



ISSN 2456-3110

Vol 4 • Issue 2

Mar-Apr 2019

Journal of
**Ayurveda and Integrated
Medical Sciences**

www.jaims.in

JAIMS



Charaka
Publications

Indexed

Role of *Panchkarma* in the management of Guillain Barre Syndrome

Dr. Sharma Lalita,¹ Dr. Srivastava Alok,² Dr. Singh Anupama,³ Dr. Upreti Diksha,⁴ Dr. Poonam⁵

¹Post Graduate Scholar, ²Professor, Dept. of Panchakarma, ³Post Graduate Scholar, Dept. of Shalaky Tantra, ⁴Post Graduate Scholar, Dept. of Kaumarbhritya, ⁵Post Graduate Scholar, Dept. of Panchakarma, Uttarakhand Ayurved University, Rishikul Campus, Haridwar, Uttarakhand, INDIA.

ABSTRACT

Guillain-Barre Syndrome is a rare disorder in which your body's immune system attacks your nerves. The syndrome afflicts about one person in 100,000. Either gender can be affected in any age group especially between ages 30 and 50, however risk increases with age. The exact cause of GBS is unknown. It is often preceded by an infection such as respiratory infection or stomach flu. Most of the time, signs of the original infection have disappeared before the symptoms of Guillain-Barre begin. Guillain-Barre syndrome damages parts of nerves. This nerve damage causes tingling, muscle weakness and paralysis. Guillain-Barre syndrome most often affects the nerve's covering (myelin sheath). Such damage is called demyelination and it causes nerve signals to move more slowly. Damage to other parts of the nerve can cause the nerve to stop working altogether. It is a paralyzing syndrome which can have dire consequences if not managed by an informed medical team. As per as Ayurvedic concept, based on various clinical presentations of G.B. Syndrome, it can be correlated with *Kaphavrut Vata*, *Medavruta Vata*, *Sarvang Vata*, too. Thus based on involvement of *Dosha*, *Dhatu*, *Mala* and patient condition one should plan the different Ayurvedic line of treatment. This article will explain how this disorder begins, how it is managed in Ayurveda by taking help of the *Panchkarma* procedures such as *Basti*, *Abhayanga* etc.

Key words: Guillain Barre syndrome, Panchkarma, Basti, Shodhana procedure.

INTRODUCTION

Guillain-Barre syndrome is an acute, frequently severe and fulminant polyradiculopathy that is autoimmune in nature. Guillain Barre syndrome is a rare disorder that causes the immune system to attack the Peripheral nervous system (PNS).^[1] The most common typical symptom is ascending paralysis i.e. weakness

Address for correspondence:

Dr. Sharma Lalita

Post Graduate Scholar, Department of Panchakarma, Uttarakhand Ayurved University, Rishikul Campus, Haridwar, Uttarakhand, INDIA.

E-mail: lalitasharma1089@gmail.com

Submission Date: 25/02/2019

Accepted Date: 25/04/2019

Access this article online

Quick Response Code



Website: www.jaims.in

DOI: 10.21760/jaims.4.2.17

begins in the feet and hands and then progresses towards the trunk. Depending upon severity of the Gullain - Barre syndrome or its different phases it can be correlated with *Kaphavrut Vaata / Medavurut Vaata / Sarvāṅgagatavāṭavyādhī* (~*Vāta* disorder affecting all parts of the body).^[2] It has been clinically observed that Ayurveda helps in case of GB Syndrome. It seems to help by correcting the altered immune system. The medicines are very effective in treating the symptoms like loss of movement in all the extremities and power in the limbs can be corrected. In Ayurveda the therapies like, *Sarvanga Abhayanga*, *Rajayapana Basti* etc. can be administered.^[3] As per Ayurvedic classics, this condition is correlated with *sarvāṅgagatavāṭavyādhī* (~*vāta* affecting all parts of the body),^[4] which is *Apatarpaṇa* in nature (~diseases which are associated with deprived growth of body tissue). Hence, the choice of treatment is *santarpaṇacikitsā* (nourishing treatment).^[5] *Santarpanabahyopakramas* (~nourishing external treatment modalities) such as

Candanabalalākṣāditailam Abhyaṅga (~oleation therapy)^[6] and *Saṣṭikaśāli Piṅḍa Sveda* (~application of processed rice)^[7] can be administered along with *Karma Basti* (~pittaghna drugs processed in *Kṣīra*),^[8] *Śirodhārā* (gentle pouring of medicated liquid over forehead).^[9]

Disease Background

Guillain-Barre syndrome is an acute, frequently severe and fulminant polyradiculopathy that is autoimmune in nature. Guillain-Barre syndrome is a rare disorder that causes the immune system to attack the peripheral nervous system.^[10] As per Ayurvedic classics, this condition can be correlated with *Sarvāṅgagatavātavyādhi* (~*Vāta* disorder affecting all parts of the body).^[11]

1. The cause of this condition is unknown, Usually Guillain-Barré occurs a few days or weeks after the patient had symptoms of a respiratory or gastro-intestinal viral infection.^[12]
2. The syndrome may occur at any age, but is most common in people of both sexes between age 30 and 50.^[13]
3. The syndrome is rare, however, afflicting only about one person in 1,00,000.^[14]
4. But is the most common cause of acute non-trauma-related paralysis. It is a rapidly evolving Areflexic motor paralysis with or without sensory disturbances. The usual pattern is an ascending paralysis that may be first noticed as rubbery legs. Weakness typically evolves over hours to a few days and is frequently accompanied by tingling dysesthesias in the extremities. The legs are usually more affected than the arms and facial diparesis is present in 50% of affected individuals.^[15]
5. In the demyelinating forms of GBS, the basis for flaccid paralysis and sensory disturbance is conduction block. This finding, demonstrable electrophysiologically, implies that the axonal connections remain intact. Hence, recovery can take place rapidly as remyelination occurs.

6. In severe cases of demyelinating GBS, secondary axonal degeneration usually occurs; its extent can also be estimated electrophysiologically. More secondary axonal degeneration correlates with a slower rate of recovery and a greater degree of residual disability.
7. When a severe primary axonal pattern is encountered electrophysiologically, the implication is that axons have degenerated and become disconnected from their targets, specifically the neuromuscular junctions.^[16]
8. In many instances the symmetrical weakness and abnormal sensations spread to the arms and upper body. These symptoms can increase in intensity until certain muscles cannot be used at all and, when severe, the person is almost totally paralyzed. Guillain-Barre syndrome most often affects the nerve's covering (myelin sheath). Such damage is called demyelination.^[17]
9. It causes nerve signals to move more slowly. Damage to other parts of the nerve can cause the nerve to stop working altogether.^[18]
10. Intubation, plasmapheresis, intravenous immunoglobulin and glucocorticoids are lines of treatment.^[19]
11. In GBS there is ascending paralysis, weakness beginning in the feet and hand and migrating towards the trunk, this was considered as *Māṃsa, Rakta* and *Majjādhātu Duṣṭi* along with *Vāta, Majjādharakāla* and *Pittadharakāla* involvement.^[20]

DISCUSSION

Guillain Barre Syndrome an autoimmune disorder presenting with rubbery ascending weakness. The disease has acute onset sometimes ascends to respiratory muscles and leading to collapse if no intensive care taken properly. The treatment principle is infusion of immunoglobulin and plasmapheresis which is effective transiently and costly may not be affordable by person of low socioeconomic status.^[21] As Ayurveda evidence based and Panchkarma treatment if advocated by wise physician give the

better results and cost effective and can be made available at remote place of country like India where the intensive care and emergency treatments are not widely available. In GBS there is ascending paralysis, weakness, beginning in the feet, hand and migrating towards the trunk this was considered as *Mamsa*, *Rakta* and *Majjadhatudushti* along with *Vata*, *Majjadhakala* and *Pittadhakala*. Massage with *Ashvagandha*, *Bala*, *Shatavari*, *Pindsweda* (rice processed with milk and *withania somnifera*, *Asparagus racemosus*, *Sida cordifolia*) was performed. All ingredients of the *Pindsweda*, *Ksira* (milk), *Shashtik Shali* 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 *Vāta* pacification. *Abhyaṅga* mitigates *Vātadoṣa*, it is *Puṣṭikara* (promotes strength) and it is *Jaraha* (prevents aging). *Abhyaṅga* using *Candanbalalākṣādi Tailam* and *Saṣṭhikaśālipiṅḍasveda* should performed in *Anulomagati* because the *Doṣa* involved is *Vāta* and the disease is caused due to the reduction in its *Calaguṇa* causing inability to transmit nerve impulses. Considering the *Doṣa* and *Dhātu* involvement *Vātaniyantraṇa* and *Balya* treatments were selected and movements were performed in *Anulomagati*. *Saṣṭhiśāli* facilitates opening up of blocks in nerve conduction and facilitates remyelination of nerves; there by helps transmit nerve impulses with minimum amount of stimulus for muscular contractions. *Basti* (~medicated enema) is an effective treatment for *Vāta*. It also brings about *Anulomana* of *Vāta*. When we use this route of administration we can facilitate rapid absorption action of medicated oils and decoctions for *Vāta* disorders. If in the patient history of *Jvara* then administered *Pittagnagaṇasiddhakṣīrabasti*. We were expecting action of drugs on *Majjādhakāla* through *Pittadhakāla*. We know that GBS is autoimmune in nature which means that there is hypersensitivity of immune system. There are two major phenomenon in the pathogenesis of Auto-immune disorders.

- Mistaken judgement about body tissue
- Attack of immune system on the body tissues to destroy them.^[22]

Mistaken judgement about body tissue occurs by the virtue of *Sīghraguṇa*. While explaining *Vātaprakṛti*, Charaka states that by virtue of this *Sīghraguṇa* we can found *Alpasmṛti* (~lesser remembrance) and *Sīghragrāhitā* (~Early identification) in persons. *Alpasmṛti* when occurs at the level of WBC their recognition of body tissues is disturbed. Hence treatment which reduces this *Sīghraguṇavāta* is also very important while treating autoimmune disorders.^[23] Attack of immune system while describing *Pitta Prakṛti Lakṣaṇa*, Charaka has mentioned that *Tikṣṇaguṇa* of *Pitta* is responsible for *Tikṣṇāgni* and *Tikṣṇaparākrama* (~Increased appetite and increased tendency to fight). When we correlate this effect of *Tikṣṇaguṇa* with respect to immune system, increase in *Tikṣṇaguṇa* causes destruction of external pathogen. *Tikṣṇaguṇa* of *Pitta* along with *Sīghraguṇa* of *Vāta* at immune system level bring about misjudgement and hypersensitivity and causes destruction of the body tissue and we can postulate that this is how autoimmune disorders occur. Hence consideration of *Tikṣṇaguṇa* of *Pitta* and its treatment is very important while treating various autoimmune disorders. Charaka has also stated importance of *Kṣīra* in the treatment of *Vatpittajajvara*. Hence *Pittagnadravya Siddha Kṣīra Basti* is used. Treatment of *Vāta* can be used while treating various auto immune disorders. In short, *Vātapittagnacikitsā* is important in treatment of autoimmune disorders. Various *Vāta-pittagnadravyas* can be used according to *Sāmatā* or *Nirāmatā* in the treatment of autoimmune disorders. Considering all this *Pittagnagaṇasiddhakṣīra* (Milk processed with herbs of *Pittagnagaṇa*) was used for *Basti*.^[24] *Sūtaśekhara Rasa* is a drug which classically acts on *Pitta* while *Guḍūci* and *Raupya Bhasma* acts on *Majjādhakāla*. Ayurvedic concept of *Pittadhakāla*, *Majjādhakāla Sāhacarya* also shows resemblance with molecular mimicry theory for C. Jejuni and nerve involvement in GBS pathology.^[25]

CONCLUSION

This 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. As immunoglobulin treatment is a costly alternative, cost effectiveness of the Ayurvedic treatment seems promising. It also confirms that Ayurvedic *Kriyā* and Ayurvedic diagnosis is very important in terms of *Doṣa*, *Sthāna* (~status) and *Udgama* (~etiology). *Pittadharakāla-Majjādharakāla* relation and clinical understanding of basic concepts of *Guṇa* in treatment of *Anuktavyādhi* form the important bridge between modern diagnostic methods and Ayurvedic treatment of GBS.

REFERENCES

1. Longo DL, Fauci AS, Kasper DL, Jameson JL, Hauser SL, Loscalzo J. Vol. 2. New York, NY: McGraw Hill; 2010. Harrison's Principle of Internal Medicine; p.3473.
2. Mahadevan L, Srividya S, Jeyalakshmi B. Dr. L. Mahadevan's Guide to Ayurvedic Clinical Practise Neurology. Vol. 2. Kanyakumari, Tamil Nadu, India: Sarada Mahadevalyer Ayurvedic Educational and Charitable Trust Derisanamscope; 2011. p.300-1.
3. Longo DL, Fauci AS, Kasper DL, Jameson JL, Hauser SL, Loscalzo J. Harrison's Principle of Internal Medicine. Vol. 2. New York, NY: Mc Graw Hill; 2010. p.3473.
4. Tripathi R. Charak Samhita of Charaka, Chikitsasthan, Vatvyadhi Chikitsa. Varanasi: Chaukhamba Sanskrit Series; 2009. p.691.
5. Tripathi R. Charak Samhita of Charaka, Chikitsasthan, Vatvyadhi Chikitsa. Varanasi: Chaukhamba Sanskrit Series; 2009. p.701.
6. Mishra SN. Bhaishajya Ratnavali of Govindadas Sen, Jwaraadhikar. Varanasi: Chaukhamba Sanskrit Series; 2007. p.218.
7. Kasture HS. Aayurvediya Panchkarmavidnyan of Haridas S Kasture, Sweda Vidhaniya. 7th ed. Nagpur: Baidyanath Aayurved Bhavan Publication; p.168.
8. Tripathi R. Charak Samhita of Charaka, Siddhisthan Bastisidhi. Varanasi: Chaukhamba Sanskrit Series; 2009. p.966.
9. Mishra SN. Bhaishajya Ratnavali of Govindadas Sen Vatvyadhirogaadhikar. Varanasi: Chaukhamba Sanskrit series; 2007. p.530.
10. Longo DL, Fauci AS, Kasper DL, Jameson JL, Hauser SL, Loscalzo J. Vol. 2. New York, NY: McGraw Hill; 2010. Harrison's Principle of Internal Medicine; p.3473.
11. Mahadevan L, Srividya S, Jeyalakshmi B. Dr. L. Mahadevan's Guide to Ayurvedic Clinical Practise Neurology. Vol. 2. Kanyakumari, Tamil Nadu, India: Sarada Mahadevalyer Ayurvedic Educational and Charitable Trust Derisanamscope; 2011. p.300-1.
12. Nicki R collodge, Brian R Walker, Stuart H Ralston, Disorders of peripheral nerves in Davidson's principles and practice of Medicine, 21st edition, illustrated by Robert Britton, 2010. Pg-1360, pp-1229.
13. Nicki R Collodge, Brian R Walker, Stuart H Ralston, Disorders of peripheral nerves in Davidson's principles and practice of Medicine, 21st edition, illustrated by Robert Britton, 2010, 1360, 1229.
14. http://www.ninds.nih.gov/disorders/gbs/detail_gbs.html
15. Longo DL, Fauci AS, Kasper DL, Jameson JL, Hauser SL, Loscalzo J. Harrison's Principle of Internal Medicine. Vol. 2. New York, NY: Mc Graw Hill; 2010. p.3473.
16. Longo DL, Fauci AS, Kasper DL, Jameson JL, Hauser SL, Loscalzo J. Entitled "GBS". Part Chapter 385. II. New York, NY: McGraw Hill; 2010. Harrison's Principle of Internal Medicine; p.3476.
17. Anthony S, Braunwald E, Kasper DL, Hauser SL, Longo DL, Jameson JL, et al., Guillain-Barré Syndrome and Other Immune-Mediated Neuropathies in Harrison's Principles of Internal Medicine 17th Ed. New York: McGraw Hill Publication, McGraw-Hill Medical; 2008. p.517.
18. Nicki R collodge, Brian R Walker, Stuart H Ralston, Disorders of peripheral nerves in Davidson's principles and practice of Medicine, 21st edition, illustrated by Robert Britton, 2010. 1360, 1229.
19. Longo DL, Fauci AS, Kasper DL, Jameson JL, Hauser SL, Loscalzo J. Harrison's Principle of Internal Medicine. Vol. 2. New York, NY: Mc Graw Hill; 2010. p.3473.
20. Shastri A. Chapter 4, Verse 16. Varanasi: Dalhan Commentary Chaukhamba Sanskrit Series; 2007. Sushruta Samhita of Sushruta SharirSthan, Garbhavyakaran; p.59.
21. Midhun Mohan et al., Int. J. Bioassays, 2015, 4 (03), 3770-3772
22. Harsh Mohan. Entitled Immunopathology Including Amyloidosis. Chapter 4. New Delhi: Jaypee Brothers, Medical Publishers; Pathology Quick Review; p.48.
23. Joshi YG. Charak Samhita of Charaka, Vimansthan Rogbhishakjitiyaviman. Chapter 8, Verse 97-98. Pune: Vaidya Mitra Publications; 2003. p.599.

24. Tripathi R. Charak Samhita of Charaka, Siddhisthan, Bastisidhi. Varanasi: Chaukhamba Sanskrit Series; 2009. p.966.
25. Longo DL, Fauci AS, Kasper DL, Jameson JL, Hauser SL, Loscalzo J. Entitled "GBS".Part 17, Chapter 385. II. New York, NY: McGraw Hill; Harrison's Principle of Internal Medicine; p.3477.

How to cite this article: Dr. Sharma Lalita, Dr. Srivastava Alok, Dr. Singh Anupama, Dr. Upreti Diksha, Dr. Poonam. Role of Panchkarma in the management of Guillain Barre Syndrome. J Ayurveda Integr Med Sci 2019;2:90-94.
<http://dx.doi.org/10.21760/jaims.4.2.17>

Source of Support: Nil, **Conflict of Interest:** None declared.
