



AYURVEDIC MANAGEMENT OF MULTIPLE SCLEROSIS- A CASE STUDY

Prapulla K¹, Ashvini Kumar M², Muralidhar P Pujar³, Lohith BA⁴, Shameem Banu Nabeesab⁵

1.Final year PG scholar, 2 &3.Professor, 4.HOD & Associate Professor , 5. Assistant Professor Department of Panchakarma, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan

Corresponding Author: prapulla6k@gmail.com

<https://doi.org/10.46607/iamj4711072023>

(Published Online: July 2023)

Open Access

© International Ayurvedic Medical Journal, India 2023

Article Received: 10/06/2023 - Peer Reviewed: 18/06/2023 - Accepted for Publication: 12/07/2023.



ABSTRACT

Multiple sclerosis (MS) is one of the autoimmune disorders where the immune system attacks the covering of nerve fibers (myelin sheath) and causes communication problems between the brain and the rest of the body. It is characterized by symptoms such as difficulty in walking, weakness of limbs, blurred vision, urinary and bladder incontinence. A 68-year-old female known case of Multiple Sclerosis from the United Kingdom approached the Panchakarma Outpatient department with complaints of difficulty in walking without assistance, weakness in the bilateral lower limb, disturbed sleep, urinary incontinence, bowel urgency and disturbed sleep for 29 years and was diagnosed as *Pranavrita vyana vata and Majja Dhatu kshaya*. Initially, the *Avarana hara* line of treatment was adopted, followed by *Samanya vata vyadhi chikista*. The outcome of the treatment was assessed by the Modified ashworth scale, Berg balance Scale, Barthel index of daily activities, Lower motor extremity index, MS walking scale and Sleep Quality Scale. Good improvement was observed in terms of walking, sleep, reduction in pain, weakness and heaviness. *Ayurveda Panchakarma* therapies, along with *Shamanoushadhi*, have provided promising results in the present case.

Keywords: *Ayurvedic management, Multiple sclerosis, Pranavrita vyana vata*

INTRODUCTION

Multiple sclerosis is an inflammatory disease in which fatty myelin sheath around the axons of the brain and spinal cord are damaged, leading to demyelination and scarring¹. It is the 2nd most common cause of neurological disability. The onset age ranges typically from 20 to 40 years. It is approximately 3-fold more common in women than men² A total of 2.8 million people is estimated to live with MS worldwide (35.9 per 1,00,000 population)³. It is marked by the triad of inflammation, demyelination and gliosis. The symptoms such as difficulty in walking, weakness of limbs, blurred vision, urinary and bladder incontinence. The treatment criteria should be addressed to improve the quality of life of the patient, avoiding drug dependence and adverse effects.

Modern view

Acute MS lesions are characterized by perivenular cuffing with inflammatory mononuclear cells, predominantly T cells and macrophages, which also infiltrate the surrounding white matter. Exercise-induced weakness is a characteristic symptom of MS along with moderate to severe spasticity, especially in the legs. Optic neuritis manifests as diminished visual acuity, dimness or decreased color perception in the central field of vision. Sensory symptoms are varied and include both paresthesia (tingling sensation, pricking sensation, or painful burning), hypesthesia (reduced sensation or numbness) and unpleasant sensation (feeling that body parts are swollen, wet or tightly wrapped). Pain and Fatigue is the common symptom of MS. They can occur anywhere in the body and changes their location over time. Bladder dysfunction and fecal urgency are present in more than 90% of MS Patients. Cognitive dysfunction can include memory loss, impaired attention, difficulty in problem-solving and slowed information processing. It has 4 clinical types they are Relapsing-remitting, Secondary Progressive, Primary Progressive, Progressive-relapsing Multiple Sclerosis. Diagnosis of

Multiple Sclerosis is done based on MRI and CSF fluid analysis.⁴

Ayurvedic view

In *Ayurveda*, diagnosis of the disease is done based on *Dosha*, *Dushya*, *Agni* and *Srotodusti*. Multiple sclerosis symptoms can be understood as *Dourbalya* (weakness), *Bala kshaya* (loss of strength), *Suptata* (numbness), *Toda* (pricking pain), *Chimichimayana* (tingling sensation), *Bhrama* (giddiness), *Timira darshana* (blurring of vision), *Gati sanga* (difficulty in walking), *Basti Karma kshaya* (bladder incontinence) and fecal urgency. These *Lakshanas* can be appreciated in pathological conditions, which are *Pranavrita vyana vata* and *Majjadhatu kshaya*.

Patient information

A 68-year-old female, non – diabetic, hypertensive nurse by profession from the United Kingdom presented to the Panchakarma outpatient department with complaints of difficulty in walking without assistance, weakness in bilateral lower limbs, urinary incontinence, and disturbed sleep. The condition was first ascertained in 1994 at the age of 39 years, with weakness of the right lower limb and imbalance in coordination while walking. She was later noticed dragging of the right leg. Approximately one year later (1995), she felt a deficit in sensation below the knee in the bilateral lower limb. After MRI, she was diagnosed with Multiple sclerosis and treated with a course of steroids. As the year passed, she complained of urine incontinence and faecal urgency. As this condition was relapsing and remitting, it troubled her routine activities. Hence for better management, she approached Panchakarma OPD of SDM college of Ayurveda and Hospital Hassan.

CLINICAL FINDINGS AT THE TIME OF IPD

Physical examination

CNS examination revealed memory, higher psychic functions, cranial nerves were intact and motor examination was done as shown in Table no.1.

Table no 1: Findings of sensory and motor system examination

Factor (bilateral lower leg)	Findings
Tandem Gait	Not possible

Two Point Discrimination	Positive
Superficial sensation below the right knee joint	Absent
Heel to shin and Toe walking test	Possible with difficulty
Lhermitte sign	Positive

Investigations: MRI of the Brain on 16/09/2014 revealed Demyelinating plaques involving the left cerebellar hemisphere, pons, periventricular white matter, centrum semiovale bilaterally, left corona radiata and body of corpus callosum.

Differential diagnosis

1. Myasthenia gravis:- Weakness, fatigue in the arm and leg, diplopia and dysarthria. Remark: Ruled out on the basis of MRI.

2. Guillain-Barre syndrome:- Muscle weakness, diplopia, incontinence of bowel or bladder. Remark: Ruling out as it is characterized by ascending paralysis or areflexia.

3. Multiple sclerosis:- Weakness and lack of coordination in the Bilateral lower limb (right > left). Lhermitte signs positive, numbness, urinary incontinence and bowel urgency.

Diagnosis assesment

Based on the MRI impression and clinical signs and symptoms, the case was diagnosed as **Multiple Sclerosis**.

Pranavarita vyana vata:- Function of Vyana vata is hampered due to Avarana of Pranavata and producing the symptom such as *Indriya shunyata (twak-indriya shunyata~ altered sensation in right lower limb)*, *Bala kshaya (weakness)* and *Gamana ashakti (difficulty in walking)*

Majjadhatu kshaya:- A condition arising due to Vata Pitta Vriddhi and Kapha Kshaya. Majja is Sthana vishesha of Kapha. Inflammation in the nervous system is the hallmark of MS. Understanding of inflammation as a vascular and cellular reaction occurring due to Srotodushti / Avarana⁵.

In this present case, the subject had difficulty in walking (*Gamana ashakti*), weakness of bilateral lower limbs (*Bala kshaya*), *Indriya shunyata (twak indriya shunyata ~altered sensation in the right lower limb*, urinary incontinence and *Anidra*(disturbed sleep). Most of these symptoms can be seen in *Pranavrita Vyana Vata* and *Majja Dhatu kshaya*.

Therapeutic intervention

Table no.2: Panchakarma Treatment schedule

Date	Intervention	Outcome
5/11/22 to 8/11/22	1. <i>Mrudu Udwartana</i> with <i>kolakulattadi churna</i> followed by <i>Parisheka</i> with <i>Dashamula Kwatha</i>	The heaviness of body reduced
9/11/22 to 17/11/22	2. <i>Mrudu Abhyanga</i> with <i>Ksheera bala Taila</i> , followed by <i>Parisheka</i> with <i>Dashamula Kwatha</i>	Status quo
18/11/22 to 22/11/22	3. <i>Mrudu Abhyanga</i> with <i>Ksheera bala Taila</i> followed by <i>Patrapinda sweda</i>	Feeling the softness of the body, weakness is reduced slightly.
5/11/22 to 15/12/22	4. <i>Avagundana</i> with <i>Dhanyaka, Haridra</i> and <i>Tulasi in Triphala Kashaya</i>	Headache reduced. Sleep improvement observed (upto 4hours)
23/11/22 to 27/11/22	5. <i>Mrudu Abhyanga</i> with <i>Ksheera bala Taila</i> followed by <i>Shashhtikashali pinda sweda</i>	Weakness reduced. Able to walk without aid for about 10 steps.
23/11/22 to 15/12/22	6. <i>Rajayapana basti Anuvasana Basti</i> with <i>Kalyanaka ghrita</i> 60ml <i>Niruha Basti (~320ml)</i> with	Weakness reduced completely. Able to walk without support for about 10mins.

	<ul style="list-style-type: none"> • Madhu 60ml • Saindhava lavana- 8gms • Sneha- Kalyanaka ghrita- 60ml • Kalka- Ashwagandha, Shatavari, Bala, Musta each 5gms • Kwatha- Mustadi Yapana Ksheerapaka 200ml 	
--	---	--

Table no 3: Shamanaushadhi at the time of discharge(60 days from 15/12/22 to 15/02/23)

Sl No	Medicine
1	Kumarabharana Rasa 250mg 1-0-0 (Before food) (Swarna bhasma, vacha, brahmi, jatamamsi, yashtimadhu, guduchi, shankhapushpi, maricha)
2	Kalyanaka Ghrita 1tsp -0- 1tsp (Before food)
3	Ksheera Bala 101 Capsule 300mg 1-0-1 (After Food)

Outcome assessment at the time of discharge

Table no 4:- Noteworthy improvement

Complaints	BT	AT
1. Difficulty in walking	Able to walk with assistance	Able to walk without assistance
2. Headache	Present	Absent
3. Nidra	Alpa (only for 2 hours)	Improved (able to sleep upto 8 hrs)

Table no 5:- Assessment criteria

Sl No	Scales	Before Treatment	After Treatment
1	MS walking scale	57(60)	51(60)
2	Muscle Tone(Modified Ashworth Scale)	Grade 4	Grade 3
3	Muscle Power	2/5 in the right leg 3/5 in the left leg	2/5 in the right leg 3/5 in the left leg
4	Berg Balance Scale	30(56)	34(56)
5	Barthel index of daily activities	10(20)	11(20)
6	Lower motor function index	10	15
7	Sleep Quality Scale (SQS)	31(84)	34 (84)

DISCUSSION

They are long-standing Avarana, which has led to Dhatu kshaya janya vata vyadhi. So initially, to combat these, Avaranahara treatment was adopted, that is Sarvanga Udwartana and parisheka (Kashaya dhara). It is also advised for managing the Anyonya Avarana of Vata⁶. It is Twakprasadakaram param (best in improving quality of cutaneous tissue), Siramukhaviviktatvam (cleanses the opening of the channels) and Twaksthagni tejanam (Increases the twakagni)⁷ followed by Samanya Vata vyadhi chikitsa like abhyanga stated to be the best modality to pacify Vata. It is Atyartha balakarmani⁸, Dardhyakritha⁹,

Mrujavarna Bala pradha, does Dhatupushti, Mardavakara and Kaphavatahara¹⁰ followed by patra pinda sweda and Shashtika shali pinda sweda (snigdha sweda) which is Stambhahara, Shoola Gaurava nigraha and does Mardavata of Anga¹¹. One of the major complaints was disturbed sleep. The subject didn't sleep for more than 2 hours for 29 years. Avagundana helped to open the Vatavaha srotas and lightened the head. The ingredients used for Avagundana are Dhanyaka, Haridra and Tulasi in Triphala kashaya dipping pacified vitiated Vata Kapha Doshas. Sleep was assessed by the sleep quality scale. Before treatment, the score was 31 out of 84, and after treatment, it increased to 34. So Avagun-

dana and other *Panchakarma* therapies helped in improving the quality of sleep of the subject. Before treatment, MS walking scale was 57 out of 60 and after treatment, it has improved to 51 out of 60, Muscle power (MRC) before treatment was 2/5 in the right and 3/5 in the left leg and after treatment, clinically the score remained the same, but subject felt strengthening of muscles in terms of walking. Procedures such as *Abhyanga* and *Shashtika shali pinda sweda* helped in increasing Muscle tone, which has improved to Grade 3 from Grade 4. *Mustadi Yapana Basti* has *Sadyobalajana*, *Rasayana* (immune modulation) and *vatahara* property¹². The majority of the drugs in the *Yapana Basti* include *Tikta Rasa*, which aids in *Asthi* and *Majja Dhatu* regeneration. There was a significant improvement in the Berg balance and Barthel index score after the treatment. This puts forth the positive strength to tackle such challenging disorders.

CONCLUSION

Multiple sclerosis is a progressive disorder with manifold impacts producing multiple systemic effects. The patient showed marked improvement in the symptoms and did not observe any relapse during the treatment and after the follow-up. The associated complaints of disturbed sleep were also addressed, and the subject got relief. Although a single case report cannot claim to be an efficacious treatment for all such cases and as the disease runs a long course, *Panchakarma therapies* along with *Shamanoushadhi* have provided promising results by improving the quality of life.

REFERENCES

- Gupta S, Kundra L, Yadava RK, Dharmarajan P. Management of multiple sclerosis through Ayurveda: A case report. *J Ayurveda Case Rep* 2022;5:33-9
- Fauci, Braunwald, Kasper, Hauser, Longo, Jameson, et al. editors. Principles of Internal medicine. Volume 2, Ch. 326, 17th ed. Newyork: McGraw-Hill Companies; 2008. p. 2611
- Walton C, King R, Rechtman L, et al. Rising prevalence of multiple sclerosis worldwide: Insights from the Atlas of MS, third edition. *Multiple Sclerosis Journal*.2020; 26 (14): 1816-1821. DOI:10.1177/1352458520970841)
- Fauci, Braunwald, Kasper, Hauser, Longo, Jameson, et al. editors. Principles of Internal medicine. Volume 2, Ch. 326, 17th ed. Newyork: McGraw-Hill Companies; 2008. p. 2611
- Dr. Umesh C. Ayurvedic management of Multiple Sclerosis: A case report, *International Journal of scientific research*: Vol 7 (issue 9): September 2018, p 47-48 DOI:10.36106/ijsr Available from : [https://www.worldwidejournals.com/international-journal-of-scientific-research-\(IJSR\)/article/ayurvedic-management-of-multiple-sclerosis-a-case-report/MTY1NTc=?is=1&b1=77&k=20](https://www.worldwidejournals.com/international-journal-of-scientific-research-(IJSR)/article/ayurvedic-management-of-multiple-sclerosis-a-case-report/MTY1NTc=?is=1&b1=77&k=20)
- Jatinder varma, Parvesh srivatsava et al. "Udwartana- A review article".*IJSRT*.2019 may; Vol 4 (issue 5):p.449-452 Available from <https://ijisrt.com/wp-content/uploads/2019/06/IJSRT19MY101.pdf> Accessed on 17/12/2022 at 8 pm
- Jadavji T, editor. *Sushruta Samhitha of Sushruta, Chikitsa sthana*.Ch.24,Ver.51-54. Reprint Edition, Varanasi: Chaukambha Orientalia; 2014.p.469
- Jadavji T, editor. *Charaka Samhitha of Agnivesha, Sutra Sthana*. Ch5, Ver.88. Reprint Edition, Varanasi: Chaukamba Orientalia; 2011.p.42
- Sadashiva HS, editor. *Astanga Hridaya of Vagbhata, Sutra Sthana*. Ch.2, Ver.8. Reprint Edition, Varanasi: Chaukambha Surabharathi Prakashan;2010.p.26
- Jadavji T, editor. *Sushruta Samhitha of Sushruta, Chikitsa sthana*.Ch.24,Ver.30. Reprint Edition, Varanasi: Chaukambha Orientalia;2014.p.488
- Jadavji T, editor. *Charaka Samhitha of Agnivesha, Sutra Sthana*. Ch14, Ver.13. Reprint Edition, Varanasi: Chaukamba Orientalia; 2011.p.88
- Jadavji T, editor. *Charaka Samhitha of Agnivesha, Siddhi Sthana*. Ch12, Ver.16(1). Reprint Edition, Varanasi: Chaukamba Orientalia; 2011.p.73

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Prapulla K et al: Ayurvedic Management of Multiple Sclerosis- A case study. *International Ayurvedic Medical Journal* {online} 2023 {cited July 2023} Available from: http://www.iamj.in/posts/images/upload/1753_1757.pdf