IAMJ

INTERNATIONAL
AYURVEDIC
MEDICAL JOURNAL

Case Report ISSN: 2320 5091 Impact Factor: 5.344

CLINICAL EVALUATION OF PANCHKARMA MANAGEMENT ALONG WITH PHYSIOTHERAPY IN TRANSVERSE MYELITIS - A CASE STUDY

Mishra Meenu[1], Shivhare Shwetal[2]

[1]Post Graduate Scholar 2ndyear Kayachikitsa, [2]Reader Department of Kayachikitsa;
Pt. Khushilal Sharma Govt. (Auto.) Ayurveda College and Institute, Bhopal, Madhya Pradesh, India

Corresponding Author: mishrameenu654@gmail.com

https://doi.org/10.46607/iamj16p4052020

(Published online: July 2020)

Article Received:28/07/2020 - **Peer Reviewed:**17/08/2020 - **Accepted for Publication:**17/08/2020

Check for updates

ABSTRACT

Introduction: Transverse Myelitis is an acute, usually monophasic, demyelinating disorder affecting the spinal cord. It is usually thought to be post infectious in origin. It occurs at any age and present with a subacute paraparesis with a sensory level, accompanied by severe pain in the neck or back at the onset. The annual incidence of Transverse Myelitis ranges from 1.34 to 4.60 cases per million. In *Ayurveda* there is no description of a single disease which can exactly resemble with Transverse Myelitis. It can be correlated with *Adhrangghata,* which comes under *Vatavyadhi.*

Aim: To study the effect of *Panchkarma* management with Physiotherapy in Transverse Myelitis and to find out effective *Panchkarma* management in Transverse Myelitis.

Material & Methods: A 30-year-old male patient Vikas Dubey was visited unit OPD 31767 Kayachikitsa Govt. Ayurveda Hospital Bhopal. On 3rd June 2019 presented with Spastic Paraplegia, had involuntary movement in bilateral lower limbs along with moderate pain off and on and irregular bladder bowel movements. The patient was treated with *Panchkarma* along with Physiotherapy for 76 days. Assessment was done on the basis of symptomatic relief.

Observation: The *Panchkarma* procedures along with physiotherapy yielded improvement in sensory & motor functions of patient.

Conclusion: On the basis of result obtained, it can be concluded that *Panchkarma* along with physiotherapy can be used as effective treatment in management of Transverse Myelitis.

Keywords: Transverse Myelitis, *Panchkarma* Management

INTRODUCTION

Transverse Myelitis is an acute inflammatory disorder affecting the spinal cord with cord swelling and loss of function. Typically, one or two spinal segments are affected with part or all of the cord area at that level involved. Clinically, a myelopathy evolves over days, and recovery (often partial) follows over weeks or months. Para-infectious autoimmune inflammatory response is the most common cause and may follow viral infection or immunization, for example. Other causes are systemic inflammatory disorders e.g. SLE, Sjogren's and sarcoidosis, infections this may cause by viruses, MS and NMO. [1]The prevalence of Transverse Myelitis ranges from 1.34 to 4.60 cases per million worldwide with no evidence of sex and familial predisposition. There is no epidemiological data are available from India.[2]Diagnosis is made by MRI and CSF examination. MRI should distinguish this from an external lesion affecting the spinal cord. CSF examination shows cellular pleocytosis, often with polymorphs at the onset and oligoclonal bands are usually absent. After treatment with high dose intravenous methylprednisolone, there are variable outcomes-one third have static deficit, one third go on to develop MS and one third recover with no subsequent relapse.[3]In *Ayurveda* there is not a single disease which resembles with Transverse Myelitis but physician should understand the disease through *dosha, dushya* and *samprapti* can be correlated with *Adhrangghata* that is a type of *Pakshvadh* which comes under *nanatmaj vatavyadhi.*[4] Modern modalities for Transverse Myelitis are steroids and plasmapheresis which has not shown any satisfactory improvement in symptoms. Therefore, in this research paper a holistic approach is evaluate the better *Panchkarma* management regimens along with Physiotherapy in Transvers Myelitis. *Panchkarma* procedures as per *Ayurvedic* guidelines and physiotherapy will be observed with respect to its clinical effect on sign and symptoms of Transverse Myelitis. Treatment for this patient including *Adhrang Rukhsha Swedan, Adhrang Snehan - Nadi Swedan, Kaal Basti* plan and *Adhrang Shashtikshalipind Swedan* followed by physiotherapy.

Aim and Objectives

- To study the effect of *Panchkarma* management with Physiotherapy in Transverse Myelitis.
- To find out effective *Panchkarma* management in Transverse Myelitis.

Material and Methods

***Selection and Source of patient**

For this study, patient of Transverse Myelitis was registered from OPD 31767 of *Kayachikitsa* Department and admitted in male IPD 1255 of Pt. Khushilal Govt. (Auto.) Ayurveda Hospital Bhopal. Patient taking allopathy medicine was stopped during the study period. The drugs required for *Panchkarma* therapy procured and prepared in *Prakalp* of *Panchkarma* in Pt. KLS Govt. Ayurveda Hospital Bhopal. This registered patient was properly informed regarding the *Panchkarma* procedures, he would undergo and was admitted in the hospital indoor ward and was treated under direct supervision.

*Duration of study 76 days

Case Study

A 30-year-old male patient Vikas Dubey was visited unit OPD 31767 Kayachikitsa Govt. Ayurveda Hospital Bhopal. On 3rd June 2019 presented with Spastic Paraplegia, had involuntary movement in bilateral lower limbs along with moderate pain off and on and irregular bladder bowel movements.

History of Present Illness

Patient was healthy before one and half year. Patient had viral fever evening of 9thFebruary 2018 and after some days developed neck pain and lower backache followed by weakness of bilateral lower limbs. He took some Allopathic medicines from Hoshangabad Hospital. He woke up late in the morning and unable to stand up by himself, during the walk he felt that his legs were not in his full control. He had irregular bowel-bladder movements. Next day along with his father, he again consulted the other Doctor who referred him to higher center. He got admitted to

doi: 10.46607/iamj16p04052020 | IAMJ June-July 2020 | www.iamj.in

higher center on the next day with the complaints of weakness in bilateral lower limbs along with involuntary movements more in right than left and bowel-bladder dysfunction.

History of Past Illness: No history of trauma, seizure, vomiting, HTN, DM, stroke, IHD, TB, major surgery, never received blood transfusion in past. There was a history of Viral Fever before some days appearing symptoms of Transverse Myelitis.

Personal History: Patient was married, Tobacco chewer and Ganja smoker since 10 years, non-alcoholic, allergy nil, sleep -appetite normal, bowel bladder irregular.

General Examination: Pallor, icterus, cyanosis, clubbing and oedema absent. Lymph node not palpable. BP, pulse, SpO_2 all vitals are stable.

Systemic Examinations: RS, CVS, P/A normal.

CNS examination revealed patient conscious and oriented responding to verbal commands, neck stiffness present and speech normal.

Sensory function: Pain in bilateral lower limbs Irregular bowel-bladder movements

Motor Function: Power- 3/5 in bilateral lower limbs. Tone- spasticity present in bilateral lower limbs. DTR- brisk DTR in bilateral lower limbs. Plantar clonus- present bilaterally

Investigation: The lab investigations (26 February 2018) vit-D, Iron, Transferrin saturation, TIBC, LFT, Lipid Profile, CBP, ANA were normal, vit-B_{12} range increased and HIV was negative. On same day MRI LS Spine was done with findings of posterocentral disc protrusion at L_5 S_1level. On 1st May 2018, Lumber Puncture was done, which showed increased polymorphs and absent of oligoclonal band in CSF. On 4th June 2018 MRI Head was done and it was normal. On 13th April 2018, MRI Cervical Spine was done with findings of disc desiccation changes seen in anterior part of dorsal spine cord from mid D_2 to mid D_4 Vertebral level involving anterior horn cells could be Myelitis? On 23rd June 2018, MRI Cervico-Dorsal Spine was done with findings of Multiple Sclerosis with cord lesion at D_2-D_4 level, subtle altered cord signals in left of spinal cord at D_4 level. In comparison to previous dorsal spine.

Treatment Regimen

This diagnosed case of Transverse Myelitis admitted in male general ward of Pt. K. L. S. Govt. Ayurveda Hospital, Bhopal with 31767 OPD no. and 1255 IPD no. and undergo following procedures:

Table 1:

S. No.	Treatment	Drug used	Dose	Duration
1.	*Adhrang Rukhsha Baluka Pottali Swedan*[5] + Physiotherapy	Sand devoid of gravel & *Saindhva lavan*	Q. S.	15 days
2.	*Adhrang Snehan*[6] and *Nadi Swedan*[7] + physiotherapy	*Ksheerbala* oil & *Nirgundi-Dashmool siddha Kwath*	Q.S.	15 days
3.	*Kaal Basti*[8]	*Dashmooladi Kwath* & *Sahchar* oil	350ml& 75ml	16 days
4.	*Adhrang shashtik Shaali Pind Swedan*[9] + physiotherapy	*Balamula, Ashwagandha, Shatavari* Milk *Shashtik Shaali*	Each 15gm Q.S. 25gm	30 days

Assessment Criteria: Gradation Pattern-Assessment will be done on the basis of relief found on the cardinal sign and symptoms of Transverse Myelitis before and after treatment. Classical sign and symptoms of Transverse Myelitis are.[10]

1. At or below the level of involvement- neuropathic pain.
2. Numbness and tingling sensation in the legs.
3. Muscle weakness, flaccid paralysis followed by spasticity.
4. Lhermitte's sign.
5. Bowel and bladder disturbances. Each sign and symptom is graded and a numerical value is given for assessment of results. The change and relief in symptoms were observed on every completion of Panchakarma procedures.

Table 2:

S.No.	Symptoms	Parameters	Scoring	BT	AT
1.	Pain in lower	• No pain(0)	0	2	0
	Limbs	• Mild pain(1-3)	1		
	(VAS scale)[11]	• Moderate pain(4-6)	2		
		• Severe pain(7-10)	3		
2.	Tingling/	• No tingling/numbness	0	2	0
	Numbness	• Sometimes for 5 to 10min	1		
		• Daily for 10-30 min	2		
		• Daily more than 1 hour	3		
3.	Spasticity (Tone)	• No increase in tone	0	4	2
	[Ashworth Scale Score][12]	• Slight increase producing a catch when a joint is more in flexion or extension	1		
		• More marked increase in tone, but joint easily flexed	2		
		• Considerable increase & passive movements difficult	3		
		• Affected part rigid in flexion or extension	4		
4.	Gait	• Normal gait	0	4	2
		• Pain occasionally	1		
		• Walk with support or mild pain	2		
		• Walk with support or severe pain	3		
		• Unable to walk	4		
5.	Lhermittes sign	• Absent	0	1	1
		• Present	1		
6.	Bowel	• 1-2 times per 1to 2 days	0	3	0
	Movement	• 2 times per week	1		
		• Once per week	2		
		• Less than once per week	3		
		• Less than for month	4		
7.	Bladder Movement	• Not at all	0	3	0
	(frequency & urgency)	• Less than 1/5th of the time	1		
	[Acc. to IPSS][13]	• Less than half the time	2		
		• About half of the time	3		
		• More than half of the time	4		
		• Almost always	5		

Result: Result has obtained by Wilcoxon matched pairs signed ranks test.

Table 3:

Mean BT	Mean AT	MD	% Relief	SD	SE	P value
2.714	0.7143	2.000	73.69%	1.000	0.3780	0.0313

Interpretation: Result revealed that before treatment mean score was 2.714 with SD± 1.113which was bought down to 0.7143 with SD± 0.9512 after treatment, which showed significant result given at 95% CI and P-value <0.05(0.0313).

DISCUSSION

In *Ayurvedic* management first we planned for *Adhrang Rukhsha Baluka Pottali Swedan* which reduced *Kapha* and *Ama* that responsible for spasticity in bilateral lower limbs. After *Swedan* spasticity reduced moderately. Then planned for *Adhrang Snehan* and *Nadi Swedan*. *Adhrang Snehan karma* produced *Snigdhta, Mardavta* and *Vishyandan* in body. *Nadi Swedan* liquify the entire toxin present in affected area from where they came out from the body through sweating. *Vata* manifestation vitiates due to *Sheet Guna*, in such case *Swedan* showing hot potency pacify the *Vata* manifestation. After completion of this period patient got relief pain in lower limbs. After

that planned for *Kaal Basti,* medication given by *Basti* primarily treat *Vatadosha*. *Vata* is the force behind the elimination and retention of feces, urine, bile and other excreta. *Basti* medication also nourishing and cleansing the flora of the colon. As *Basti* retention time increased gradually the condition of patient also improved like irregular bowel-bladder movements became regular and involuntary movement in bilateral lower limbs reduced. After completion of the *Kaal Basti, Adhrang Shashtik Shali Pind Swedan* started that helped to improve circulation, nourishment to the lower half of the body, it improved the strength of the tissues of bones and muscles. After completion of *Shashtik Shali Pind Swedan* patient started walking with support. Patient was taking physiotherapy throughout the treatment period which helped to reducing spasticity in bilateral lower limbs and also improving strength, mobility and range of lower limbs motion.

CONCLUSION

Modern treatment modalities of Transverse Myelitis include use of Methylprednisolone and plasmapheresis, which do not give satisfactory result and improvement. This shows that need of search some alternative treatment is highly desirable. The present study shows that *Panchkarma* procedures along with physiotherapy work effectively in the management of Transverse Myelitis. In this single case study trying to evaluate on effective management of Transverse Myelitis through *Ayurveda* perspective.

REFERENCES

1. Kumar Parveen, Clark Michael, Kumar & Clark's Clinical Medicine, 9th edition 2017, Ch. 21, Page no. 862.
2. Berman M, Feldman S, Alter M, Zilber N, Kahana E. Acute Transvers Myelitis; Incidence and etiologic consideration; Neurology 1981; 31:96671. [PUBMED]
3. H Ralston Stuart, D Penman Ian, Strachan Mark WJ & P Hobson Richard, Davidson's Principles and Practice of Medicine, 23rd edition 2018, Ch. 25, Pageno.1110.
4. Shastri Kashinath & Chaturvedi Gourakha Nath, edited Charak Samhita of Agnivesh, revised by Charak and Dridhbala, Part-1, Chaukhambha Sanskrit Sansthan, Varanasi Reprint 2017; Sutrasthana 20, verse 11, page no. 399.
5. Kaviraj Shastri Ambikadutta, Sushruta Samhita, Ayurveda- Tattva - Sandipika Hindi Commentary, Part-1, Chaukhambha Sanskrit Sansthan Varanasi Reprint, 2016; ChikitsaSthana 32, verse 4, page no.173.
6. Shastri Kashinath & Chaturvedi Gourakha Nath, edited Charak Samhita of Agnivesh, revised by Charak and Dridhbala, Part-1, Chaukhambha Sanskrit Sansthan, Varanasi Reprint 2017; Sutrasthana 5, verse 86, page no. 128.
7. Shastri Kashinath & Chaturvedi Gourakha Nath, edited Charak Samhita of Agnivesh, revised by Charak and Dridhbala, Part-1, Chaukhambha Sanskrit Sansthan, Varanasi Reprint 2017; Sutrasthana 14, verse 29-33, page no. 288.
8. Shastri Kashinath & Chaturvedi Gourakha Nath, edited Charak Samhita of Agnivesh, revised by Charak and Dridhbala, Part-2, Chaukhambha Sanskrit Sansthan, Varanasi Reprint 2017; Siddhisthana 1, verse 47-48, page no.972.
9. M.M. Padhi, Dr. Sharda Ota, Dr. M.M. Sharma, Dr. B. Venkateshwarlu. Editor; A Practical Handbook of Panchkarma Procedures; New Delhi. C.C.R.A.S.2010, Page no. 45-47.
10. Nadkar Y Milind, Golwalla's Medicine for Students, 25th edition 2017, Ch.7, Pageno.555.
11. H Ralston Stuart, D Penman Ian, Strachan Mark WJ & P Hobson Richard, Davidson's Principles and Practice of Medicine, 23rd edition 2018, Ch.34, Page1343.
12. Clinical Research Protocol for traditional health sciences, Central Council for Research in Ayurveda & Siddha.
13. H Ralston Stuart, D Penman Ian, Strachan Mark WJ & P Hobson Richard, Davidson's Principles and Practice of Medicine, 23rd edition 2018, Ch. 15, Page no.438.

ABBREVATIONS

MS: Multiple Sclerosis NMO: Neuromyelitis Optica SLE: Systemic Lupus Erythematosus HTN: Hypertension, DM: Diabetes Mellitus, IHD: Ischemic Heart Disease TB: Tuberculosis, DTR: Deep, Tendon Reflex, BT: Before Treatment AT: After Treatment MD: Mean Difference SD: Standard Deviation SE: Standard Error CI: Confidence Interval

Source of Support: Nil
Conflict of Interest: None Declared

How to cite this URL: Mishra Meenu et al: Clinical Evaluation Of Panchkarma Management Along With Physiotherapy In Transvers Myelitis. International Ayurvedic Medical Journal {online} 2020 {cited July, 2020} Available from: http://www.iamj.in/posts/images/upload/2453_2457.pdf