

RESTORING MOBILITY IN LUMBAR SPONDYLOSIS: AN INTEGRATIVE AYURVEDIC APPROACH — A CASE REPORT

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ABSTRACT

Background: Lumbar spondylosis is a common degenerative disorder of the lumbar spine associated with low back pain, stiffness, restricted movement and functional disability. From the Ayurvedic perspective, the clinical presentation may be correlated with Katishoola, a Vata-predominant condition.

Case Presentation: A 43-year-old female presented to the OPD of IPGAE&R at SVSP Hospital on 14 July 2026 with low back pain and stiffness associated with radiating pain and numbness involving the posterior thigh, calf and heel for three years. Sleep disturbance, constipation and loss of appetite were also reported. Clinical examination revealed an antalgic gait, straightening of the lumbar lordosis, tenderness at L3-L5, painful flexion and extension and a positive Straight Leg Raise (SLR) test below 30° bilaterally. Digital X-ray showed reduced

lumbar lordosis, early marginal osteophytic changes and reduced intervertebral disc spaces at L2-L3, L3-L4 and L4-L5. **Intervention:** The patient was managed with Dipana-Pachana using Panchakola Churna, Sadya Virechana with Triphala Kwatha and Abhyadi Modaka, Sarvanga Abhyanga with Sahacharadi Taila, Dashamoola Nadi Swedana and Kala Basti comprising Erandamooladi Niruha Basti and Sahacharadi Taila Anuvasana Basti. Shamana therapy included Trayodashanga Guggulu, Vatagajankusha Rasa, Dashamoola Kwatha and Ashwagandha Churna during the hospital-based treatment, followed by Rasnasaptaka Kwatha, the same oral medicines and local application of Laghu Visagarbha Taila for one month after discharge. **Outcome:** Following treatment, pain, stiffness, restricted joint

movement and gait impairment improved from scores of 3, 3, 3 and 2 to 0, 0, 0 and 0, respectively. The SLR test improved from positive at 30° to absence of pain at 90°. The recorded Oswestry Disability Index (ODI) item scores decreased from a total of 38/50 before treatment to 4/50 after treatment, indicating marked improvement in functional disability.

Conclusion: This case showed improvement in pain, stiffness, mobility, gait, SLR findings and functional disability following an Ayurvedic multimodal protocol comprising Shodhana and Shamana therapies. As this is a single case without a control group, the findings are preliminary and should be interpreted cautiously. Controlled clinical studies are required to establish the efficacy and reproducibility of the therapeutic protocol.

KEYWORDS: Lumbar spondylosis, Katishoola, Basti, Erandamooladi Niruha Basti, Sahacharadi Taila, Oswestry Disability Index.

INTRODUCTION

Lumbar spondylosis is a prevalent degenerative condition of the lumbar spine characterized by progressive structural changes involving the intervertebral discs, facet joints and vertebral bodies. It is a common cause of low back pain and disability.^[1] The pathophysiology is multifactorial and includes age-related degeneration, genetic predisposition and mechanical stress on the lumbar spine. Clinical manifestations may include low back pain, leg pain, numbness and motor weakness of the lower extremities, often aggravated by upright standing and walking and relieved by sitting or lying supine.

The source manuscript describes lumbar spondylosis as having multifactorial genetic, mechanical and lifestyle-related contributors. It also notes the substantial burden of low back and neck pain in India. In Ayurveda, the clinical presentation of lumbar spondylosis may be correlated with Katishoola. Acharya Charaka did not describe Katishoola as an independent disease entity, rather he described Prishtagraha and Trikagraha among Vataja Nanatmaja Vyadhi and mentioned Katishoola as a symptom of Gridhrasi. Sharangadhara has mentioned Katishoola among Vataja Nanatmaja Vyadhi. The condition may therefore be considered within the broader framework of Vata-vyadhi.

The present case was managed with a multimodal Ayurvedic protocol consisting of Dipana-Pachana, Sadya Virechana, Abhyanga, Swedana, Basti and Shamana therapy. The clinical response was assessed using symptom-based scoring, Straight Leg Raise testing and the Oswestry Disability Index.

CASE REPORT

Patient Information and Clinical History

July 2023 (3 Years Before Hospital visit)

- Onset of symptoms: The patient developed pain and stiffness in the lower back region.
- Progression: Over the subsequent period, the patient experienced radiating pain and numbness extending to the posterior aspect of the thigh, calf muscle and heel.

May 2026 (2 Months Before Hospital visit)

- Movement was restricted and pain increased associated with sleep disturbances, constipation with irregular bowel movements and loss of appetite.

July 14, 2026 (Day of Hospital visit)

- **Event:** Patient presents to the Kayachikitsa Outpatient Department (OPD) at the Institute of Post Graduate Ayurvedic Education & Research (IPGAER), Kolkata.
- **Patient Profile:** 43 years old married female, housewife from a lower socio-economic background.
- **Physical Examination:** Medium-built, 53 kg, 5 feet 1 inch tall, fair complexion.
- **Medical History Confirmed:** No history of diabetes, hypertension, hypothyroidism, spinal cord injury, or drug abuse.
- **Family History:** Both parents are Hypertensive and under the supervision of the conservative system of medicine.
- **Addiction:** No such
- **Marital History:** Married for 14 years
- **Menstrual history:** Normal, 30 days cycle
- **Sexually transmitted disease history:** No such

Baseline Findings

General examination

Table -1.

Blood pressure	130/90 mm of Hg
Pulse rate	84 beats/min
Respiratory rate	20/min
Temperature	Normal
Anaemia	Not present
Jaundice	Not present
Clubbing	Not present
Oedema	Not present

Mental state	Conscious
Gait	Antalgic

Relevant systemic & local examination

Table -2.

Examination	Finding
Inspection	Slight straightening of the lumbar region, suggesting loss of lumbar lordosis; pain aggravated while standing and walking, consistent with neurogenic claudication.
Palpation	Tenderness at the L3, L4 and L5 vertebral levels.
Flexion	Lower back pain when bending forward.
Extension	Low back pain while leaning backwards.
SLR	Right leg: below 30°; Left leg: below 30°.

Investigation

Digital X-ray of the lumbosacral spine showed reduced lumbar lordosis, early marginal osteophytic changes and reduced intervertebral disc space between L2-L3, L3-L4 and L4-L5.

Ayurvedic Assessment

Table: 3.

Ashtavidha Pariksha	Finding
Nadi	Vata-Kaphaja
Mutra	Prakrita
Mala	Vivandha
Jihwa	Sama
Shabda	Prakrita
Sparsha	Prakrita
Drik	Prakrita
Akrti	Madhyam

Diagnostic Assessment

To establish objective and clinically relevant measures of treatment response, the patient was assessed using a structured symptom based assessment scale, the Straight Leg Raising (SLR) test and the Oswestry Disability Index (ODI). The symptom-based assessment included evaluation of pain, stiffness, movement of joints and gait, with each parameter graded on a 0–3 scoring system, where a higher score indicated greater severity or functional impairment. The SLR test was performed to assess limitation associated with radiating low back and lower-limb symptoms. The Oswestry Disability Index (ODI), a validated functional assessment tool for low back pain, was used to evaluate the impact of the condition on daily activities, including pain intensity, personal care, lifting, walking, sitting, standing, sleeping, sex life, social life and travelling. These parameters were assessed before initiation of

treatment and reassessed following completion of the therapeutic protocol.

Treatment Schedule

The treatment plan included Dipana and Pachana with Panchakola Churna, followed by Sadya Virechana with Triphala Kwatha and Abhyadi Modaka. Subsequently, Sarvanga Abhyanga with Sahacharadi Taila and Sarvanga Swedana with Dashamoola Nadi Swedana were administered. The patient was then subjected to Kala Basti, comprising Erandamooladi Niruha Basti and Sahacharadi Taila Anuvasana Basti, as per the prescribed schedule. Along with Shodhana therapy, Shamana Chikitsa was administered with Trayodashanga Guggulu, Vatagajankusha Rasa, Dashamoola Kwatha and Ashwagandha Churna during the hospital stay. After discharge, the patient was advised a one-month regimen consisting of Rasnasaptaka Kwatha, Trayodashanga Guggulu, Vatagajankusha Rasa, Dashamoola Kwatha, Ashwagandha Churna and local application of Laghu Visagarbha Taila.

Table 4.

Date	Therapeutic Intervention	Dosage
14.07.2026–16.07.2026	Dipana & Pachana with Panchakola Churna	3gm twice daily after food
17.07.2026	Sadya Virechana with Triphala Kwatha and Abhyadi Modaka	50 ml Triphala kwatha and 30 gm Abhyadi Modaka
18.07.2026 onward	Sarvanga Abhyanga with Sahacharadi Taila and Dashamoola Nadi Swedana	Q.S.
21.07.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
22.07.2026	Erandamooladi Niruha Basti	Approx. 600 mL
23.07.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
24.07.2026	Erandamooladi Niruha Basti	Approx. 600 mL
25.07.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
26.07.2026	Erandamooladi Niruha Basti	Approx. 600 mL
27.07.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
28.07.2026	Erandamooladi Niruha Basti	Approx. 600 mL
29.07.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
30.07.2026	Erandamooladi Niruha Basti	Approx. 600 mL
31.07.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
01.08.2026	Erandamooladi Niruha Basti	Approx. 600 mL
02.08.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
03.08.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
04.08.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
05.08.2026	Anuvasana Basti with Sahacharadi Taila	100 ml
Basti Formulation		
Erandamooladi niruha basti	Madhu	50 ml
	Saindhava Lavana	10 gm
	Sahacharadi taila	100 ml
	Putayavani kalka	50 gm
	Kwatha	400 ml

	Gomutra	50 ml
Shamana Chikitsa during Basti Administration		
During Hospitalization	Trayodashanga Guggulu	500 mg twice daily
	Vatagajankusha Rasa	500 mg twice daily
	Dashamoola Kwatha	20 mL once daily
	Ashwagandha Churna	3 gm twice daily
Shamana Chikitsa after Discharge		
During Follow up	Rasnasaptaka Kwatha	20 mL once daily
	Trayodashanga Guggulu	500 mg twice daily
	Vatagajankusha Rasa	500 mg twice daily
	Dashamoola Kwatha	20 mL once daily
	Ashwagandha Churna	3 gm twice daily
	Laghu Visagarbha Taila – local application	As required

Follow up and Outcomes

The combined treatment protocol showed significant improvement after 30 days follow up. The follow-up assessment was carried out using the predefined clinical parameters, including pain, stiffness, movement of joints, gait, Straight Leg Raising (SLR) test and Oswestry Disability Index (ODI). The clinical findings obtained after follow-up were compared with the baseline assessment to determine changes in symptom severity and functional disability. The follow-up evaluation was intended to assess the overall clinical and functional response to the Ayurvedic treatment protocol.

Table 5: Effect of treatment on assessment parameters.

Parameter	Before Treatment	After Follow-up
Pain	4	2
Stiffness	4	1
Movement of joints	4	1
Gait	3	1
SLR Test	Positive at 30°	No pain at 90°

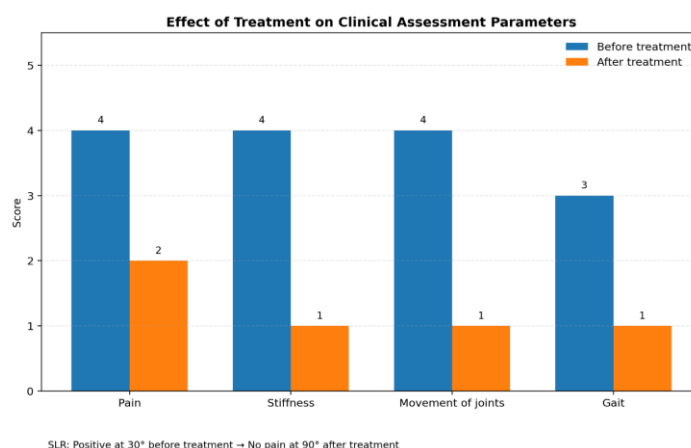
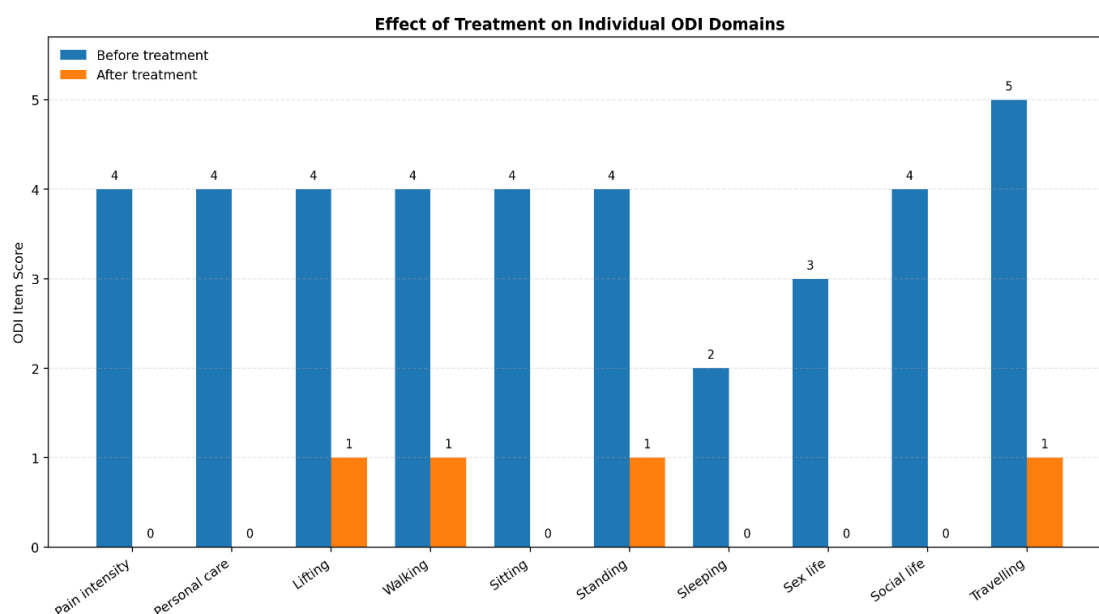


Figure 1: Effect of treatment on assessment parameters.

Table 6: Effect of treatment on Oswestry Disability Index scale.

ODI Item	Before Treatment	After Treatment
Pain intensity	4	0
Personal care	4	0
Lifting	4	1
Walking	4	1
Sitting	4	0
Standing	4	1
Sleeping	2	0
Sex life	3	0
Social life	4	0
Travelling	5	1

**Figure 2: Effect of treatment on Oswestry Disability Index scale.****Table 7: Arbitrary scoring of assessment parameters.**

Symptoms	Criteria	Arbitrary score
Pain	No pain while walking	1
	Mild pain while walking	2
	Moderate pain while walking	3
	Severe pain while walking	4
Stiffness	No stiffness	1
	Stiffness for 15-30 min	2
	Stiffness for 30-45 min	3
	Stiffness more than 1 hour	4
Movement of joints	Normal movement	1
	Mild restricted movement	2
	Moderate restricted movement	3
	Severe restricted movement	4
Gait	Walks very well	1

	Walks relatively well	2
	Walk with support	3
	Unable to walk	4

DISCUSSION

Classical management of Vatavyadhi emphasizes Snehana, Swedana, Samshodhana and Rasayana, with appropriate modification according to the clinical condition. In the present case, external oleation (Abhyanga) with Sahacharadi Taila^[3] was incorporated as part of the treatment protocol, considering the Vata predominant clinical presentation. Swedana is traditionally administered after adequate Abhyanga. It is considered useful for promoting relaxation, reducing stiffness and facilitating the movement of aggravated Doshas from the peripheral tissues towards the Koshtha, thereby preparing the patient for subsequent Shodhana procedures. In the present case, Dashamoola Nadi Swedana was employed following Abhyanga. In this case, Panchakola Churna was initially administered for Dipana-Pachana. Panchakola comprises Pippali, Pippalimoola, Chavya, Chitraka and Nagara and is traditionally described as useful for improving Agni and addressing Vata Kapha predominance. Following this preparatory phase, Sadya Virechana^[4] was performed using Triphala Kwatha and Abhyadi Modaka with the intention of facilitating Koshta Shodhana before commencement of the Basti regimen. Among the Panchakarma procedures, Basti holds particular importance in Vata disorders. In the present case, Erandamooladi Niruha Basti^[5] was selected as the principal Niruha formulation.^[6] The Kwatha component included Erandamoola, Palasha, Laghu Panchamoola, Rasna, Ashwagandha, Atibala, Guduchi, Punarnava, Aragvadha, Devadaru and Madanaphala, while Satapuspa, Priyangu, Pippali, Yashtimadhu, Bala Moola, Indrayava and Musta were used as Kalka drugs. According to the Ayurvedic rationale described in the source manuscript, the formulation possesses Dipana and Lekhana properties and may be useful in conditions involving Kaphavrita Vata. The Ushna and Tikshna attributes of several ingredients are traditionally considered helpful in addressing Srotorodha and reducing manifestations such as Stambha and Gaurava. Sahacharadi Taila was used for Anuvasana Basti and Abhyanga. The formulation contains Sahachara, Dashamoola, Manjistha, Shatavari, Devadaru, Kushta, Chandana, Jatamamsi, Gogdugdha and Tila Taila. Within the Ayurvedic framework, Sahacharadi Taila is regarded as particularly useful in Vata-predominant conditions and is traditionally associated with strengthening and nourishing effects. Its use in the present case was therefore intended to provide both local and systemic Vata-pacifying and Brimhana support. Trayodashanga Guggulu^[7] was included as a Shamana formulation. It contains Abha, Ashwagandha,

Hapusha, Guduchi, Shatavari, Gokshura, Vriddhadaraka, Rasna, Satapuspa, Sati, Yavani, Sunthi, Guggulu and Ghrita. The formulation is traditionally indicated in conditions such as Katigraha, Gridhrasi, Prishthagraha, Asthigatavata and Vata-Kaphaja disorders. Its inclusion in the present therapeutic protocol was based on its classical application in Vata disorders and its traditionally described anti-inflammatory and Vata-pacifying properties. Vatagajankusha Rasa^[8] was also administered as part of Shamana therapy. The formulation contains ingredients including Rasa Sindura, Lauha Bhasma, Gandhaka, Haritala, Vatsanabha, Trikatu and Tankana. Traditionally, it is used in various Vata disorders, including Gridhrasi. Its therapeutic attributes are described in terms of Vedanasthapana, Shoolaprashamana, Balya, Rasayana and Srotoshodhana actions. In the present case, its inclusion was intended to provide symptomatic support, particularly against pain and Vata-Kapha-related manifestations. However, claims regarding specific pharmacokinetic or cellular mechanisms of its mineral and herbo-mineral constituents cannot be established from the present case and therefore require appropriate experimental and clinical validation. Dashamoola Kwatha^[9] was prescribed as another component of Shamana therapy. Dashamoola is traditionally regarded as a Vata-pacifying formulation and has been used in various Vata disorders, including conditions associated with pain and inflammation. The source manuscript specifically relates Dashamoola to the management of Katishoola and describes its potential analgesic, anti-inflammatory and anti-oedematous effects. These properties provide an Ayurvedic rationale for its inclusion in the present case. Following discharge, Rasnasaptaka Kwatha^[10] was incorporated into the continuation regimen. It contains Rasna, Amrita, Devadaru, Aragvadha, Trikantaka, Eranda and Punarnava and is traditionally indicated in pain involving the Jangha, Uru, Prishtha, Trika and Parshva. Rasna and Eranda are described as possessing Vata-shamaka, Shoolahara, Shothahara and Vedanasthapana properties. Devadaru, Aragvadha and Eranda are traditionally considered supportive of Anulomana, while Punarnava contributes to the management of Shotha. Amrita is regarded as an important Shamana drug with traditional applications in Ama and Vata-related disorders. Overall, the treatment strategy in this case was based on a multimodal Ayurvedic approach, combining Agni correction, Koshta Shodhana, Snehana, Svedana, Basti Karma and subsequent Shamana therapy. The sequence was planned to address the presumed Vata-Kapha involvement while simultaneously targeting pain, stiffness, restricted movement and functional impairment.

CONCLUSION

This case suggests that an integrated Ayurvedic protocol including Virechana, Abhyanga,

Swedana and Kala Basti may help reduce pain and stiffness and improve mobility and daily functioning in lumbar spondylosis. The patient showed improvement in clinical symptoms, SLR and ODI scores. However, as this is a single-case report with limited follow-up, the findings are preliminary and need confirmation through larger controlled studies.

PATIENT'S PERSPECTIVE

The patient reported significant relief in low-back pain and stiffness, with improved walking and daily activities. She was satisfied with the treatment and felt that her overall quality of life had improved.

INFORMED CONSENT

Informed consent was obtained from the patient.

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