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AYURVEDIC MANAGEMENT OF TRANSVERSE MYELITIS - A CASE REPORT

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ABSTRACT

Transverse myelitis (TM) is one of the common clinical conditions faced by a neurologist and is one of the leading causes of disability, in those affected. The inflammation at a particular area of the spinal cord leads to symptoms, based on the area affected. The management includes the acute management and the management of the resultant neurological deficits. From the Ayurvedic perspective, the condition is to be discussed under the concept of Avarana, the involved dosha being categorized, as per the clinical presentation. The function of the Vatha gets obstructed by the obstructing dosha, which is in an aggravating state, due to its own contributory aetiology. The initial stage may also be associated with aama, which has to be managed without fail. Fixing the associative dosha in the pathogenesis, along with the main dosha, Vatha, helps to fix the protocol, to be framed. The selected Ayurvedic protocol including the internal medications, snehapana and procedures such as Virechana, Sarvanga seka, Nirooha followed by appropriate rasayana has been found effective, in the case of Transverse myelitis. Here the case of a 35 year old man is discussed, who presented with features suggestive of paraparesis with urinary incontinence and also sensory disturbances on lower half of the body as a part of the TM. He positively responded to the proposed Ayurvedic management.

KEYWORDS: Transverse myelitis, Avarana, Snehapana, Nirooha, Lasuna rasayana.

INTRODUCTION

Transverse myelitis (TM) is a rare inflammatory disease causing injury to the spinal cord resulting in demyelination presenting with varying degrees of weakness, sensory alterations, and autonomic dysfunction.[1] TM has a conservatively estimated incidence of between 1 and 8 new cases per million per year, with approximately 25% in children.[2] TM generally presents with rapidly progressing muscle weakness or paralysis, beginning with the legs and potentially moving to the arms with varying degrees of severity. Sensation is diminished below the level of dermatomal distribution of the spinal cord involvement in the majority of individuals. Pain, and temperature sensation are generally diminished and appreciation of vibration and joint position sense may also be decreased. Sexual dysfunction, increased urinary urgency, bowel or bladder incontinence, difficulty or inability to void, and incomplete evacuation of bowel or constipation are other characteristic autonomic symptoms.[3]

Evidence of inflammation either on MRI as gadolinium enhancement or on lumbar puncture as elevated white blood cells or IgG index is frequently observed and aids in the diagnosis.[4] Intravenous steroids, Plasma exchange and immunosuppressive agents like cyclophosphamide are used in the acute management.[5] Historic data, points to the fact that approximately 1/3 of individuals recover with little or only minor symptoms, 1/3 are left with a moderate degree of permanent disability and 1/3 have virtually no recovery and are left severely functionally disabled.[6]

CASE HISTORY

A 35 year old gentleman from Calicut attended the Neurology OPD of our hospital, presenting with acute weakness of lower half of the body, loss of sensation below nipples and obstruction of urine from almost 9 months. Initially, he developed an acute attack of high grade fever, inability to pass urine and gradually went unconscious and was admitted to the nearby hospital. He regained consciousness after 24 hours with weakness of lower half of the body. He was catheterised for the problem with urination. There was also loss of sensation on the lower half of the body below nipples with a bilateral distribution. There was also incontinence of the

bowels. After 10 days of allopathic medicines as well as physiotherapy, he started walking with walker support with slight gain in sensation. Bowel and bladder problems persisted.

Later he started with severe low back pain as well as on both knee joints. The pain aggravates with prolonged sitting with no considerable relief with rest. He was continuing with analgesics, multivitamins and also anxiolytics. He was much disturbed emotionally due to the disability and resultant financial crisis. He approached our institution as he was not having any further progress in the condition.

Clinical Examination

On examination of Vitals - pulse rate was 70/mt, regular and of full volume, Heart rate was 70/min with normal S1 and S2, Blood Pressure was 120/80 mm Hg (right arm sitting), Temperature was 98.4°F (armpit), Respiration rate was recorded as 14/min and body weight was 60 Kg, having height of 164cm on measurement.

On neurological examination, he was conscious, oriented and responded well. All the higher mental functions were intact. There was no traceable involvement of any of the cranial nerves. There was weakness of the lower half of the body and he was able to move only with support. There was motor weakness with grade II, in both the lower limbs with restricted dorsiflexion of the foot. The deep tendon jerks were exaggerated with grade III in both the lower limbs. Loss of sensation, touch, temperature and pressure was noticed below the D3 dermatome level.

MRI of the cervico dorsal spine showed subtle hyperintense signals in the thoracic (D2 to conus) on T2 weighted images suggestive of subacute myelitis. He was admitted in our IPD for observation and possible management.

Management

Initially the condition was considered as Pittavritha Vatha[7] considering the early involvement of Pitta in the pathology. Also considering the possibility of associative aama, commenced with Amritha shadangam kwatha,[8] Chandraprabha gulika[9] and Avipathy choorna[10] for the initial 7 days. Burning sensation subsided, appetite improved, but there was no modification in the presentation of weakness.

The medicine was altered in the succeeding week to Sahacharabaladi kwatha,[11] Sinduvarerandam,[12] Kaisoraguggulu[13] and Brihat vaiswanara choorna,[14] as an effort of alleviating Vatha. There was slight improvement in the altered perception of sensation.

Then the patient was prepared for the Sodhana therapy. Rookshana was done with takrapana internally and also with performing dhanyamladhara externally, for 3 days. Snehapana was performed with Sahacharadi taila[15] till samyak lakshana, ooshmasweda was performed for 3 days after application of Dhanwantara taila.[16]

Virechana was performed with 40 ml of Sinduvareranda at 8AM, on the next day. Three days rest was given and the patient was maintained on strict diet of rice gruel, green gram soup, cooked vegetables, especially fibre rich ones, with minimal oil, spice and salt.

As the patient complained of abdominal distension, diffuse pain and heaviness of the thighs, Vasthi was planned with the thinking of Vathakopa, localised in the pakwasaya. Selected vasthis are having their own proven efficacy in such situations.[17] Here yogavasthi, a combination of 3 nirooha and 5 anuvasana, were planned. Anuvasana was done with Pippalyadi taila[18] for 3 days followed by Erandamooladi nirooha[19] on 3 alternate days by using Sahacharadi taila in the combination. The patient started walking without support, by the end of yogavasthi, as a part of his improvement.

As the patient was not satisfied with his sleep quality and so as to combat the observed episodes of anxiety, marsa nasya was done with Ksheerabala tailam[20] upto 5 days, with a dose of 1ml to 3 ml, along with simple counselling on the same days. The episodes of anxiety also reduced along with satisfactory sleep, after the procedure.

Table 1: Adopted procedures with medicines used.

Procedure	Medicine	Duration(days)	Rationale
Dhanyamladhara	Dhanyamla	3	Rookshana
Snehapana	Sahacharadi taila	7	Vathahara
Ooshmasweda	Dhanwantara taila	3	Swedana
Virechana	Sinduvareranda 40ml	1	Sodhana
Kayasekam	Sahacharadi taila + Dhanwantaram taila	7	Vatha vyadhi chikitsa
Yogavasthi – nirooha	Erandamooladi nirooha Sahacharadi taila	3	,,
Snehavasthi	Sahacharadi taila	3	,,
Nasya	Ksheerabala taila	5	Indriya prasadana

This was followed by the administration of lasuna rasayana[21] for 21 days. We started with 15ml lasuna swarasa added with 5 ml of Dhanwantara taila. This was increased by 5ml daily with 1/3rd of the taila, till the amount of lasuna swarasa reached 60 ml, on the 10th day. The same dose was maintained upto 21 days. Diet was restricted with fewer intakes of amla, lavana, katu, snigdha and seetha substances in the diet schedule, during the entire course. On the 22nd day Virechana[22] was performed with Avipathy choorna at a dose of 30 gm at 7 AM. The advice on discharge was Dhanwantaram taila 25 ml at morning and Aswagandhadi lehya[23] 25 gm at bedtime internally and Dhanwantaram and Sahacharadi taila for external application.

RESULT

After 3 months of treatment, there was relief from the major symptoms like parasthesia, difficulty in walking and the sensory and motor attributes of both the lower limb improved. He had improvement in the overall muscle strength and was able to walk and also climb stairs without support. The foot drop also improved and can walk with holding the slippers. There was no considerable improvement in overflow incontinence of urine, but was able to hold it better. The psychological issues were solved and there was sufficient sleep and also the confidence boosted after the therapy. The treatment protocol has to be repeated, based on the assessment of attained improvement after 6 months, on a conditional basis.

DISCUSSION

A condition like TM is affecting the nervous system and on assessing the dosha, Vatha is the main culprit in the pathology. In many cases, either Pitta or Kapha is causing obstruction to the function of Vatha due to the avarana. Here the initial management must be for Pitta or Kapha, to relieve the obstruction and hence normalise Vatha.[24]

Affections of the Kukundara marma[25] is also to be considered here, the insult of which leads to sensory and motor alterations of the lower limbs, as per Vaghbata. Similar symptoms are also a feature of disturbed Vatha in the Pakwasaya. The treatment was planned as mentioned above considering all these pathologies in mind. Drugs are to be selected considering the involvement of aama and also assessing the status of agni of the individual.

If the condition fits to the criteria of Vatha disorder, the line to be adopted is snehana, sweda, sodhana, vasthi followed by appropriate administration of selected rasayana. This was the thinking behind such a protocol. Nasya was performed to overcome the episodes of anxiety regarding the outcome in the individual.

CONCLUSION

TM is not mentioned as such in the Ayurvedic parlance. But considering the symptoms and the cause, any disease can be approached with the Ayurvedic concepts of pathophysiology and management, with special reference to the residual neurologic paralysis. After assessing the associative doshas and also assessing the involvement of aama or avarana, the protocol is to be formulated. This has to be followed by continuous administration of internal medicines. The unexplored treasure of Ayurveda in the area of complicated diseases like TM has to be brought to light and the possibilities of the Ayurvedic treatment modalities in similar cases has to be studied and reported for the benefit of the society, so as to improve the quality of life of the affected.

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