha due to its inherent properties. In anticipation of Pitha aggravation, the Virechana was conducted using Avipathi Churnam.

CONCLUSION

The incorporation of Ayurvedic treatment procedures, coupled with Rasayana therapy, demonstrated a notable amelioration of symptoms, a reduction in disability, and an enhancement in the overall quality of life. Quality of life scale PDQ – 39 SI score was improved from 53.25 pre-treatment to 35.79 post treatment. Even if the symptoms exhibit partial subsidence, concerns about relapses persist. Consequently, it is advisable to undergo therapies repeatedly at regular intervals as per the Vyadhi Avastha. This instance clearly highlights the necessity of positive, constructive, and successful outcomes when two medical systems collaborate at various phases of therapy in order to attain the best possible recovery for the patient.

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REFERENCES

1. Das KVK. Textbook of medicine. 5th ed. New Delhi: Jaypee Brothers Medical Publisher's (p) Ltd. 2008;1258.
2. Das KVK. Textbook of medicine. 5th ed. New Delhi: Jaypee Brothers Medical Publisher's (p) Ltd. 2008;1259.
3. Jameson JL, Kasper DL, Hauser SL, Longo DL, Loscalzo J. Harrison's textbook of internal medicine. US: McGraw-Hill Education. 2018;3386.
4. Acharya YT. Charaka samhitha. Sootrasthana. Varanasi: Chaukambha Orientalia. 2015;113.
5. Yadunandana Upadhyaya, editor. Madhava Nidanam. Vol. 1. Varanasi: Chukhambha Prakashana; 2019;494.
6. Govardhana Sharma, editor. Basavarajeeyam. 1st ed. Nagpur: Gorakshana Yantralaya Publication. 1978.
7. Yadavji Trikamji Acharya. Charaka samhitha. Chikitsasthana. Varanasi: Chaukambha Orientalia. 2015.
8. Yadavji Trikamji Acharya. Charaka samhitha. Chikitsasthana. Varanasi: Chaukambha Orientalia. 2015;81.
9. Yadavji Trikamji Acharya. Charaka samhitha. Chikitsasthana. Varanasi: Chaukambha Orientalia. 2015;82.
10. Rasa Thailam. Available at: https://www.indiaabundance.com/shopping/sp33_pr9642/Rasa_Thailam.html. Accessed on 21 November, 2023.
11. Tripathi B. Ashtanga Hridayam. 6th ed. Vol. Uthara Sthanam. Ch. 39/136-13. Varanasi: Choukhamba Press; 2012;404.
12. Sorte K, Parwe S, Nisargandha M. A review on the Rasayana effect of Lasuna (Allium Sativum). 2023;18:392-408.
13. Modified Hoehn and Yahr Scale: Modified Hoehn and Yahr Scale. 2023. Available at: https://emedicine.medscape.com/article/2172546-overview?form=fpf. Accessed on 21 November, 2023.
14. Schwab and England Activities of Daily Living Scale |Rehab Measures Database. 2016. Available at: https://www.sralab.org/rehabilitationmeasures/schwab-and-england-activities-daily-living-scale. Accessed on 21 November 2023.

15. Europe P. The Parkinson's Disease Composite Scale. Available at: https://www.parkinsonseurope.or involved/the-parkinsons-disease-composite-scale/. Accessed on 21 November 2023.
16. Parkinson's UK. 2020. The Parkinson's Disease Questionnaire (PDQ-39). Available at: https://www.parkinsons.org.uk/professionals/resourc es/parkinsons-disease-questionnaire-. Accessed on 21 November 2023.
17. Parkinson's Disease Questionnaire-39 | Rehab Measures Database. 2014. Available at: https://www.sralab.org/rehabilitationmeasures/parkin sons-disease-questionnaire-39. Accessed on 21 November 2023.

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