



ORIGINAL RESEARCH PAPER

Ayurveda

MANAGEMENT OF GUILLAIN BARRE SYNDROME THROUGH AYURVEDA – A CASE STUDY

KEY WORDS: GBS, Vatvyadhi, Ayurveda, Jwara, Ama

Dr. Krishna Namdeo Kadam

Assistant Professor, Dept. of Rog Nidan; Government Ayurved College, Nanded;

Dr. Viraj Vilas Jadhav*

Professor, SAM College of Ayurvedic Sciences and Hospital *Corresponding Author

ABSTRACT

Guillain Barre Syndrome is an acute frequently severe and fulminant poly radiculopathy i.e. autoimmune in nature. GBS now recognized as commonest cause of acute post infectious flaccid paralysis worldwide. It occurs year around at a rate of between 1 and 4 cases per 1,00,000 annually. Age is an important factor determining outcome and prognosis. Direct correlation of GBS with Ayurvedic terminology is difficult. The presentation and dosha dushya samurchana is considered first and then one should proceed with treatment. Here a case 58 year old male patient presented with chief complains having weakness in both hands and legs, tingling numbness in whole body and difficulty in walking since from 10 to 12 days. He was provisionally diagnosed as a case of acute inflammatory demyelinating polyneuropathy (AIDP) of GBS. As per Ayurvedic classics, the condition I have taken as Sarvangagata Vata (vata affecting the whole body) which precedes Jwara. Hence line of treatment, I have adopted was Jwarachikitsa and Vatavyadhi chikitsa, which included Amapachana as well Brihanachikitsa along with Shamanoushadhi. The outcome was very remarkable in the form of improvement in the muscle power from zero to five and very interestingly, patient is able to walk on his own.

INTRODUCTION

Guillain Barre Syndrome (GBS)⁷ is a rare disorder in which your body's immune (protective) system attacks your nerves. Weakness and tingling in your extremities are usually its first symptoms. These sensations can spread quickly. Eventually your whole body may be paralysed. On the other hand there is rapid onset of muscle weakness due to the damage to the peripheral nervous system.

GBS⁷ is defined as a poly – neuropathy. In this, the body's immune system mistakenly attacks the peripheral nerves. When this happens, the insulation around the nerves is destroyed. Sometimes it is triggered by an infection. The exact cause of GBS is unknown. It is often preceded by an infection such as respiratory infection or stomach flu. It is an autoimmune disease in which the body's defensive mechanism becomes offensive and attacks your nerves. It presents with weakness and tingling sensation in extremities. As per Ayurveda, this condition is correlated with Sarvangagata vatavyadhi – associated with deprived growth of body tissue. Vata disorder which is that is preceded by Jwara. Myelin sheath is a fatty in nature which is surrounded around the nerve cells that forms insulating layer which is necessary for proper functioning of nervous system. It is destroyed in case of GBS. It is compared to Medogata vata i.e. vitiation of vata. This destroys the myelin (fat) and affects the signal transmission. It may cause weakness of muscles and leads to GBS. It can be considered as Mamsagatavata. Hence, the choice of treatment is Santarpana-brihanachikitsa that is nourishing the body. It includes Pizhichil pouring of oil in a specific and parallel manner on both limbs and whole of body. Abhyanga and pana of Gandharvahastadi erandaitala and shastikasali pindasweda as an external nourishing therapy. Shirodhara that is pouring oil over forehead which contains a mixture of Tilaitala and Brahmi taila. Medicine used as for internal administration are the mixture of Bruhatvatachinamani rasa, Guduchisatwa¹, Sutshekhara rasa, Rajat bhasama. Nasya that is administration of taila (Anutaila) in both nostrils.

CASE REPORT

A 58 year old male patient OPD no. 472/25/1/2019, presented with weakness in all four limbs. He got difficulty to walk and sit and stand of his own and requires support for that. He was suffering from difficulty in deglutination and dysarthria since 15 days. He has had undergone the primary treatment for

these complaints in private clinics. But was not got satisfactory symptomatic relief, rather he experienced progress and increase in symptoms.

Hence for further treatment he was brought by his relatives to Government Ayurved College, Nanded. Patient was admitted in Indoor Patient Department IPD no.8872/25/1/2019. He did not have any history of Diabetes, Hypertension, Tuberculosis, Asthma or any major surgical procedures. He had history of tobacco chewing from last 12 years and an occasional history of consumption of alcohol. No history of specific medication or drug abuse was found.

HISTORY OF CHIEF COMPLAINS

Patient was healthy a month before presentation but had fever for which he had taken medications from private clinic and even then the fever did not subside. He developed gradual weakness in both lower limbs with ascending progression to upper limb. For these complaints he again took treatment from another private practitioner. Even so, he did not get relief and was brought to Government Ayurved College, Nanded.

He was investigated by private clinician, Electromyogram and Nerve conduction velocity (EMG NCV) and other investigations were done and diagnosed with GBS.

General examination of the patient:

Pulse - 98/min- regular and Vatapradhana pitta, Blood pressure 110/80 mm Hg. Tongue- slightly coated, frequency of passing urine found to be normal, in bowel habit- patient was passing hard stool with a history of chronic constipation.

Systemic examination:

In the systemic examination, findings of respiratory and cardiovascular system were within the normal limits. Abdomen was mildly distended, non-tender, and bowel sounds were present. Patient was conscious and well oriented and pupillary reaction to light was normal.

Vikrut Strotas Pariksha (examination):

- There was diffuse weakness of all four extremities
- Muscle tone was decreased
- Vibratory sensation was diminished in the distal lower extremities.
- Muscle stretch reflexes were diminished

Annavaastrotodushiti⁸-

Udaradhmana(Abdominal distention), Sama jivha(coated tongue)

Mamsavaastrotodushiti⁸-

Ubhayahastapadadourbalya (weakness over all four limbs)

Majjavahaastrotodushiti⁸-

Sakaṣṭāgilana (dysphagia),sakaṣṭāshabdoccharaṇa (dysarthriya), Chakramanakashta(difficulty in walking), Sarvangachimchimayana

Purishavaastrotodushiti⁸-

Malavrodha(constipation,hard stool)

Deep Tendon Reflexes (DTR)-

Bicep-Tricep-Supinator: Knee- Ankle- were diminished; Babinski sign- negative

Muscle power grade-

right upper limb-0/4, lower limb-0/3; left upper limb-0/3,lower limb-0/3

Investigations:

Routine studies of blood and urine were within normal limits¹⁰. CT-Scan of brain was normal.

Diagnostic criteria:

Based on the clinical presentation of features and on the basis of EMG -NCV report which was done already, directed the diagnosis towards GBS, which shows acute demyelinating sensory, motor polyneuropathy involving both upper and lower limbs.

Ayurvedic treatment

- Gandharvahastadi erandataila-** 15 ml once a day with luke warm water was given daily in apankal for a duration of 8 days.
- Pizhichil-** A type of KeraliyanPanchkarma, in which a gentle synchronized massage was carried out under a constant flow of warm oil. The oil used for this patient was a mixture of Balataila(Sidacordifolia)^{1,4} and Ashwagandha(Withaniasomniferae) taila. It was applied for duration of 15 days.
- Shashtikashali pindasweda-** Balamula¹ (root of Sidacordifolia), Ashwagandha¹(Withaniasomnifera) chur a and Shatavari (Asparagus racemosus) was processed with 500 ml of kshira (milk) wherein milk was boiled to reduce the quantity to half of Shaṣṭīkashali (processed ṣhaṣṭīka rice) was cooked very soft and made like paste with above filtrate of kṣhira. This paste was applied with gentle circular movements for 20 min in anulomagati. It was done for 15 days.
- Shirodhara-** was done using the mixture of Tilataila (sesame oil) and Brahmi(Bacopa moneri) Taila (lukewarm) for a period of 15-20 min for 15 days.
- The mixture of **compound drug** was prepared using B hatvatachitamanikalpa20gm, GuduchiSatwa⁶ (Tinosporacordifolia) 1gm, Rajatabhasma⁶ 1gm and Sutshekhar rasa⁶ (250 mg each) 20 tablets. These all drugs mixed and powdered together and divided into 60 divided doses. These were administered BD with ghrita as an internal medicine.
- Panchtika Kshira Basti** along with Panchtiktaghrita-Basti was prepared with kshira processed with Panchtiktaghrita 60ml along with Panchtiktaghrita 20ml was administered for 16 days.

RESULT

The Ayurvedic treatment applied over the patient, showed the tremendous beneficial effects. When the patient was admitted in IPD, he was unable and got much difficulties in walking, sitting without support. He was found difficulty in speaking and agglutination. After completion of the course of

medicine, patient got nearby complete remission from all of the symptoms and was able to walk by himself without support.

Table 1: Muscle Power Grade (MPG)

| MPG | BT | AT |
|------------------|-----|-----|
| Right Upper Limb | 4/5 | 5/5 |
| Left Lower Limb | 3/5 | 5/5 |
| Right Upper Limb | 3/5 | 5/5 |
| Left Lower Limb | 3/5 | 5/5 |

Table 2: Deep Tendon Reflex (DTR)

| DTR | BT | AT |
|----------------------------|------------|----|
| Bicep reflex Rt. And Lt. | diminished | ++ |
| Tricep reflex Rt. And Lt. | diminished | ++ |
| Supinator jerk Rt. And Lt. | diminished | ++ |
| Knee reflex Rt. And Lt. | diminished | ++ |
| Ankle reflex Rt. And Lt. | diminished | ++ |

DISCUSSION

Exact correlation of any condition explained in Ayurveda can not made precisely with Guillain Barre Syndrome. Below mentioned pathology of some diseases which I had correlated and for braking these pathogeneses I have planned above treatment for GBS. And surprisingly got success in this patient.

1. MamsagataVata / MedogataVata^{8,9}-

When the morbid Vata afflicts Mamsa (muscles/ flesh) and or Meda (fat tissue), then the management of appeared symptoms like heaviness, pricking in the body, pain and weakness, can treat GBS.

2. KaphavrittaVyana^{8,9}-

When the functioning of VyanaVata is blocked or enveloped by morbid kapha, the person suffers from tightness, heaviness, stiffness in all over body, pain swelling and severe restrictions in movement of joints.

3. SarvangaVata^{8,9}-

Sarvanga kupite vate gatra sphuran bhanjane | Vedanabhiparitacha sphutanti vasya Sandhayaha || Ch.Chi.

Majority of the symptoms mentioned above, mimic the symptoms of GBS. Hence GBS should be treated with the lines of treatment of Vatvyadhi.

Control of Vata is the key principle in the treatment of GBS.

Vata shaman (pacifying the vata) and Vatanulomana (propelling the morbid dosha in downward direction) by the administration of effective medicine and treatment will lead to effective cure of GBS.

Considering these facts, the treatment administered to the present case was worked on above principles to break the pathogenesis of GBS-

1. Gandharvahastadi ErandaTaila²-

Is the Taila yoga⁶ containing Chirbilva⁴, Chitraka⁴, Shunthi^{4,5}, Haritaki^{4,5}, Punarnava⁴, Yavakshara, Musali. The guna karma of these drugs have Uasnvirya, they showed their Dipana(appetizer), Pachana (Digestant), anti-inflammatory, purgative, malashodhaka, analgesic-vedanasthapana, vatakaphahara properties on this patient. Shunthi stimulates nerves and improves impulse transmission. Haritaki acts as anulomaka and gives strength to ThusErandataila showed its best act as Vatashaman, anulomaka. Its processing with Gandharvahastadi kashaya gave stimulation and strength to nerves.

2. Pizhichil-

In Pizhichil, used mixture of Balataila(Sida cordifolia) and Ashwagandha(Withania somniferae) taila increased the blood circulation, also helped in nourishing the muscles

and nerves tissues .

3. Shastikashalipindasweda^{2,3}-

Massage with Ashwagandha, Bala, Shatavaripiṇḍasveda (rice processed with milk and withania somnifera asparagus racemosus, sida cordifolia) was performed. All ingredients of the Piṇḍasweda, kṣhira (milk), ṣhaṣṭikahali and balamula possess santarpana qualities (Antioxidant nourishing) with prithvi and ap-mahabhutas (subtle elements of earth and water, which are nourishing in nature) and is indicated for balya, brimhana (nourishing), strengthening dhatus (building blocks) and vata pacification. Abhyanga, mitigates vatadoṣha, it promotes strength. Considering the doṣha and dhatu involvement vataniyantraṇa and balya treatments were selected and movements were performed in anulomagati. Shaṣṭikshalik sweda facilitates opening up of blocks in nerve conduction and facilitates remyelination of nerves; thereby helps transmit nerve impulses with minimum amount of stimulus for muscular contractions.

4. Shirodhara³-

It has the ability to win over day today stress. It provides never been so healthy feel. Thus it regularizes metabolism, controls and balance doshas. It integrates body mind co-ordination.

5. GBS is an auto immune disorder. Vatapittagnachikitsa is important in treatment of autoimmune disorders. Various vata-pittagna dravyas including Sutashekhara rasa and Guḍuchi and raupyabhasma acting on majjadhara kala were used, since Ayurvedic concept of pittadhara kala - majjadhara kala sahadhara kala. Considering all this Sutashekhara rasa was given along with Guḍuchi and Raupyabhasma and Brihatvatcintamani.

6. Panchatiktakshira Basti (medicated enema) is an effective treatment for vata. It also brings about anulomana of vata. When we use this route of administration we can facilitate rapid absorption action of medicated oils and decoctions for vata disorders.

CONCLUSION

The present case study proves that Ayurvedic kriya and Ayurvedic diagnosis is very important in terms of doṣha, sthana and udgama. Pittadharakala-majjadharakala relation and clinical understanding of basic concepts of guḍa in treatment of anuktavyadhi form the important bridge between modern diagnostic methods and Ayurvedic treatment of GBS.

This case study not only gives us confidence and better understanding for treating such cases in Ayurvedic hospital but also leads in the direction of further clinical trials to establish cost effective Ayurvedic therapy.

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