



Case Study

AN INTEGRATED AYURVEDIC APPROACH IN THE MANAGEMENT OF LUMBAR SPONDYLOSIS WITH RADICULOPATHY

Vyshnavi M S^{1*}, Dana Muhammed¹, Namitha TP²

*1PG Scholar, ²Assistant Professor, Department of Shalyatantra, Government Ayurveda Medical College, Pariyaram, Kannur, India.

Article info

Article History:

Received: 16-01-2026

Accepted: 21-02-2026

Published: 15-03-2026

KEYWORDS:

Lumbar spondylosis, Radiculopathy, Gridhrasi, Vaitarana vasti, Ayurvedic management, Lumbar traction, Therapeutic exercise.

ABSTRACT

Lumbar spondylosis with radiculopathy is a common degenerative spinal disorder characterized by chronic low back pain, radiating lower limb pain, sensory disturbances, and functional impairment. In Ayurveda, it correlates with *Gridhrasi* associated with *Katigata Vata*, resulting from *Vata* vitiation, *Dhatu kshaya*, and *Marga avarana*. Conservative Ayurvedic management, particularly Panchakarma-based interventions, offers a potential non-surgical approach. A 45-year-old male with chronic low back pain radiating to the right lower limb, associated with numbness and burning sensation, was treated using a phased Ayurvedic protocol. Initial therapy focused on *Rukshana* and *Ama pacana* to address *Kapha-Meda avarana* and metabolic obstruction, followed by *Snehana* and *Swedana* to pacify *Vata*, relieve muscular spasm, and improve lumbar mobility. Considering the chronic *Vata*-dominant pathology, *Vaitarana Basti* was administered as the principal *Sodhana* therapy. Supportive interventions included lumbar traction and a structured stage-wise lumbar strengthening exercise program to enhance neural decompression, spinal stability, and functional recovery. *Brimhana* therapy was later incorporated to nourish tissues and support long-term neuromuscular stability. Following treatment, the patient demonstrated marked improvement in subjective and objective parameters, including significant reduction in low back pain, complete resolution of radicular symptoms, numbness, and burning sensation, with improved lumbar mobility and functional capacity. He was able to resume daily activities without discomfort. This case highlights that an integrated, phased Ayurvedic approach combining *Panchakarma*, supportive traction, and therapeutic exercises can effectively manage lumbar spondylosis with radiculopathy and may serve as a safe, non-invasive alternative to surgery.

INTRODUCTION

Lumbar spondylosis is a chronic degenerative spinal disorder characterized by intervertebral disc degeneration, facet joint hypertrophy, osteophyte formation, and narrowing of the spinal canal or foramina, leading to low back pain, radiculopathy, sensory disturbances, and functional disability. Its prevalence has increased due to modern lifestyle factors such as prolonged sitting, faulty posture, repetitive mechanical stress, and sedentary habits.

In Ayurveda, degenerative spinal disorders are attributed primarily to *Vata dosha* vitiation, often accompanied by *Dhatukshaya* and advancing age. Clinically, lumbar spondylosis with radiculopathy correlates with *Gridhrasi* and *Katigata Vata*, *Vata*-dominant conditions characterized by radiating pain, stiffness, and restricted lumbar movements. Classical texts describe these under *Vatavyadhi*, with degeneration involving *Asthi* and *Sandhi*, and *Pakvashaya* contributing to chronicity and recurrence^[1].

Ayurvedic management focuses on *Vata samana* and *Anulomana* through *Snehana*, *Swedana*, *Brimhana*, and *Basti Karma*, while supportive interventions like lumbar traction and therapeutic exercises aid decompression, nerve relief, mobility, and postural stability. This case report highlights the

Access this article online	
Quick Response Code	
	https://doi.org/10.47070/ijapr.v14i2.3990
Published by Mahadev Publications (Regd.) publication licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)	

effectiveness of an integrated Ayurvedic protocol combined with traction and exercises in managing lumbar spondylosis with radiculopathy.

Patient Information

A 45-year-old moderately built male, working as a shopkeeper and home appliance businessman, presented to the Shalyatantra Outpatient Department, Government Ayurveda Medical College, Pariyaram, with complaints of low back pain radiating to the right lower limb, associated with numbness and burning sensation.

Presenting Complaints

- Low back pain for 2 months
- Radiating pain from the right thigh to the foot for 1.5 months.
- Numbness and burning sensation in the right lower limb for 1 month.

History of Present Illness

The patient was apparently asymptomatic five years prior, when he sustained a fall from steps with impact over the hip region. Following the incident, he developed intermittent low back pain, for which he received symptomatic treatment with analgesics, resulting in temporary relief. Over time, the pain gradually increased in intensity and frequency,

Special Tests

Test	Pre-test results	Post test results
SLR	Positive (at 30°)	Negative
Lassegues test	Negative	Negative
Pump handle	Negative	Negative
Gillie’s	Positive	Negative
FABER’s test	Negative	Negative
FNST	Positive	Positive

Motor Examination

On motor system examination of the lower limbs, muscle bulk and tone were normal bilaterally. There was no evidence of muscle wasting, fasciculations, or involuntary movements.

Muscle Power (MRC Grading)

Muscle Group	Root Value	Right (Grade)	Left (Grade)
Hip flexors	L2-L3	5/5	5/5
Knee extensors	L3-L4	5/5	5/5
Ankle dorsiflexors	L4-L5	5/5	5/5
Great toe extensors	L5	5/5	5/5
Ankle plantar flexors	S1	5/5	5/5
EHL (Extensor Hallucis Longus)	L5	5/5	5/5

Deep Tendon Reflexes

Reflex	Root Value	Right	Left
Knee jerk	L3-L4	Normal	Normal
Ankle jerk	S1	Normal	Normal

becoming chronic and radiating to the right lower limb. During the past one month, the pain was associated with numbness and burning sensation along the course of radiation.

The patient’s occupational activities involved prolonged standing, frequent bending, manual handling of heavy appliances, and long-distance two-wheeler travel, which aggravated the symptoms. Conservative treatment provided only transient relief. Magnetic Resonance Imaging (MRI) of the lumbosacral spine revealed degenerative changes suggestive of lumbar spondylosis with nerve root compression. Surgical intervention was advised; however, the patient was unwilling to undergo surgery and opted for Ayurvedic management. His personal history included irregular meal timings with good appetite, normal bowel and bladder habits, adequate sleep, a history of smoking and alcohol consumption, and hypertension for which he was on regular medication

Clinical Examination

On examination of the lumbosacral spine, there was no swelling or redness, palpation was non-tender, range of motion was full and pain-free, and muscle power was grade 5.

Sensory Examination

Sensory examination revealed altered sensations in the right lower limb corresponding to the lumbosacral nerve root distribution.

Superficial Sensation

Sensory Modality	Right Lower Limb	Left Lower Limb
Touch	Reduced over lateral leg and dorsum of foot	Normal
Pain	Hypoesthesia with occasional dysesthesia	Normal
Temperature	Mild impairment	Normal

The sensory impairment was distributed along the posterolateral aspect of the right thigh, leg, and dorsum of the foot, corresponding to L4–L5 nerve root involvement, consistent with MRI findings.

Deep Sensation

- Joint position sense: Intact
 - Vibration sense: Intact
- No saddle anesthesia was noted.

Investigations**1. USG Abdomen & Pelvis (23/9/25)****Treatment****Internal medicines**

Date	Medicine	Dose	Frequency
17/09/25– 26/09/25	<i>Gandharva hastadi kashayam</i>	45ml	Twice daily before food
17/09/25 – 26/09/25	<i>Shad dharanam Gulika</i>	1-0-1	Twice daily after food
27/ 09/25 –3/10 /25	<i>Sahacharadi kashayam</i>	45 ml	Twice daily before food
27/ 09/25 – 3/10 /25	Tab. <i>Trayodasanga guggulu</i>	1 -0-1	Twice daily with <i>Kashayam</i>
27/ 09/25 – 3/10 /25	Cap. <i>Guggulutikthakam gritham</i>	2-0-2	Twice daily after food
4/10/25 – 10/10/25	<i>Dhanwantaram gulika</i>	0-0-1	Evening before food
11/10/25 – 17/10/25	<i>Maharasnadi kashayam</i>	45ml	Twice daily before food
11/10/25 – 17/10/25	<i>Gandha tailam capsule</i>	1-0-1	Twice daily after food

Management with Panchakarma procedures

Duration	Treatment
17/09/25 – 19/09/25	<i>Udwarthanam</i> with <i>Kolalulathadi churnam</i>
20/09/25 – 26/09/25	<i>Dhanyamla dhara</i>
27/ 09/25 – 3/10 /25	<i>Abhyangam</i> + <i>Ushma sweda</i> with <i>Sahacharadi taila</i> + <i>Dhanwanthara taila</i> Traction (9 kg) Started lumbar exercises
4/10/25 – 10/10/25	<i>Vaitharana vasthi</i>
11/10/25 – 17/10/25	<i>Taila dhara</i> with <i>Dhanwantharam taila</i>

Lumbar strengthening exercises

Along with *Abhyanga*, the patient initially performed a lumbar stabilization and mobility exercise program, including pelvic tilts, bridging, cat-cow stretches, bird-dog exercise, and single knee-to-chest stretches. Exercises were done in a pain-free range with slow, controlled movements, typically 10 repetitions with 10-second holds once daily. Following

Grade 1 fatty liver; no renal pathology.

2. MRI Lumbar Spine (25/9/2024)

- Disc degeneration with posterior and right posterolateral disc protrusion.
- Bilateral facet joint hypertrophy at L4–L5.
- Compression of thecal sac and nerve roots.
- Narrowing of spinal canal and lateral recess.
- Lumbar spondylosis

supervised sessions, the patient was advised to continue these exercises at home to maintain lumbar mobility, enhance core stability, preserve spinal alignment, and prevent recurrence of symptoms.

After completion of treatment:

The patient demonstrated significant clinical improvement, with marked reduction in radiating pain

and complete resolution of numbness and burning sensations. Provocative tests including Straight Leg Raise (SLR), Femoral Nerve Stretch Test (FNST), and Gilles test were negative. The patient was able to resume daily activities without discomfort. Sensory examination showed marked improvement, with touch, pain, and temperature sensations largely restored in the right lower limb, and resolution of the previously noted sensory impairment along the posterolateral thigh, leg, and dorsum of the foot.

Discharge Advice and Follow-Up

On discharge, the patient was advised to continue regular lumbar strengthening and flexibility exercises. Instructions were given to avoid prolonged sitting, forward bending, sudden twisting movements, and heavy weight lifting. Emphasis was placed on maintaining proper posture and ergonomics during daily activities, with frequent breaks during extended periods of work. Warm fomentation over the lumbosacral region was advised to reduce stiffness and support *Vata samana*. The patient was counseled to avoid exposure to cold, irregular routines, and excessive physical strain. A follow-up evaluation was advised after two weeks, or earlier if symptoms recur or worsen.

RESULTS

After completion of the full course of Ayurvedic treatment, the patient showed marked clinical improvement in both subjective and objective parameters.

Low back pain intensity reduced significantly, and the radiating pain to the right lower limb subsided. The associated numbness and burning sensation also resolved. Functional movements of the lumbar spine improved, and the patient was able to perform daily activities without discomfort. Special tests that were previously positive, including Straight Leg Raise (SLR), Femoral Nerve Stretch Test (FNST), Gilles test, became negative after treatment, indicating improvement in nerve irritation, muscular function, and shoulder stability. Overall, the patient experienced significant relief without the need for surgical intervention.

DISCUSSION

The present case of lumbar spondylosis with radiculopathy correlates with *Gridhrasi* and *Katigata Vata* in Ayurveda. Etiological factors such as prior trauma, prolonged bike riding, heavy lifting, faulty posture, and occupational strain contributed to *Vata* aggravation, leading to lumbar spine degeneration and nerve compression. The treatment protocol followed the principles of *Vata shamana*, *Snehana*, *Swedana*, *Vasti*, and *Brmhana*.^[2]

Lumbar spondylosis with radiculopathy represents a *Vata-pradhana* degenerative disorder characterized by *Dhatu kshaya*, *Marga avarodha*,

inflammation, muscular spasm, and neural compression. The selected external therapies aim at *Vata shamana*, *Kapha-Meda vilayana*, *Shotha hara*, and *Shoola prasamana*, thereby addressing both axial and appendicular involvement.

Udwarthanam with Kolakulathadi Churnam^[3]

Udvarthana primarily addresses *Kapha-Meda avarana* and promotes *Srotossodhana*. *Kolakulathadi Churna*, owing to its *Ruksha*, *Ushna*, and *Lekhana* properties, helps reduce stiffness, heaviness, and metabolic obstruction. In lumbar spondylosis, it improves local circulation, decreases paraspinal muscle rigidity, and prepares the tissues for subsequent *Snehana* and *Swedana*. Post-treatment, the patient showed reduction in stiffness and heaviness with improved lumbar flexibility.

Dhanyamla Dhara: *Dhanyamla Dhara* is a *Vata-Kapha hara* and *Ama pachana* therapy that relieves stiffness, heaviness, and chronic inflammation. The acidic, fermented medium improves microcirculation, reduces edema around nerve roots, and alleviates neuromuscular pain. It is particularly effective in chronic degenerative and inflammatory conditions where *ama* and *Avarana* coexist.

Abhyangam and Ushma Sweda with Sahacharadi Taila and Dhanwanthara Taila

Abhyanga provides *Bahya snehana*, pacifying aggravated *Vata* and nourishing *Snayu* and *Mamsa dhatu* ^[4]. *Sahacharadi Taila* is effective in lumbosacral pain and sciatica, while *Dhanvantara Taila* supports neuromuscular and joint function. *Ushma Sveda* following *Abhyanga* enhances tissue penetration and alleviates muscle spasm, pain, and stiffness. Post-treatment, marked reduction in para spinal muscle spasm and pain with improved lumbar range of motion was observed.

Vaitharana Vasti: *Vaitarana Vasti* is a *Sodhana niruha vasti* indicated in *Vata-Kapha* disorders associated with *Ama* and *Avarana*. In lumbar spondylosis, it acts on the *Pakvasaya*, the primary seat of *Vata*, correcting *Apana Vata* dysfunction. Its *Ruksha*, *Ushna*, and *Ama-pachaka* properties help clear *Srotorodha*, reduce inflammation, and alleviate pain and stiffness. Post-treatment, significant reduction in low back pain, radicular symptoms, and sensory disturbances was observed, along with improved functional ability.^[5,6]

Taila Dhara with Dhanwanthara Taila: *Taila Dhara* offers continuous, gentle oleation and warmth, producing profound *Vata shamana* and neuromuscular relaxation. It calms irritated nerve endings, reduces chronic pain, and supports tissue healing.

Traction: Lumbar traction is a conservative therapy for lumbar spondylosis that relieves disc and nerve root compression, reduces muscle spasm, and improves spinal mobility, providing short-term pain

relief. It is most effective as an adjunct to strengthening and flexibility exercises and should be applied cautiously in patients with spinal instability or severe osteoporosis. Post-treatment, patient experienced improvement in range of motion and temporary reduction in pain, which facilitates participation in active rehabilitation exercises.

Exercises: Lumbar spondylosis requires a graded and stage-wise rehabilitation approach to prevent symptom aggravation and ensure long-term functional recovery. In the acute stage, the use of gentle mobility and pain-relieving exercises such as pelvic tilts, knee-to-chest stretches, and cat-cow movements help reduce muscle spasm, relieve stiffness, and maintain lumbar flexibility without imposing excessive mechanical stress on the spine.

As symptoms subside, progression to the sub-acute stage with core and lumbar stabilizer strengthening exercises, including bridging, partial crunches, and bird-dog exercise, enhances spinal stability by improving neuromuscular control and support to the degenerative lumbar segments.

In the functional stage, endurance-oriented and posture-corrective exercises such as wall sits, advanced bridging, and prolonged bird-dog holds contribute to improved muscular endurance, postural alignment, and functional capacity, thereby reducing the risk of recurrence. The structured progression of exercises, when integrated with therapeutic interventions, resulted in significant pain reduction, improved spinal stability, and enhanced ability to perform daily activities with better posture and endurance.^[7]

Internal medications also played a crucial role

Internal medications played a crucial role in the management of the condition. The selected formulations represent a multi-modal Ayurvedic strategy addressing *Vata dushti*, inflammation, neuromuscular compression, *Ama*, and chronic degenerative changes, while ensuring long-term safety and tissue nourishment.

Gandharva Hastadi Kashayam and **Shad Dharanam Gulika** were administered in the initial phase as *Deepana-Pachana* therapies. *Gandharva Hastadi Kashayam* corrected *Apana Vata* dysfunction through mild *Virechana* and *Vata anulomana*, relieving pain, stiffness, and restricted movements, while promoting neuromuscular relaxation and functional improvement. *Shad Dharanam Gulika* aided *Ama-pachana*, correcting *Ama*-induced *Srotorodha*, enhancing drug absorption, and supporting gastrointestinal tolerance during treatment.^[8]

In the middle phase of treatment, *Sahacharadi Kashayam* was administered for its potent *Vata-samana* and *Vedanasthapana* actions, effectively relieving radiating pain, stiffness, and neuromuscular

involvement. *Trayodasaṅga Guggulu* addressed chronic degenerative pathology by strengthening *Snayu* and *Asthi dhatu*, providing anti-inflammatory and tissue-supportive effects that enhanced spinal stability and slowed degenerative progression. *Guggulu Tikṭhakam Ghrtam* was advised as a *Snehana* prior to *Vasti*, offering deeper *dhatu*-level nourishment, pacifying *Vata-Pitta*, reducing chronic inflammation, and promoting *asthi dhatu poshana*, making it suitable for long-standing degenerative and inflammatory conditions.^[9]

Dhanwantaram Gulika was administered specifically during the period of *Vaitarana Vasti*, where its *Vata-hara*, *Shoolahara*, and *Srotoshodhana* properties supported the action of *Vasti* by relieving pain, stiffness, and neuromuscular involvement during the *Shodhana* phase.

Following the *Vasti* regimen *Brmhana* and *Rasayana* phase, *Maharasnadi Kashayam* was administered for its *Vata-Kaphahara* action, reducing residual pain and stiffness while improving musculoskeletal flexibility. *Gandha Tailam* (capsule), with *Balya*, *Brmhana*, and *Vata-samana* properties, supported *Dhatu* nourishment, musculoskeletal strength, and stability, promoting long-term recovery and preventing recurrence after *Vasti* therapy.^[10]

Thus, Ayurvedic management addressed both the root cause (*Vata* vitiation with *Ama*) and the structural manifestations of lumbar spondylosis, resulting in significant functional improvement without surgical intervention.

CONCLUSION

This case report demonstrates the effective management of lumbar spondylosis with radiculopathy through a phased Ayurvedic approach. Correlated with *Katigata Vata* and *Gridhrasi*, the condition was addressed using *Vata samana*, *Snehana*, *Swedana*, *Vasti*, and *Brmhana*, targeting both underlying pathophysiology and structural pathology. Integrated therapies including internal medications, external procedures, *Vaitharana Vasti*, lumbar traction, and a structured stage wise lumbar exercise program led to significant improvement in subjective and objective outcomes.

Post-treatment, the patient experienced marked reduction in low back pain, complete resolution of radicular symptoms, numbness, and burning sensation, along with improved lumbar mobility and functional capacity. Previously positive SLR, FNST, and Gilles tests became negative, and the patient resumed daily activities without discomfort or need for surgical intervention.

This case highlights that a holistic Ayurvedic management strategy, combined with rehabilitation exercises, can provide a safe, effective, non-invasive option for degenerative lumbar spine disorders. Larger

clinical studies are warranted to validate these findings and establish standardized protocols.

Patient Perspective

The patient reported marked relief in pain and numbness, improved walking ability. He expressed satisfaction with Ayurvedic management and avoided surgery.

REFERENCES

1. Agnivesha, Charaka. Charaka Samhita, Sutrasthana; Nanatmaja Vatavyadhi Adhyaya. In: Sharma RK, Dash B, editors. Charaka Samhita. Vol 1. Reprint ed. Varanasi: Chaukhambha Sanskrit Series Office; 2014. p. 198–200.
2. Chakrapanidatta. Chakradatta, Vatavyadhi Chikitsa. In: Tripathi I, editor. Chakradatta. Reprint ed. Varanasi: Chaukhambha Sanskrit Bhavan; 2010. p. 189–192.
3. Agnivesha, Charaka. Charaka Samhita, Sutrasthana; Shadvirechana Shatashritiya Adhyaya. In: Sharma RK, Dash B, editors. Charaka Samhita. Vol 1. Reprint ed. Varanasi: Chaukhambha Sanskrit Series Office; 2014. p. 395–398.
4. Agnivesha, Charaka. Charaka Samhita, Sutrasthana; Snehadhyaya. In: Sharma RK, Dash B, editors. Charaka Samhita. Vol 1. Reprint ed. Varanasi: Chaukhambha Sanskrit Series Office; 2014. p. 107–110.
5. Vagbhata. Ashtanga Hridaya, Chikitsa sthana; Vasti Chikitsa Adhyaya. In: Murthy KRS, editor. Ashtanga Hridaya. Vol 2. Reprint ed. Varanasi: Chaukhambha Krishnadas Academy; 2012. p. 407–412.
6. Sharma S, Patil P. Clinical evaluation of Vaitharana Vasti in the management of low back pain due to Vata-Kapha disorders. AYU. 2012; 33(4): 514–519.
7. Kisner & Colby Therapeutic Exercise: Foundations and Techniques
8. Chakrapanidatta. Chakradatta, Vatavyadhi Chikitsa. In: Tripathi I, editor. Reprint ed. Varanasi: Chaukhambha Sanskrit Bhavan; 2010. p. 188–195.
9. Agnivesha, Charaka. Charaka Samhita, Chikitsasthana; Vatavyadhi Chikitsa Adhyaya. In: Sharma RK, Dash B, editors. Charaka Samhita. Vol 5. Reprint ed. Varanasi: Chaukhambha Sanskrit Series Office; 2014. p. 28–35.
10. Rao PN, Shailaja U. Integrated Ayurvedic management of lumbar spondylosis with internal medications and Vasti therapy: A case series. AYU. 2016; 37(1): 45–52.

Cite this article as:

Vyshnavi M S, Dana Muhammed, Namitha TP. An Integrated Ayurvedic Approach in the Management of Lumbar Spondylosis with Radiculopathy. International Journal of Ayurveda and Pharma Research. 2026;14(2):117-122. <https://doi.org/10.47070/ijapr.v14i2.3990>

Source of support: Nil, Conflict of interest: None Declared

*Address for correspondence

Dr. Vyshnavi M S

PG Scholar,

Department of Shalyatantra,

Government Ayurveda Medical College,

Pariyaram, Kannur.

Email: msvyshnavi9@gmail.com

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.