

# Understanding Myasthenia Gravis Through Ayurvedic Principles and the Therapeutic Role of Panchakarma: A Review

Dr. Abhishek Ranjan Jha<sup>1</sup>, Dr. Suman Rulaniya<sup>2</sup>

<sup>1</sup>Department of Panchakarma, <sup>2</sup>Department of Kaumarbhritya,  
National Institute of Ayurveda (DU), Jaipur, India.

Corresponding Author: Dr. Abhishek Ranjan Jha

DOI: <https://doi.org/10.52403/gijhsr.20260301>

## ABSTRACT

**Introduction:** Myasthenia Gravis (MG) is a chronic neuromuscular illness characterized by different degrees of skeletal muscle weakening. Myasthenia gravis (MG) is a significant but curable autoimmune illness that causes muscular fatiguability and weakening. Myasthenia gravis is a relatively rare disease with an annual incidence of 10-20 new cases per million. MG affects 50 to 200 million individuals. Every year, three to thirty new cases are diagnosed per million individuals. This is due to a reduction in the number of available acetylcholine receptors (AChRs) at neuromuscular junctions due to an antibody-mediated autoimmune attack. The most often afflicted muscles are those of the eyes, face, and swallowing. The cause of this disease can be understood in the light of *Dhatavgnimaandhya* and *Vyana Vayu Vikriti*.

**Materials & methods:** Ayurvedic literature includes *Brihatraye*. Number of published studies, articles and books. All relevant materials have been provided as source material for critical comprehension of myasthenia gravis.

**Result:** This article attempts to elucidate the pathophysiology of myasthenia gravis by examining the ideas of *Dosha-Dushya*, *Aama*, *Agnimandya*, and *Srotovaigunya*. For disease pathology to begin, all components

must be present. The pathogenesis of any illness will not develop without these factors.

**Discussion:** *Ayurvedic* remedies can yield even more promising effects. Comparison of myasthenia gravis to disorders addressed in *Ayurveda* is challenging, and an accurate link is impossible. However, with a thorough grasp of *Vyadhighataka*, a plausible diagnosis may be formed and treated accordingly. This article attempts to explore the pathophysiology of myasthenia gravis.

**Keywords:** *Ayurveda*, *Panchakarma*, *Myasthenia gravis*, *Yapna Basti*

## INTRODUCTION

Myasthenia Gravis (MG) is a chronic neuromuscular illness characterized by different degrees of skeletal muscle weakening. Myasthenia gravis (MG) is a significant but curable autoimmune illness that causes muscular fatiguability and weakening. The word is derived from the Greek words “mys” (muscle) and “astheneia” (“weakness”), as well as the Latin “gravis” (“serious”). Myasthenia is caused by malfunction of the neuromuscular synapse (also known as the neuromuscular junction [NMJ]), resulting in clinical “fatigue”, which is defined as muscle weakness that increases with muscle use and

improves with rest [1]. MG is an autoimmune disease most commonly caused by anti-AChR antibodies. Anti-AChR antibodies reduce the number of available AChRs at NMJs by three distinct mechanisms: (1) receptor cross-linking and rapid endocytosis; (2) postsynaptic muscle membrane damage; and (3) AChR active site blockade [2]. It primarily affects women under the age of 40 and males over the age of 60. It is uncommon among children [3]. In this disease, two types of autoantibodies are produced against the postsynaptic membrane receptor. 85% of patients produced autoantibodies against nicotinic AChR, and the remaining 15% have autoantibodies against muscle-specific kinase (MuSK). MuSK is a protein involved in regulating the concentration of AChR on the postsynaptic membrane. Myasthenia gravis has a prevalence of up to 200 per 100,000. Men in their 50s and 60s are most afflicted, while women in their 20s and 30s are more likely to be affected [4]. Muscle weakness and fatigability are the most

prominent characteristics. The weakness worsens with repeated usage (fatigue) or late in the day but may recover with rest or sleep. The cranial muscles, notably the lids and extraocular muscles (EOMs), are often affected early in the course of MG, with diplopia and ptosis being common symptoms. When the patient attempts to grin, his or her facial weakness causes a "snarling" face. Limb weakness in MG is typically proximal and might be asymmetric. Deep tendon reflexes are maintained despite muscle weakening. In Modern scientific treatment of myasthenia gravis includes cholinesterase drugs, glucocorticoids and other immunosuppressive agents, thymectomy, plasmapheresis. Long-term usage of steroids and immune modulators has various negative consequences on different systems of the body.

#### **SYMPTOMS OF MYASTHENIA GRAVIS: -**

Limbs	Proximal weakness initially in the shoulder girdle, later on may be generalised
Facial	Weakness of orbicularis oculi muscle. Snarling smile, hanging jaw sign
Ocular	Ocular movements are weak.
Palate	Palatal palsy
Speech	Nasal speech

Ayurvedic treatment results in much better outcomes. It is difficult to relate myasthenia gravis to disorders mentioned in Ayurvedic medicine, and a precise correlation is impossible. Although there is no direct mention to an illness similar to MG in Ayurvedic scriptures, a likely diagnosis and treatment may be determined based on *Nidana*, *Roopa*, *Upashaya*, and *Anupashaya*. *Acharya Charaka* mentioned eighty types of *Vata* disorders in *Sutra Sthana*. Among of them many symptoms can be seen in myasthenia gravis patients like *Shosha* (muscle wasting), *Toda* (pricking pain), *Sada* (malaise), and *Supti* (numbness) [5]. There are a few principles in, such as *Ayurveda Vatakshaya*, *Udanavrita Vyana*, *Aama*, and *Mansa*

*Kshaya*, which can help us comprehend the pathophysiology of myasthenia gravis.

#### **MATERIALS & METHODS**

*Brihatrayee* is mentioned in Ayurvedic texts. The number of published studies, papers, and books on the subject demonstrates the issue's prominence. All relevant materials have been incorporated as source material for critical comprehension of Myasthenia gravis on the basis of *Vyadhi Ghatak*.

#### **RESULT**

A comprehensive review of classical Ayurvedic literature and contemporary scientific publications revealed that although no disease entity identical to Myasthenia Gravis (MG) is explicitly

described in Ayurvedic texts, its clinical manifestations and pathophysiology can be understood through the principles of *Vata Kshaya*, *Vyana Vayu Vaigunya*, *Udanavrita Vyana*, *Mamsa Kshaya*, *Rasa Kshaya*, and *Snayu Daurbalya*.

The hallmark symptoms of Myasthenia Gravis, including ptosis, diplopia, dysphagia, dysarthria, facial weakness, proximal muscle weakness, and fatigability, exhibit significant similarities with the manifestations of deranged *Vata Dosha* and *Dhatu Kshaya*. The fluctuating muscular weakness and impaired motor activities can be attributed primarily to *Vyana Vayu Dushti*, as *Vyana Vayu* governs voluntary and involuntary movements such as *Nimesha*, *Unmesha*, *Utkshepana*, and *Apakshepana*.

Analysis of the available literature further suggests that *Panchakarma* interventions possess considerable therapeutic potential in the management of Myasthenia Gravis. *Abhyanga* and *Pizhichil* predominantly exert *Vatahara*, *Balya*, and *Brimhana* actions, thereby improving muscle nourishment and reducing fatigability. *Shashtika Shali Pinda Sweda* facilitates *Mamsa Poshana* and enhances muscular strength through its nourishing and rejuvenating properties. *Nasya Karma* appears particularly beneficial in managing ocular and bulbar manifestations of MG owing to its direct action on *Urdhvajatrugata* disorders and its ability to pacify *Vyana* and *Udana Vayu*. *Yapana Basti*, by virtue of its *Shodhana*, *Brimhana*, *Rasayana*, and *Ojovardhaka* properties, may correct *Vata* imbalance, nourish depleted *Dhatu*s, and improve neuromuscular function.

Collectively, the reviewed evidence indicates that *Panchakarma* therapies target the fundamental Ayurvedic pathological components of Myasthenia Gravis, namely *Vata Dushti*, *Dhatu Kshaya*, *Snayu Daurbalya*, and *Ojakshaya*, thereby offering a rational and holistic approach for improving muscle strength, reducing fatigue, enhancing functional capacity, and

improving the quality of life in patients with Myasthenia Gravis.

## DISCUSSION

**Ayurvedic correlation:** *Samprapti* describes the full process of illness development, beginning with exposure to the causal variables and progressing through the early perturbations in those factors. It is a system for examining each sickness in sequential sequence, beginning with *Dosha Vaishamy* and continuing till the full degree of the ailment emerges. Some symptoms of *Vata Kshaya* include *Manda Chestata*, *Alpavaktvam*, *Apraharsha*, and *Mudhasangnyata*, which might be related to myasthenia gravis. Some symptoms in *Udanavrita Vyana* include *Alpaagnita*, *Chestahani*, and *Nimilnam*, which can also be related to Myasthenia gravis. Among the five subtypes of *Vata Dosha*, *Vyana Vayu* is primarily responsible for coordinating various bodily movements and functions, including *Aakshepana* (downward movement), *Utkshepana* (upward movement), *Nimesha* (closing of the eyelids), and *Unmesha* (opening of the eyelids) [6]. In Myasthenia Gravis, these motor functions become impaired due to defective neuromuscular transmission. From an Ayurvedic perspective, this functional impairment can be attributed to *Vyana Vayu Dushti*, which plays a significant role in the disease pathogenesis. In *Astang Hridaya Sutrasthan*, *Acharya* explains *Mamsa Kshaya Lakshna* which correlates with ocular expression of sickness. *Acharya* explains in *Rasa Kshaya Lakshan* 'Shrama' and 'Glani', which can be associated with muscular tiredness, which is a fundamental sign of myasthenia gravis.

**Mode of action of Shali Shatik Swedana:** *Shastika Shali Pinda Sweda* is a *Brimhaniya Snehika* sudation made from a bolus of boiling *Shashtika Shali*, *Vata hara Kwatha* (a decoction of *Vatahara* herbs), and milk. Moist heat is employed in this method, and it is more effective than dry heat since it completely penetrates the skin, increasing

the influence on muscles, joints, and soft tissue. This technique also enhances the flexibility of the affected region. *Swedana* makes the skin more permeable by opening the skin appendage through sweating and dilation of blood vessels, all of which aid in medication absorption. Most items are not permeable via the skin; however, the amphipathic structure of milk aids in the absorption of other medications. *Bala Moola Kwatha* also helps to feed muscular tissues and avoid muscle weakness. Therefore, *Shastika Shali Pinda Swedana* is one of the most favoured methods of *Swedana* for myasthenia gravis patients when muscular weakness exists [7].

**Pizhichi:** *Pizhichi* follows the same principles as the *Swedana* procedure. *Pizhichi*, like *Swedana* treatment, functions on the basis of its *Ushna* and *Teekshna* properties. The administration of lukewarm/mild hot medicinal liquid boosts metabolic rate, resulting in vasodilation of the blood vessels. The *Veerya* of *Abhyanga*, *Parishek*, *Avagaha*, and *Alepa* enter the body via these *Roma Kupa* after being *Paka* by *Bhrajaka Pitta* in the skin. The skin's *Bhrajaka Pitta* is activated, facilitating transdermal absorption of medicinal liquids. The medicinal liquid is poured from a height of twelve *Angula*. The liquid falling over the body's surface causes a ripple effect. This activates the sympathetic nervous system. The sympathetic nervous system fibres innervate the tissues in every organ system and provide physiological regulation over a variety of bodily processes. It pacifies *Vata*, increases digestive strength, and does *Mala*. – *Shodhana* [8].

#### **Yapna Basti:**

*Yapana Basti* is considered a unique form of *Basti* that possesses both *Shodhana* (purificatory) and *Brimhana-Rasayana* (nourishing and rejuvenative) properties. It is specifically indicated in chronic, debilitating, and neuro-muscular disorders characterized by *Vata* predominance and

*Dhatu Kshaya*. *Yapana Basti* possesses a unique combination of *Shodhana*, *Brimhana*, and *Rasayana* properties and is indicated in chronic debilitating disorders associated with *Vata* predominance and *Dhatu Kshaya*. In Myasthenia Gravis, where *Vyana Vayu Vaigunya*, *Mamsa Kshaya*, and *Snayu Daurbalya* predominate, *Yapana Basti* may act by pacifying deranged *Vata*, nourishing depleted tissues, promoting *Ojas*, and improving neuromuscular function. Owing to its *Balya* and *Jeevaniya* actions, it may help reduce muscular fatigability and enhance functional capacity and quality of life in patients with Myasthenia Gravis [9].

#### **Nasya:**

Myasthenia Gravis commonly manifests with ptosis, diplopia, dysarthria, dysphagia, facial weakness, and difficulty in mastication due to involvement of ocular and bulbar muscles. In Ayurvedic parlance, these manifestations indicate derangement of *Vyana Vayu* and *Udana Vayu* affecting the structures of the *Urdhvajatru Pradesha*. *Nasya Karma* is considered the foremost treatment modality for disorders situated above the clavicle and is described as the gateway to the head ("*Nasa hi Shiraso Dwaram*"). Therefore, administration of medicated oils through the nasal route may help in pacifying vitiated *Vata*, nourishing the sensory and motor pathways, and improving the functional integrity of cranial nerves and neuromuscular structures. The therapeutic utility of *Nasya* in Myasthenia Gravis lies in its ability to target the predominant cranial manifestations of the disease. By virtue of its *Vatahara*, *Brimhana*, and *Balya* properties, *Nasya* may improve neuromuscular transmission, enhance muscle strength, and reduce fatigability of ocular and bulbar muscles. Therefore, *Nasya* can be considered a rational *Panchakarma* intervention in the comprehensive management of Myasthenia Gravis, particularly in patients presenting with ptosis, dysphagia, dysarthria, and facial weakness [10].

### **Abhyanga:**

Myasthenia Gravis is characterized by progressive muscular weakness and fatigability, which can be interpreted in *Ayurveda* as a manifestation of *Vata Prakopa* associated with *Mamsa Dhatu Kshaya* and *Snayu Daurbalya*. *Abhyanga*, being one of the foremost therapies for *Vata* disorders, is particularly beneficial in conditions involving neuromuscular weakness and tissue depletion. The unctuous (*Snigdha*), heavy (*Guru*), and nourishing (*Brimhana*) properties of medicated oils counteract the *Ruksha*, *Laghu*, and *Chala* qualities of aggravated *Vata*, thereby restoring its normal physiological functions. Acharya Charaka has advocated the use of various medicated oils and ghee preparations such as *Bala Taila*, *Sahacharadi Taila*, *Dashamoola Ghrita*, *Nirgundi Taila*, and *Moolaka Taila* in *Vata* disorders. Regular *Abhyanga* with these formulations helps in pacifying deranged *Vata*, nourishing depleted tissues, improving muscle tone, and strengthening *Snayu* and *Mamsa Dhatu*.

From a contemporary perspective, massage therapy improves peripheral blood circulation, enhances lymphatic drainage, reduces muscular fatigue, and stimulates mechanoreceptors and the autonomic nervous system. Increased local circulation facilitates better tissue nutrition and oxygenation, which may improve muscle performance and reduce fatigability in patients with Myasthenia Gravis [11].

Therefore, in Myasthenia Gravis, *Abhyanga* may act through *Vata Shamana*, *Brimhana*, *Mamsa Poshana*, and *Snayu Balya*, thereby improving muscle strength, reducing fatigue, and enhancing functional capacity and quality of life.

### **CONCLUSION**

According to *Acharya Charaka*, if a physician is unable to define a specific sickness, he should not be humiliated because it is not always feasible to name all sorts of diseases in concrete terms. There is no clear therapy for autoimmune illnesses in

modern science. By adopting the ideas outlined in *Ayurveda*, we may play an important role in managing symptoms without causing more harm to the body. This may improve the overall health of such patients. *Panchakarma* therapies such as *Shali Shatik Swedana*, *Pizhichil*, and *Yapna Basti* can be quite beneficial in the treatment of myasthenia gravis. *Ayurveda* may work miracles in a variety of horrible situations. However, the necessity of the hour is to identify and treat each ailment using *Ayurvedic* criteria.

### **Declaration by Authors**

**Acknowledgement:** None

**Source of Funding:** None

**Conflict of Interest:** The authors declare no conflict of interest.

### **REFERENCES**

1. Vidyasagar Panchal, Prashanth A.S. A Critical Understanding Of Myasthenia Gravis And It's Treatment In Ayurveda - A Case Study. Int J Ayu Pharm Res. 2018;6(8). 55-61.
2. Harrison's principles of Internal Medicine volume 1, editor Braunwald, Fauci, Kasper, Hauser, Longo, Jameson. 21st edition McGraw Hill. Page No. 3509.
3. Richman DP. The future of research in myasthenia. JAMA Neurol. 2015;72(7):812-814. doi:10.1001/jamaneurol.2014.4740. Available from: <https://doi.org/10.1001/jamaneurol.2014.4740>
4. P.J. Mehta's practical medicine 21st edition, editor Nihar P. Mehta, page no 350.
5. Agnivesha. Charaka Samhita. Vol. 1. Shukla V, Tripathi RD, editors. Delhi: Chaukhamba Sanskrit Pratishtan; 2011. Sutrasthana, Chapter 20, Verse 12. p. 294.
6. Text book of Kriya Sharira by Dr. Vedmani pandey, vol-1, Vata dosha 4th chap, Chaukhambha publications New Delhi, P.no.84
7. Yadav P, Kumar A. Efficacy of Shastika Shali Pinda Sweda in muscular dystrophy: a case study. Int J Res Ayurveda Pharm. 2021;12(4):12-14. doi:10.7897/2277-4343.120497.
8. Yadav M, Mangal G. A Review Of Unique Panchakarma Modality- Sarvangadhara.

- International Ayurvedic Medical Journal. 2021 Oct 15;9(10):2481–5.
9. Tiwari S, Gupta S, Srivastava AK. Role of Panchakarma in preventing lifestyle disorders. *Journal of Ayurveda and Integrated Medical Sciences (JAIMS)*. 2018 Jun 25;3(3).
  10. Ashwini H.A, Kiran. M. Goud, Lolashri S J. Role of Panchakarma in Myasthenia Gravis – A Case Study. *International Journal of Ayurveda and Pharma Research*. 2018;6(3):61-65.
  11. Rani P, Vaishnava S, Rani P. Myasthenia Gravis: An Ayurvedic Review. *International Journal of Ayurvedic and Herbal Medicine*. 2026 Feb 18;16(01).

How to cite this article: Abhishek Ranjan Jha, Suman Rulaniya. Understanding myasthenia gravis through ayurvedic principles and the therapeutic role of panchakarma: a review. *Gal Int J Health Sci Res*. 2026; 11(3): 1-6. DOI: <https://doi.org/10.52403/gijhsr.20260301>

\*\*\*\*\*