



AYURVEDIC MANAGEMENT OF GUILLIAN-BARRE SYNDROME: A CASE REPORT

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ABSTRACT

Introduction: Guillain-Barré syndrome (GBS) is an acute immune-mediated demyelinating neuropathy with significant morbidity despite standard therapy. In Ayurveda, it can be correlated with Sarvangavata. This case report evaluates the effect of Ayurvedic management in GBS. **Methods:** A 45-year-old male with motor demyelinating GBS and a Guillain-Barré Disability Scale score of 3 was treated with Ayurvedic external therapies (Agnilepa, Abhyanga, Shashtikashali Pinda Sweda, and Basti) along with internal medications for 15 days. **Results:** Post-treatment, muscle power and bulk improved, and the disability score reduced from grade 3 to grade 1. The patient regained independent ambulation without support. **Discussion:** Ayurvedic interventions based on Vatashamana, Amapachana, and Brumhana principles may support neurological recovery and functional improvement in GBS.

KEYWORDS: Guillain-Barré syndrome, Sarvangavata, Ayurveda, Basti, Case report

INTRODUCTION

Guillain-Barre syndrome (GBS) is one of the most common severe acute paralytic neuropathy. Is a heterogeneous rapidly progressive disease. GBS has a monophasic disease course post infection and is usually non relapsing. Around 20 to 30% of patients may be associated with life threatening respiratory failures. Prevalence is 2.7 per 1,00,000 per year [1]. Prevalence is more in men than women and has seasonal fluctuations. GBS is usually preceded by an infection resulting in immune stimulation. This induces molecular mimicry between microbial and nerve antigens leading to an aberrant autoimmune response targeting peripheral nerves and their spinal roots [2]. One to two weeks post immune stimulation, clinical manifestation begins with a rapidly evolving areflexic motor paralysis with or without sensory disturbances. Typically weakness is ascending paralysis which evolves over hours to a few days. Affliction of lower limbs is more common than upper. Cranial nerves can be involved. Other manifestations include tingling dysesthesias, autonomic disturbance, and respiratory failure. Peak presentations are in a period of 2- 4 weeks [3]. Main phenotypes of GBS are acute inflammatory demyelinating polyneuropathy and acute motor axonal neuropathy based on pathology involved in myelin sheath or nerve axon respectively. Intravenous Immunoglobulins (IVIg) [4] and plasma exchange [5] have shown evidences in the management of GBS. In spite of these therapies patients develop severe weakness, incomplete recovery, pain, fatigue and a long disease course [1]. Other hindrance of these therapies specially in developing and under developed countries are the high cost involvement. Ayurveda mentions a clinical condition termed sarvangavata vyadhi [6], which symptomatologically relates to GBS. Sarvangavata presents itself with motor deficits, speech derangement, severe pricking and aching pains, may affect from single limb to whole body. Treatment of sarvangavata depends on pathological state of vatadosha. Vatadusti could be due to primary increase in Vata alone or due to other dosha and dhatus (body tissues). State of vata can be saama (gross metabolic disturbance) or niraama (without gross metabolic disturbance). Pathological staging could be due to gata or avarana. Considering these various factors management is planned either through santarpana or apatarpana principles.

CASE REPORT

A 45-year-old male with no known comorbidities such as hypertension or diabetes mellitus was apparently asymptomatic until approximately nine months prior to presentation, when he witnessed a traumatic event involving suicide by hanging, following which he developed persistent anxiety and sleep disturbances characterized by difficulty initiating and maintaining sleep and excessive worry, for which he received medical treatment without any history of psychiatric hospitalization. Around the same period, he developed a persistent cough attributed to dust allergy that resolved with avoidance measures and symptomatic treatment, and he also reported altered bowel habits with increased stool frequency of 3-4 times per day for approximately three months. Approximately 10 days prior to the onset of neurological symptoms, he experienced an episode of acute loose stools occurring 3-4 (up to 4-5) times per day for a few days, which resolved spontaneously. About one month prior to admission, the patient developed sudden-onset, symmetrical, and progressive weakness involving both upper and lower limbs; on the day of onset, he fell while attempting to get out of bed and was unable to stand without assistance, with gradual worsening leading to difficulty in walking and holding objects. He also reported tingling sensations and a sense of heaviness in both upper and lower limbs for approximately 36 days and pain in both lower limbs for the past 15 days. There was no history of facial weakness, diplopia, dysphagia, dysarthria, bladder or bowel incontinence, respiratory distress, or cranial nerve involvement. The patient was initially evaluated at Suyog Hospital, where relevant investigations were performed and a diagnosis of Guillain-Barré syndrome was made; he was admitted for



six days and received treatment without significant clinical improvement, following which he was admitted to Hitech Panchakarma Hospital, Mysuru, where he first presented on 23 October 2025 for further evaluation and management.

CLINICAL FINDINGS

GENERAL EXAMINATION

Consciousness: Alert
 Built: Hyposthenic
 Pallor: Absent
 Icterus: Absent
 Cynosis: Absent
 Clubbing: Absent
 Lymphadenopathy: No palpable lymph nodes
 Odema: Absent

Height – 168 cm
 Weight- 49 Kg
 BMI- 17.36 kg/m² (Underweight)
 B.P: 130/90 mmhg
 Heart rate 84 beats/min, Pulse rate: 84/min
 Respiratory rate: 20 cycles/min

CENTRAL NERVOUS SYSTEM EXAMINATION

HIGHER MENTAL FUNCTIONS

- Conscious and co-operative
- Oriented to time, place and person.
- Memory – recent memory-intact
- Remote memory- intact
- Intelligence – intact
- No evidence of illusion, delusion or hallucination.

CRANIAL NERVES EXAMINATION : INTACT

SENSORY SYSTEM EXAMINATION

Superficial: Crude touch-intact, Temperature sensation- intact, Pain sensation- intact **Deep :** Vibration sense-intact, Joint sense-Intact, Position sense-Intact, Pressure sense-Intact.

Cortical: Tactile localization-intact, Tactile discrimination-intact, 2 Point Discrimination - decreased sensation, Stereognosis-Present, Graphesthesia- Present

MOTOR SYSTEM EXAMINATION:

Table no.1 : Measurement of Muscle Bulk

MUSCLE BULK (in cms)		
UPPER LIMB		
Mid arm	22	21
Mid forearm	19	19
LOWER LIMB		
Mid-thigh	34.5	33.5
Mid- calf	25	25

Table no.2 : Description of Muscle Bulk

MUSCLE TONE		
	RIGHT	LEFT
UPPER LIMB	HYPOTONIC	HYPOTONIC
LOWER LIMB	HYPOTONIC	HYPOTONIC

Table no.3 : Description of muscle power

MUSCLE POWER UPPER LIMB			
		RIGHT	LEFT
SHOULDER	Adduction	4/5	4/5
	Abduction	4/5	4/5
ELBOW	Flexion	4/5	4/5
	Extension	4/5	4/5
WRIST	Flexion	3/5	3/5
	Extension	3/5	3/5
FINGER ABDUCTION		3/5	3/5
OPPOSITION OF THUMB		3/5	3/5
TEST OF GRIP	Palmar grip	Weak	Weak



	Palmar grip	Weak	Weak
MUSCLE POWER LOWER LIMB			
		RIGHT	LEFT
HIP	Flexion	4/5	4/5
	Extension	4/5	4/5
KNEE	Flexion	4/5	4/5
	Extension	4/5	4/5
ANKLE	Flexion	4/5	4/5
	Extension	4/5	4/5

Table no.5 : Description of Tendon Reflex

DEEP TENDON REFLEXES		
	RIGHT	LEFT
BICEPS JERK	Absent	Absent
TRICEPS JERK	Absent	Absent
SUPINATOR JERK	Absent	Absent
KNEE JERK	Diminished	Diminished
ANKLE JERK	Diminished	Diminished

INVESTIGATION

Nerve conduction study: Abnormal suggestive of motor demyelinating polyradiculoneuropathy (17/10/2025)

CREATINE KINASE, SERUM -948 U/L (17/10/2025)

MRI BRAIN : No abnormality detected.

ASSESSMENT CRITERIA : Guillian Barre syndrome disability scale

SCORE	
0	A healthy state
1	Minor symptoms and capable of running
2	Able to walk 10m or more without assistance but unable to run
3	Able to walk 10m across an open space with help
4	Bedridden or chair bound
5	Requiring assisted ventilation for at least part of the day
6	Dead

Before treatment: Grade 3

MATERIALS AND METHODS

THERAPEUTIC INTERVENTION

Treatment plan included internal medication and external procedures.

Table no.6 : EXTERNAL PROCEDURES

Sl.no	Treatment	Date	Duration
1.	Sarvanga Agnilepa Chikithsa	24/10/25 to 30/10/25	7 Days
2.	A) Sarvanga abhyanga with Balashwagandhalakshadi taila followed by Sashtika shali pinda sweda. B) Matrabasti with Dhanvantara taila	31/10/25 To 6/11/25	7 Days
3.	Koshtashodhana with Nimbamruta eranda taila 60ml	7/11/25	
4.	A) Sarvanga abhyanga with Balashwagandhalakshadi taila followed by Sashtika shali pinda sweda. B) Mustadi Yapanabasti Anuvasana with Ashwagandhaghrita Niruha with Mustadiyapana ksheerapaka with mamsarasa.	8/11/25 To 15/11/25	8 Days

**Table no.7: INTERNAL MEDICATIONS**

SL.NO	DRUG	DOSAGE	DURATION
1.	Neurocare Drops	10ml -0-10ml with milk before food	15 Days
2.	Cap. Palsineuron	1-0-1 after food	15 days
3.	Syrp Navashwagandha	2tsp-2tsp-2tsp after food	15 days
4.	Ajamamsarasayana	0-0-2 tsp after food	15 days
5.	Balashwagandhalakshadi taila	for external application	15 days

RESULTS

Follow-up and outcome observations were recorded during and after the treatment modalities. Before treatment, the score on the Guillain-Barré Syndrome Disability Scale was 3, which improved to 2 after treatment, along with an increase in muscle bulk and power. The patient was able to walk approximately 500 meters without support. After 15 days of treatment, the disability grade further improved to 1.

Table no.7: Changes in muscle power before and after treatment

		RIGHT		LEFT	
		BEFORE	AFTER	BEFORE	AFTER
SHOULDER	Adduction	4/5	5/5	4/5	5/5
	Abduction	4/5	5/5	4/5	5/5
ELBOW	Flexion	4/5	5/5	4/5	5/5
	Extension	4/5	5/5	4/5	5/5
WRIST	Flexion	3/5	4/5	3/5	4/5
	Extension	3/5	4/5	3/5	4/5
FINGER ABDUCTION		3/5	5/5	3/5	5/5
OPPOSITION OF THUMB		3/5	4/5	3/5	4/5
TEST OF GRIP	Palmar grip	Weak	Good	Weak	Good
	Pincer grip	Weak	Good	Weak	Good

DISCUSSION

The rationality behind each treatment protocol is depicted below.

Agni lepa

Agnilepa is a traditional therapeutic practice followed in certain parts of Karnataka for managing neuromuscular conditions, including Guillain-Barré syndrome (GBS). It is considered a type of Alepa [7] and is categorized under Niragni Upanaha Sweda. The application involves a thick herbal paste possessing Suptihara, Vedanasthapaka, Shothahara, and Stambhahara properties, thereby relieving numbness, pain, stiffness, and swelling. In GBS, nerve injury primarily occurs due to free radicals that induce oxidative stress, disrupt the blood-nerve barrier, and lead to demyelination. These free radicals can be correlated with Ama described in Ayurvedic texts. Hence, Agnilepa Chikitsa is adopted for its Vatakaphahara and Amapachaka actions, attributed to its Rooksha, Teekshna, and Ushna qualities, which help remove Avarana and Stabdata. The formulation includes ingredients such as turmeric, garlic, cinnamon, and mustard, containing active phytoconstituents like curcuminoids and allyl isothiocyanate. These compounds act synergistically to neutralize free radicals, reduce oxidative stress, and support nerve protection and regeneration, which can be understood as the Amapachana effect leading to reduction in heaviness, numbness, and weakness.

Sarvanga Abhyanga with Bala Ashwagandhadi Taila

Sarvanga Abhyanga is a principal modality in Vata Chikitsa. Sushruta describes Abhyanga as Dhatupushtijanana, highlighting its Brumhana effect, which is essential in the management of Vatavyadhi. It helps in pacifying Vata and Kapha dosha [8]. In Vata disorders arising from Dhatu Kshaya, Bala Ashwagandhadi Taila, as mentioned in Sahasrayoga, is particularly beneficial due to its Pushtikaram Param property [9], signifying potent Brumhana action. The formulation also exhibits Tridosahara, Asthiposhaka, Balya, and Kshatahara effects.

Abhyanga further contributes through its Vatahara, Shramahara, Twakprasada, and Twakdrudeekarana actions, which are crucial in Vatavyadhi [10]. Ingredients such as Ashwagandha, Bala, and Laksha contain phytoconstituents like withanolides, alkaloids, saponins, flavonoids, and resin glycosides. These compounds collectively exert immunomodulatory and anti-inflammatory effects and enhance muscle strength and function, resulting in improved power in the present case.



Shashtikshali pinda sweda

Shashtikashali Pinda Sweda is an important Brumhana therapy employed in the management of Vatavyadhi ^[11]. Classical texts emphasize Snehana, Swedana, Basti, and especially Brumhana measures for Vata disorders, as highlighted by Acharya Chakradatta. This procedure is a type of Snigdha Sankara Sweda and is particularly indicated in Ghora Anila Vyadhi, as well as conditions dominated by stiffness and pain. Owing to its Madhura and Snigdha qualities, it acts as Balya, Brumhana, Vatahara, and promotes nourishment of Mamsa and Asthi dhatus. When Swedana is administered along with Brumhana, it facilitates Agnideepana, Mardavata, Twakprasadana, Bhakta Shraddha, and Srotoshodhana. From a modern perspective, components such as milk and Shashtikashali rice are rich in vitamins including B12, B6, B9, B2, and vitamin D, which are essential for nerve health. Among these, vitamin B12 plays a key role in nerve repair and myelin synthesis. Additionally, Balamoola contains flavonoids, saponins, and steroids that exert anti-inflammatory effects and improve muscle tone. Procedurally, the application of heat induces localized vasodilation, enhancing blood circulation and nutrient supply to the affected nerves while facilitating toxin removal. This results in reduced muscle spasm, pain, stiffness, and overall weakness in the present case.

Matrabasti with Dhanwantarataila:

Dhanwantara Taila, a classical Ayurvedic formulation rich in herbs known for *Vata-shamaka* (*Vata-pacifying*), *Brimhana* (*nourishing*), *Shoolaghna* (*analgesic*), and *Snigdha* (*lubricating*) qualities, is especially indicated in Vata disorders involving musculoskeletal pain, stiffness, and functional limitations. In Vatavyadhi, where dryness, loss of tissue integrity, pain, and limited mobility predominate, Dhanwantara Taila's lipid-based constituents support smooth joint function and improved neuromuscular coordination, complementing the systemic balancing of Vata.

Mustadi yapana basti

Basti is described as *Ardha Chikitsa* in Ayurveda and is considered the foremost therapeutic measure for managing Vata disorders. It facilitates *Vatanulomana*, promotes strength, and restores normal physiological functions. Acharya Sushruta, while describing the benefits of Mustadi Yapana Basti, highlights its *Balya*, *Shoolanashana*,^[12] and nourishing properties. This formulation exhibits the combined actions of both *Niruha* and *Anuvasana Basti*. The presence of honey and *Saindhava Lavana* plays a crucial role due to their *Yogavahi* and *Sukshma* qualities, enabling deeper penetration of drugs through microchannels (*Srotas*). These properties help loosen the adhesion of vitiated doshas and facilitate their effective elimination. From a contemporary scientific perspective, rock salt is rich in minerals such as magnesium, potassium, and calcium, along with trace elements like iron, zinc, and copper, which contribute to muscle relaxation, strength, neuromuscular function, and immune modulation. Honey contains bioactive compounds including naringenin, gallic acid, and caffeic acid, which exhibit anti-inflammatory effects. Its proline content supports collagen synthesis, thereby aiding in nerve tissue repair. Ingredients such as *Ksheera* and *Mamsarasa* are abundant in amino acids essential for muscle protein synthesis, promoting muscle hypertrophy, strength, and flexibility through the presence of collagen and gelatin. *Musta* and *Shatapushpa* contain alkaloids and volatile oils that provide antioxidant and anti-inflammatory actions. The *Sneha* used in this formulation, *Ashwagandha Ghrita*, is described in its *Phalashruti* as *Vataghna*, *Vrushya*, and *Mamsa-vivardhana*, which aligns with the therapeutic objective of enhancing muscle mass. Modern studies attribute these effects to phytoconstituents such as withanolides, alkaloids, saponins, flavonoids, and resin glycosides that collectively modulate immune responses, reduce inflammation, and improve muscle function and strength. Thus, the synergistic action of the Basti procedure and its pharmacological components contributed to a noticeable increase in muscle bulk in the present case.

SHAMANOUSHADHI

Neurocare Drops, Cap. Palsineuron, Syrup Navashwagandha, Ajamamsarasayana, and Balashwagandhalakshadi Taila are Ayurvedic formulations commonly used in the management of Guillain–Barré Syndrome (GBS). They are primarily aimed at nerve nourishment, strength restoration, and neuromuscular recovery. Ingredients such as *Ashwagandha* and *Bala* are traditionally described as neuroprotective, adaptogenic, and anti-inflammatory, potentially supporting muscle strength, reducing fatigue, and aiding convalescence. Balashwagandhalakshadi Taila, used externally, may help improve circulation, muscle tone, and stiffness during rehabilitation, these therapies support recovery and quality of life.

CONCLUSION

This case report highlights the potential role of Ayurvedic management in Guillain–Barré syndrome through a structured, stage-wise approach targeting Vatadushti and Avarana. The integrated use of Agnilepa, Abhyanga, Shashtikashali Pinda Sweda, and Basti therapies, along with internal medications, resulted in significant functional improvement, evidenced by enhanced muscle power, increased muscle bulk, and a marked reduction in disability score from grade 3 to grade 1 within a short treatment duration. The observed outcomes suggest that Ayurvedic interventions may support neurological recovery, improve quality of life, and offer a cost-effective complementary approach in the management of GBS. However, larger clinical studies are required to substantiate these findings and establish standardized treatment protocols.



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