A Panchkarma Approach in the Management of Sarvanga Vatavyadhi (MND–Amyotrophic Lateral Sclerosis): A Clinical Case Report

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Abstract— **Background**: **Amyotrophic Lateral Sclerosis (ALS) is a progressive neurodegenerative disorder characterized by degeneration of upper and lower motor neurons, resulting in progressive muscle weakness and loss of motor control. Conventional management is primarily supportive, with pharmacological interventions offering only modest benefit. Ayurveda, through the Panchkarma approach, provides a holistic therapeutic model aimed at alleviating symptoms, improving functional ability and enhancing quality of life. Case Presentation**: **A 56-year-old female with early-onset ALS presented with progressive weakness of both upper limbs, initially involving the right index finger 2.5 years earlier. Over time, tremors developed during weight lifting, accompanied by upper-body and low-back weakness, bilateral knee instability and difficulty in standing, walking and prolonged sitting. She had no comorbidities such as diabetes or hypertension. Neurological examination revealed decreased motor activity and a nerve conduction study showed a non-recordable F-wave in the right median nerve, confirming motor neuron dysfunction. Intervention: The patient underwent a structured Panchkarma protocol comprising Yapana Basti and Shashtika Shali Pinda Swedana for 16 days, Nasya Karma with Trisati Prasarini Taila for 14 days, followed by Shamana therapy for 15 days to consolidate therapeutic gains. Outcomes: Following intervention, clinical improvement was noted in muscle strength, postural stability and mobility, with higher ALSFRS-R, Norris and WHOQOL-BREF scores. Subjective relief from fatigue and improved daily functioning were reported, without adverse events**. **Conclusion: This case demonstrates that integrative Ayurvedic therapies can provide meaningful symptomatic relief and functional improvement in a patient of ALS. While encouraging, single-patient outcomes require validation through larger clinical trials to establish efficacy.**

Index Terms— **Amyotrophic Lateral Sclerosis, Ayurveda, Panchkarma, Yapana Basti, Shashtika Shali Pinda Swedana, Nasya Karma.**

I. INTRODUCTION

Amyotrophic Lateral Sclerosis (ALS) is among the most challenging neurodegenerative disorders, characterized by progressive degeneration of upper and lower motor neurons, culminating in muscle weakness, atrophy and respiratory compromise. Conventional therapies like riluzole, edaravone and multidisciplinary supportive care only modestly slow disease progression and provide symptomatic benefit; no curative treatment exists. The urgent need for adjunctive strategies motivates exploration of integrative systems.

In Ayurveda, conditions sharing features of limb weakness, tremors, atrophy, and neuromuscular dysfunction are often categorized under Vatavyadhi (disorders of Vata). The pathophysiology is understood as Vata Prakopa (aggravation), compounded by Dhatukshaya (tissue depletion) Classical Ayurveda treat such conditions using Panchkarma (e.g. Basti, Swedana, Nasya and Rasayana) therapies to remove Dosha blockages, pacify Vata, nourish Dhatus and support systemic resilience

While a few published Ayurvedic case reports describe beneficial outcomes in motor neuron disease (MND) and ALS, the literature remains sparse in one

documented case, ALS was managed using Swedana, Niruhabasti and internal therapies, with improvement in ALSFRS-R scores and functional domains.

This case report applies a rigorous integrative approach combining Ayurvedic diagnosis, classical examination (Dashavidha Pariksha), treatment protocol and modern objective outcome measures to present a scientifically robust documentation of an early-onset ALS patient treated with Panchkarma. This case aims to document the clinical and functional outcomes following an integrative Panchkarma protocol in a patient with early-onset ALS.

II. PATIENT INFORMATION

A 56-year-old female presented on 19/06/2025 with insidious onset of weakness in the right index finger approximately 2.5 years ago. Over time, the weakness gradually progressed to involve both upper limbs. The patient subsequently noticed tremors when lifting lightweight objects. Subsequently, she developed generalized weakness in the upper body, low back discomfort and bilateral knee instability, which impeded her ability to rise from sitting, ambulate comfortably and maintain posture during prolonged sitting. She had no history of diabetes, hypertension, endocrine or systemic disease. The family history was non-contributory. The patient reported psychological distress related to functional decline.

Ayurvedic Assessment: Dashavidha Pariksha
A classical tenfold Ayurvedic evaluation was performed to guide diagnosis and therapy:

- Prakriti: The patient's constitution was assessed as Vata–Kapha predominant.
- Vikriti: Her current imbalance showed Vata Prakopa with Kapha Avarana obstructing normal Vata function.
- Sara: Mamsa Sara and Majja Sara were judged to be compromised, consistent with muscle wasting and nervous depletion.
- Samhanana: Body build was moderate, but with evident loss of muscle tone on examination.
- Pramana: Anthropometric measures (height, weight) were within expected norms, though BMI was slightly low due to chronic muscle loss.
- Satmya: Dietary adaptation showed she tolerated a vegetarian diet but aggravated on cold or dry foods.
- Satva: Mental resilience was moderate; she was cooperative, though anxious about disease progression.
- Ahara Shakti: Digestive capacity was found to be Mandagni (reduced), with occasional bloating and variable appetite.
- Vyayama Shakti: Physical endurance was markedly reduced; even minimal exertion precipitated fatigue.
- Vaya: At 56 years, she fell into Madhyama Vaya (middle age), a stage where Vata tends to increase.

This profile corresponded with the Ayurvedic diagnosis of Sarvanga Vatavyadhi with Dhatukshaya, guiding selection of therapies aimed at pacifying Vata, clearing obstructions and nourishing depleted tissues.

III. CLINICAL FINDINGS

On general physical examination, the patient exhibited moderate build but noticeable muscle wasting in forearm and shoulder regions. Tremors were evident during voluntary movements, especially when holding light weights. Neurological evaluation revealed reduced motor strength in bilateral upper limbs and knees; reflexes were present but slowed. Sensory examination was intact. She had difficulty rising from sitting, maintaining posture in a prolonged seated position, and ambulating short distances with stability.

Electrophysiological studies confirmed decreased motor conduction amplitude and a non-recordable F-wave in the right median nerve, consistent with motor neuron dysfunction; sensory conduction remained normal. No demyelinating features were present.

From an Ayurvedic perspective, the observed features corresponded to Vata Lakshanas: Kampa (tremor), Bala Hani (loss of strength), Stambha (stiffness), Gatra Sadana (limb fatigue) and Kshaya (wasting). The progressive course reflected ongoing Dhatukshaya of Mamsa and Majja Dhatus, while the tremors and neuromuscular blockade suggested obstructed Vata channels.

Timeline

Phase	Duration	Key Events & Interventions
Onset	~2.5 years prior	Weakness began in right index finger
Progression	~1.5 years onward	Bilateral involvement, tremors, upper-body weakness
Decline	Last 6 months	Difficulty in rising, walking, prolonged sitting
Presentation	Day 0	Baseline evaluation (ALSFRS-R 28, Norris 3, QOL 42)
Intervention	Days 1–16	Panchkarma: Shashtika Shali Pinda Swedana + Baladi Yapana Basti
Nasya phase	Days 17–30	Nasya Karma with Trisati Prasarini Taila
Shamana phase	Days 31–45	Oral Trisati Prasarini Taila for consolidation
Post-assessment	Day 46	Re-evaluation (ALSFRS-R 34, Norris 6, QOL 58)
Follow-up	Day 76 (~30 days later)	Recheck (ALSFRS-R 33, Norris 6, QOL 56)

IV. DIAGNOSTIC TESTING

Laboratory workup including haematology, liver/renal function, thyroid function and metabolic panels was unremarkable. Neuroimaging (MRI brain/spine) ruled out compressive or structural lesions. Electromyography/NCS showed a motor pattern of reduced amplitude and absent F-wave in right median nerve, with preserved sensory conduction, consistent with motor neuron disease. These investigations, along with the clinical course, supported the diagnosis of early-onset ALS in the absence of alternative aetiologies.

Diagnosis

- Modern Neurological Diagnosis: Early-onset Amyotrophic Lateral Sclerosis (ALS), an MND subtype
- Ayurvedic Diagnosis: Sarvanga Vatavyadhi with Kapha Avarana and Dhatukshaya

This dual-diagnostic framework allowed integrative management thus aligning classical Ayurvedic principles with contemporary functional scales and neurophysiological correlation.

Prognosis

ALS generally carries a grave prognosis, with median survival 3–5 years after onset. However, the partial functional recovery and stabilization seen in this patient over the short term suggest that integrative therapy may slow decline and enhance quality of life, at least in selected cases. These outcomes are encouraging but cannot predict long-term survival.

V. THERAPEUTIC INTERVENTIONS

The patient underwent a systematic integrative Ayurvedic protocol:

1. Shashtika Shali Pinda Swedana Administered daily for 16 days (from 20/06/2025-03/07/2025) using boluses of cooked rice in medicated milk decoction, applying heat and massage to nourish tissues, pacify Vata and improve microcirculation.
2. Yapana Basti (Kala Basti schedule): Given over 16 days (from 20/06/2025-05/07/2025) using Baladi Yapana Basti, a medicated enema combining nourishing (Sneha) and cleansing effects. This method supports both detoxification and reinstatement of internal balance.
3. Nasya Karma After Basti and Shashtika Shali Pinda Swedana; Nasya Karma was done for 14 days (from 07/07/2025-20/07/2025), 6 drops per nostril of Trisati Prasarini Taila were administered to open channels, support neural pathways and reinforce Vata regulation in the head and neck region.
4. Shamana Therapy: Post- Panchkarma, the patient took oral Trisati Prasarini Taila 10 ml twice daily for 15 days to consolidate therapeutic gains, pacify residual Vata and maintain systemic balance.

In parallel, she was advised a warm, nourishing diet avoiding cold, dry and processed foods; moderate physiotherapy; stress management; and supportive lifestyle modifications consistent with Vata care.

VI. OUTCOMES

At the end of treatment, the patient reported greater ease in daily movements, steadier gait, reduced tremors, improved grip strength, and enhanced confidence and activity. Objective scale improvements were: ALSFRS-R from 28 to 34, Norris scale from 3 to 6, WHOQOL-BREF from 42 to 58. At 30-day follow-up, scores were largely retained (33, 6, 56). No adverse events or complications were observed.

The magnitude and consistency of these gains over a relatively short intervention period suggest more than spontaneous fluctuation; they may reflect a therapeutic effect of the integrative protocol.

Functional Outcomes

Assessment Tool	Baseline Score	Post-Treatment Score	Follow-up Score (30 days)
ALSFRS-R (0–48)	28	34	33
Norris Scale (0–9)	3	6	6
WHOQOL-BREF (0–100)	42	58	56

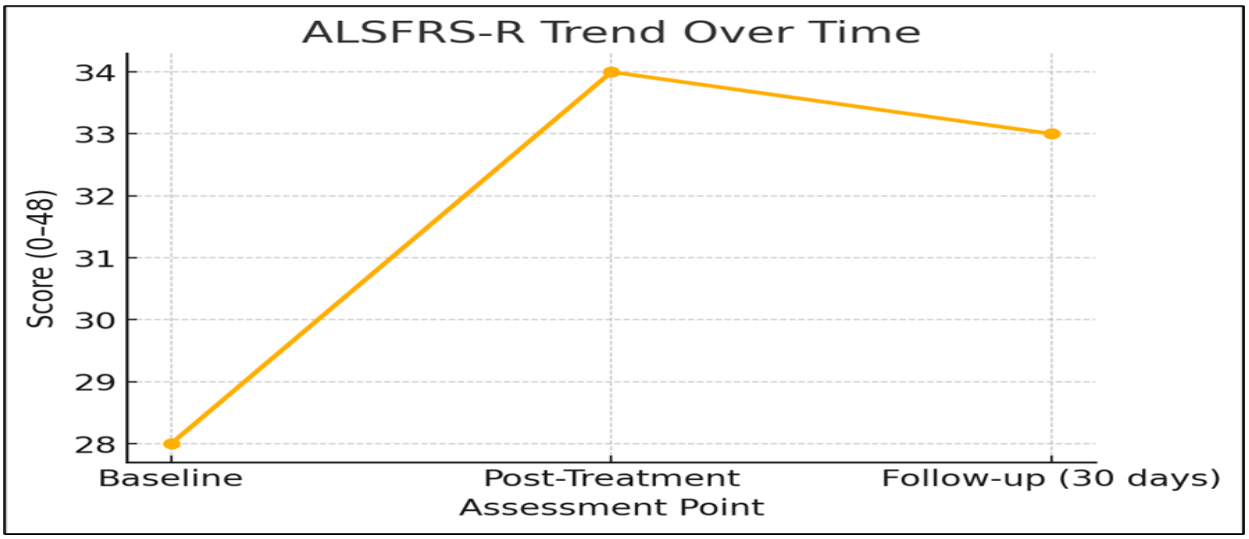

Figure 1: ALSFRS-R Trend Over Treatment Period

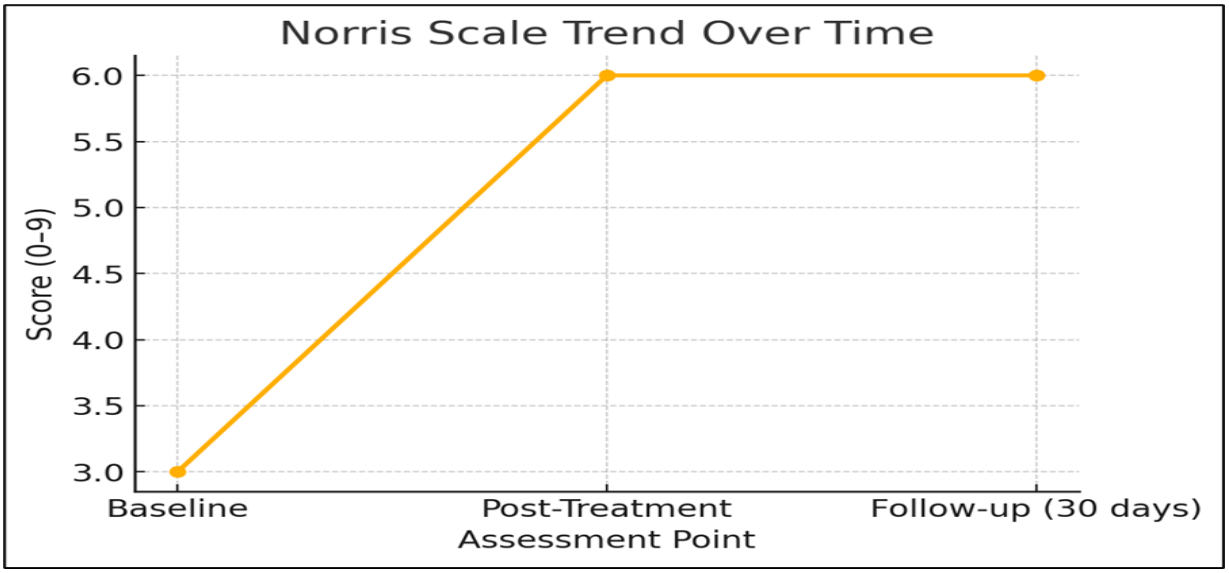

Figure 2: Norris Scale Trend Over Treatment Period

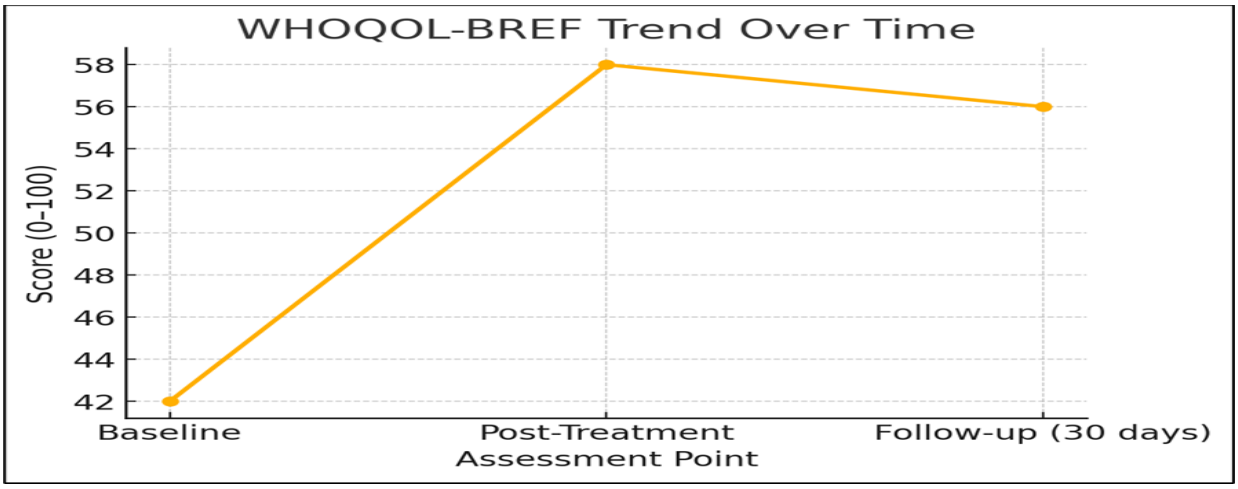

Figure 3:WHOQOL-BREF Trend Over Treatment Period

VII. DISCUSSION

This case adds to limited but growing evidence that Ayurvedic Panchkarma may play a supportive role in ALS management. Unlike earlier single-case descriptions, this manuscript documents a full Ayurvedic diagnostic process (Dashavidha Pariksha), integration with functional scales and neurophysiological correlation.

The observed improvements can be interpreted through Ayurvedic mechanisms: Shashtika Pinda Swedana nurtures muscles and calms Vata; Yapana Basti cleanses deeper channels while nourishing tissues; Nasya opens neural pathways; and Shamana consolidates the effect and supports homeostasis. The removal of Kapha Avarana permits freer Vata movement, while the nourishment of Dhatukshaya helps restore strength.

From a modern perspective, possible mechanisms include modulation of inflammation, enhancement of microcirculation, neuroprotective phytochemical action, reduction of oxidative stress, and supportive trophic effects on neurons. For example, network pharmacology studies show that numerous Ayurvedic phytochemicals interact with neural signalling pathways relevant to neurodegenerative disease. (8) Furthermore, Panchkarma may influence systemic detoxification and metabolic homeostasis beneficial in neurological disorders. (9,10)

However, limitations are significant: this is a single case without control, placebo, long-term follow-up, or biomarker endpoints. The possibility of placebo effect, natural variation, or measurement bias cannot be excluded. Hence, the results should be regarded as hypothesis-generating rather than confirmatory.

Future work should pursue pilot trials, biomarker studies (neurofilament light, MRI, electromyography trends) and mechanistic explorations (metabolomics, gene expression) to validate and refine such integrative protocols.

VIII. CONCLUSION

This detailed case report illustrates that Panchkarma therapy, when carefully individualized and integrated with modern monitoring, may yield symptomatic relief, functional improvement and slowed decline in early-onset ALS, with good safety in this instance. Although not curative, it may be a promising adjunctive approach in a disorder with otherwise limited options. Rigorous clinical trials are urgently needed to test reproducibility and efficacy.

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