AYURVEDIC MANAGEMENT OF MULTIPLE SCLEROSIS: A CASE REPORT

Ayurveda

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ABSTRACT

Multiple Sclerosis (MS) is a chronic inflammatory demyelinating disease of the brain and spinal cord, commonly affecting young adults & occurs most frequently between ages 25 – 35 years, the cause remains unknown to modern medicine. Theories include genetics, infections, and environmental factors. Inflammation in nervous system is hallmark of MS, inflammation occurs in spots that are scattered in brain and spinal cord and they are called plaques. The body's own immune system attacks and damages the myelin. Immune reactions turn on/activate lymphocytes, these eat holes through the lining of venules and enter nervous system and initiate inflammation in CNS leading to demylination. The present report deals with a case of Multiple sclerosis diagnosed under the preview of majja kshaya and praana avruta vyana according to Ayurveda. Efficacy of treatment was calculated by using Modified Ashworth scale for muscle tone, Barthel index of activities for daily living and Berg balance scale for balancing. Before treatment, total score of Modified Ashworth scale was 4, Barthel index of activities of daily living was 17 and Berg balance scale score was 47, after treatment the scores were 2, 18 and 49 respectively. Good improvement was observed in walking, reduction in pain and moderate improvement was seen in weakness of the extremities. Ayurveda panchakarma therapies along with internal medications have provided promising results in the present case.

INTRODUCTION:

Multiple sclerosis is a chronic inflammatory demyelinating disease of brain and spinal cord. The cause remains unknown, theories include genetics, infections and environmental factors. Inflammation in nervous system is hallmark of multiple sclerosis. Inflammation occurs in spots that are scattered in brain and spinal cord and they are called plaques. The disease was considered to be uncommon in Indian subcontinent, but in recent times more and more cases are being diagnosed with the aid of MRI where in optico-spinal form is seen more commonly in India[1].

Ayurveda concept of multiple sclerosis is unclear, however according to previous case reports and with the following concepts the disease can be correlated to "prana avruta vyana" characterized by sarvendriya shunyatwam, where in special senses both gynendriya and karmendriya have interruption in their functions and bala kshaya[2]. Secondly Multiple sclerosis is a condition arising due to vata, pitta vriddhi and kapha kshaya (majja kshaya – degeneration – sthana vishesha)[3]. A revisit to classics points gives the understanding of inflammation as a vascular and cellular reactions occurring due to either srotodusti or avarana.

CASE DESCRIPTION: -

A 26 years aged female patient came to our care (20/03/2017) with complaints of difficulty in walking, weakness in both lower extremities and pain in all extremities. Weakness was more in left limb (3/5) compared to right (4/5). The patient was able to move and do her regular activities without support. The condition was first noticed in 2014 with numbness and tingling sensation in her right hand. Approximately two years later she felt deficit in strength in left upper and lower extremities for which, after MRI she was diagnosed with Multiple sclerosis and treated with a course of Steroids. Patient does not have any past history of major illness and no family members have suffered from similar problem. At the time of examination patient was alert and responding to vocal commands. Sensory examination revealed diminished sensation over left upper extremity and both lower extremities. Motor examination revealed power in left lower and right lower extremities were 3/5 and 4 /5 respectively. There was no muscle wasting and among test for coordination knee to heal test was possible with slight difficulty on left side, rest tests for coordination were possible without any difficulty. Muscle tone assessment was done through Modified Ashworth scale and the score for lower extremities, right hand, left hand, neck & trunk was 3, 0, 1 and 0 respectively. Balancing was assessed by using Berg balance scale and the score was 47 (Low fall risk). Daily activities were assessed by Barthel Index of

daily activities and the score was 17 (Max-20). Hematological, Bio-chemical, serum calcium and thyroid profile reports were normal. MRI of brain (11/09/2016) reveled Demyelinating plaques involving left cerebellar hemisphere, pons, peri ventricular white matter, centrum semi ovale bilaterally, left corona radiata and body of corpous callosum suggesting Multiple sclerosis.

DIAGNOSIS, ASSESSMENT AND TREATMENT: -

Patient had satisfied the steps (McDonald Criteria) in making the diagnosis of Multiple sclerosis i.e. two or more attacks and MRI evidence of nine or more T2 brain lesions[4]. Total two assessments were carried out before and after treatment. Assessment was based on the scoring of Modified Ashworth scale for muscle tone, Berg balance scale for balance and Barthel index for assessment of daily activities[5,6,7]. The patient was diagnosed as prana avrutha vyana and condition due to vata pitta vriddhi and kapha kshaya (Majja kshaya – sthana vishesha) according to Ayurveda.

Treatment was aimed to remove avarana followed by kevala vata chikitsa and Rasayana chikitsa. Various panchakarma procedures like sarvanga abyanga, shastika shali panda sweda, bhaspa sweda and Basti were implemented. Line of treatment was flexible and modified according to the necessity and tolerance of the patient.

TABLE 1: Intervention

Panchakarma intervention	
From 27.3.2017 to 3.4.2017	SABS – Dhanvantram taila **Yoga basti** **Niruha -** Dashamoola kwatha – 400 ml Madhu – 50 ml Shudha bala taila – 50 ml Hingu vachadi kalka – 15 grms Saindava lavana – 10 grms Anuvasana Sachachari taila – 100 ml
From 4.4.2017 to 19.4.2017	Shastika shali panda sweda **Kala basti** Ksheera sadita mustadi raja yapana – 400 ml Madhu – 50 ml Maha masha taila – 50 ml Shatapuspa kalka – 15 grms Saindava lavana – 10 grms **Anuvasana** Maha masha taila – 100 ml

Internal Medications				
Duration	Medicine	Dose	Frequency	Anupana
21.3.2017 to 26.3.2017	Panchakolasava	20 ml	Twice daily	water
From 27.3.2017	Tab. Brihat vata chintamani rasa	1 tab	Once a day	water
	Tab. Kanjanakari rasa	1 tab	Twice daily	water
	Cap Guru rasayana (from 4.4.17)	1 cap 1 cap 2 cap 2 cap 3 cap 3 cap 3 cap 2 cap 2 cap 1 cap 1 cap	Twice X 3days Thrice X 3days Twice X 3days Thrice X 3days Twice X 3days Thrice X 3days Twice X 3days Thrice X 3days Twice X 3days Thrice X 3days Twice X 3days	water
	Saraswatha gritha	10 ml	Twice daily	Hot water

DISCUSSION: -

Patient had vata prakopaka lakshanas like weakness in both lower extremities and pain in all the extremities. Gamana kricchrata/ gati vaishamyata (difficulty in walking), agnimandya etc avruta vata lakshanas were also seen. Multiple sclerosis shows predominant involvement of vata vriddhi and kapha kshaya lakshanas in samprapthi (Pathogenesis). The clinical picture of Multiple sclerosis resembles with prana avruta vyana and condition with vata, pitta vriddhi and kapha kshaya. Similar diagnosis is made in present case and line of treatment was planned according to that.

Initially to remove anyonya avarana treatments like snehana and bhaspa sweda were started by using Dhanwantram taila. After snehana and bhaspa swedana, yoga basti was scheduled (3 niruha and 5 anuvasana). After eight days of treatment patient felt substantial improvement in pain and increase in appetite, later Shastika shali panda sweda and kala basti (6 niruha and 10 anuvasana) was scheduled. Simultaneously to tackle the vata vriddhi and kapha kshaya (Majja kshaya) Saraswatha gritha, Brihat vata chintamani rasa, Tab. kanajanakari rasa and Cap. Guru rasayana were prescribed.

Before starting treatment total score of Modified ashworth scale for both lower extremities was 3 and after treatment it came down to 2. Berg balance scale the pre score was 47 (low fall risk) and post treatment the score was 49. Barthel index of daily activities pre score was 17 and post treatment the score was 18 (Max-20). Substantial improvements were noticed in walking and pain, where as moderate improvement was noticed in muscle weakness. MRI (04/7/2017) showed No obvious enhancement seen on post contrast scan, compared to prior scan dated (11/09/2016) there is mild regression in the size of the plaques and new interval plaques in left frontal, right fronto-parietal sub cortical white matter and no foci of active demylination was seen.

CONCLUSION: -

The Ayurveda diagnosis of prana avruta vyana, condition with vata, pitta vriddhi and kapha kshaya (Majja kshaya – sthana vishesha) was considered as Ayurveda perspective of Multiple sclerosis. Medicines like Tab. Kanjanakari rasa, Cap. Guru rasayana, Brihat vata chikntamani rasa and Saraswatha gritha were beneficial in decreasing the size of the plaques and no foci degeneration was seen, but however new interval of plaques were noticed. Panchakarma procedures like sarvanga abyanga, bhaspa sweda, shastika shali panda sweda and basti karma were beneficial in tackling difficulty in movements and weakness of extremities. Present study finding can't be generalized, further long term follow up studies on larger sample are required to substantiate the above claims.

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