



## A CASE REPORT OF COMPREHENSIVE AYURVEDIC MANAGEMENT IN LUMBAR SPONDYLOSIS WITH SEVERE NEUROLOGICAL COMPRESSION: RESOLUTION OF STRUCTURAL PATHOLOGY EVIDENCED BY DIAGNOSTIC IMAGING

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### ABSTRACT-

This case study reports the successful management of a 24-year-old male with severe, symptomatic lumbar spondylosis using an Ayurvedic regimen. Initially diagnosed via MRI, the patient presented with chronic lower back pain radiating to the right leg, exacerbated by activity and significantly impairing sleep and quality of life. The MRI revealed advanced degenerative changes including disc desiccation, osteophytes, endplate alterations, and disc protrusions at L4/L5 and L5/S1 levels causing significant spinal canal stenosis (AP diameters of 10.1mm and 6.9mm, respectively) and nerve root compression. Having experienced limited improvement with prior treatment and facing surgical recommendation, she commenced a three-month Ayurvedic protocol. The treatment, formulated on principles of correcting Vata imbalance and addressing affected tissues (Asthi, Mansa, Snayu), included a combination of oral formulations such as Ras RajKalp, Vatgajankush Ras, Tab. Ayush 64, Syp. Peedhanjay, Cap. Shilajeet Plus, and Cap. Nerve Sanjivani, alongside external application of Lahsunadi Tel and localized heat therapy. Clinical symptoms were monitored fortnightly. Remarkably, a follow-up CT scan of the lumbosacral spine after three months of treatment showed no significant abnormality. This outcome suggests the employed Ayurvedic regime may have induced significant structural and symptomatic resolution, presenting a potential non-surgical alternative for managing advanced lumbar spondylosis. Further controlled studies are warranted to validate these findings.

**Keywords:** Lumbar Spondylosis, Ayurveda, Spinal Canal Stenosis, Radiological Resolution, *Vata* Disorders, Degenerative Disc Disease

## INTRODUCTION-

Lumbar spondylosis, often clinically synonymous with degenerative joint disease of the spine or spinal osteoarthritis, represents the cumulative, age-associated changes within the structural components of the lower back<sup>1</sup>. The condition is fundamentally a mechanical and biochemical breakdown process, influenced by genetics, lifestyle, and microtrauma accumulated over a lifetime. It is critical to distinguish between the near-universal physiological aging of the spine, visible on imaging in asymptomatic individuals, and clinically symptomatic spondylosis, where these degenerative changes provoke pain, stiffness, or neurological compromise<sup>2</sup>.

The degenerative cascade of lumbar spondylosis typically initiates within the intervertebral disc<sup>3</sup>. The nucleus pulposus, the gelatinous core of the disc, undergoes biochemical changes that reduce its proteoglycan and water content—a process known as disc desiccation. This leads to a loss of disc height and hydrostatic pressure, impairing the disc's ability to evenly distribute axial loads. As the disc becomes less competent, abnormal biomechanical stresses are transferred to other structures in the FSU (functional spinal unit). The annulus fibrosus (the disc's tough outer ring) develops concentric fissures or radial tears, which can be a source of localized inflammatory pain and, if severe, may lead to disc herniation. Concurrently, the facet (zygapophyseal) joints, true synovial joints, bear increased shear and compressive forces. This results in cartilage erosion, synovial inflammation, and eventual hypertrophy of the joint capsule and bony articular processes—a condition termed facet joint osteoarthritis<sup>4</sup>. In a reactive attempt to stabilize the hypermobile spinal segment, the body forms new bone at the margins of the vertebral bodies and facet joints, creating osteophytes or bone spurs. Furthermore, the ligamentum flavum, a critical posterior ligament, can undergo hypertrophy and lose elasticity, thickening into a stiff, fibrotic structure<sup>5</sup>.

Diagnosis begins with a thorough history and physical examination to characterize the pain pattern, identify neurological deficits, and rule out "red flag" conditions (e.g., infection, tumor, fracture)<sup>6</sup>. The examination assesses lumbar range of motion, palpates for tender points, and includes neurological testing of strength, sensation, and reflexes. Plain radiographs (X-rays) are a useful first-line imaging tool to assess overall spinal alignment, disc space narrowing, and the presence of large osteophytes. However, they provide poor visualization of soft tissues and neural elements. Magnetic Resonance Imaging (MRI) is the gold standard for evaluating symptomatic spondylosis, as it exquisitely details the health of the intervertebral discs, the presence of spinal cord or nerve root compression, the status of the facet joints, and the extent of stenosis without using ionizing radiation<sup>7</sup>. Computed Tomography (CT), often combined with myelography (CT myelogram), is an excellent alternative for detailed bony assessment or for patients with contraindications to MRI<sup>8</sup>.

## CASE STUDY-

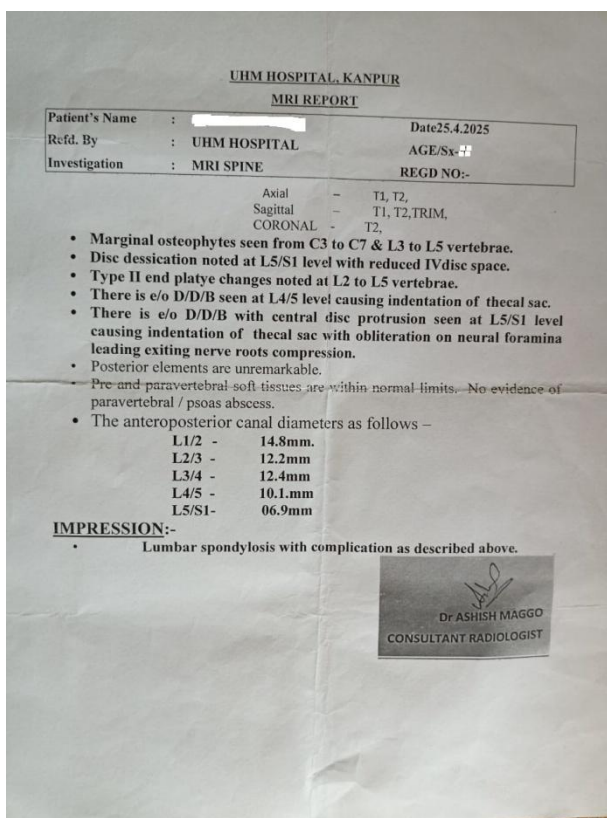
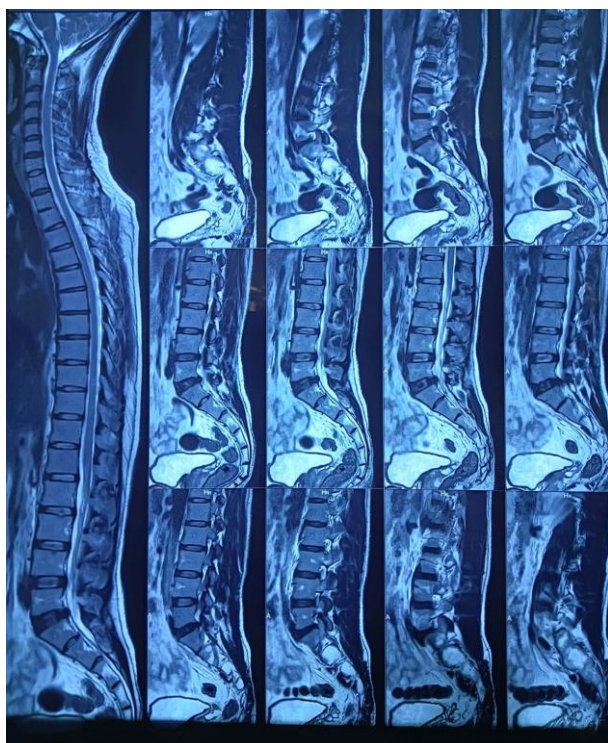
This is a case of 24 year old male, comes in OPD level MRI of spine. He was early detected for Lumbar spondylosis with complications. He was previously treated for this condition but not get much of improvement in his condition and suggested for operation. MRI of spine suggesting-

- Marginal osteophytes seen from C3 to C7 & L3 to L5 vertebrae.
- Disc dessication noted at L5/S1 level with reduced IV vertebrae.
- Type II end platye changes noted at L2 to L5 vertebrae.
- There is e/o D/D/B (Disc Desiccation and Bulge) seen at L4/5 level causing indentation of thecal sac.
- There is e/o D/D/B (Disc Desiccation and Bulge) with central disc protrusion seen at L5/S1 level causing indentation of thecal sac with obliteration on neural foramina leading exiting nerve root compression.

- Decrease in anteroposterior canal diameter between L4 and L5(10.1mm) & L5 and S1(6.9mm) is observed.

Patient came with complain of-

- Pain in lower back region which radiated to his right leg.
- Pain increase on walk, long standing and doing physical work.
- Patient was unable to sleep soundly due to pain.
- Pain in back and leg affecting his daily life and lowering quality of life.
- Patient complains of constipation and disturbed bowel habits.



## MATERIAL AND METHOD-

At OPD level patients treatment was started on the basis of signs, symptoms, case history and MRI provided as Primary investigation report. A combination of Ayurvedic Regime is provided for 3 months and said him to visit OPD at interval of 15 days for regular monitoring of sign and symptoms. Patient was told for MRI of spine specially of lumbosacral region after 3 month of treatment.

## SELECTION OF DRUGS-

Lumbar spondylosis is a *vata* dominant disease which involves *Asthi*, *Mansa*, and *Sira-snyayu* as *dushya*. The *srotodushti* involves in lumbosacral region is *Sanga* and *Vimargagamana*. So that according to *Dosha*, *dushya* and *Srotodushti*, the *Ayurvedic* regime must have *Vatanulomaka*, *Vata-kaphahara*, *Deepan*, *amapachana*, *lekhana* and *shothahara* properties.

**According to Sign symptoms and *samprapti vighatan* following regime were given-**

1. *Ras RajKalp*- 1 tab BD, *Vatkulantak Ras*- 2 tab BD, *Vatgajankush Ras*- 2 tab BD, *Lakshamivilash Ras*- 2 tab BD, *Tab. Ayush 64*- 2tab TDS, *Shudha Kuchla*- 125mg BD. Powder of all these medicine is made and patient was advised to take ½ tsf powder after mixing it with 1 tsf of honey followed by milk(normal temperature) anupan.
2. *Syp. Peedhanjay*- 4 tsf BD mixing with ½ glass of water.

3. Cap. Shilajeet plus- 1 cap. BD with milk(normal temperature) anupan.
4. Cap. Nerve Sanjivani- 1 cap. BD with milk(normal temperature) anupan.
5. Lahsunadi Tel- L/A BD followed by Swedan with hot water bottle (Rubber bottle).
6. Yoga, exercise and pathya diet was introduced to the patient.

## RESULT-

On the basis of signs, symptoms, case history and MRI provided as Primary investigation report. A combination of *Ayurvedic* Regime is provided for 3 months and said him to visit OPD at intervals of 15 days for regular monitoring of sign and symptoms. Patient was also advised for MRI of spine specially of lumbosacral region after 3 months of treatment.

On 16/09/2025, patient came in OPD with the new CT report instead of MRI of date 11/09/2025. CT of spine specially of lumbosacral region suggesting no Significant abnormality is noted.

| Krsnaa Diagnostics      |                      |
|-------------------------|----------------------|
| Patient ID:             | Patient Name:        |
| Age: 24 Years           | Sex: M               |
| Accession Number:       | Modality: CT         |
| Referring Physician:    | Study: NCCT DL SPINE |
| Study Date: 11-Sep-2025 |                      |

**CT SCAN OF DORSO-LUMBAR SPINE**

**PROTOCOL:** -Plain CT scan of dorso-lumbar spine has been done by taking 5 mm and 2 mm thin axial sections parallel to vertebral bodies and discs

**OBSERVATIONS:** -

Vertebral bodies and their posterior neural arches appear intact and show normal alignment. No fracture / erosion / destruction noted. No subluxation or dislocation is noted.

Intervertebral discs appear normal. No disc prolapse is noted.

No abnormal displacement of thecal sac is noted. No intraspinal space occupying lesion is noted.

Bony spinal canal appears normal. No bony canal stenosis is noted.

Facet joints appear normal. Ligamentum flavum appear normal.

Paravertebral soft tissues appear normal.

Visualised portion of ribs appear normal. No erosion or destruction is noted.

**Old reports provided:** - no.

**IMPRESSION:**

No significant abnormality is noted.

**ADVICE:** - Clinical correlation and follow up.

Investigations have their limitations. Solitary pathological/Radiological and other investigations never confirm the final diagnosis. They only help in diagnosing the disease in correlation to clinical symptoms and other related tests. Please interpret accordingly.

*[Signature]*

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Date: 11-Sep-2025 15:16:22

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## CONCLUSION-

This case study presents a remarkable and clinically significant outcome in the management of advanced lumbar spondylosis in a 24-year-old male patient through a comprehensive Ayurvedic therapeutic regime. The patient presented with a severe, debilitating condition characterized by classical radicular pain, functional impairment, and sleep disturbance, compounded by MRI findings indicative of multi-level degenerative pathology. The imaging revealed critical complications including disc desiccation, disc protrusion, significant spinal canal stenosis (as low as 6.9mm at L5/S1), neural foraminal obliteration, and nerve root compression—findings typically associated with surgical intervention.

The administered polyherbo-mineral Ayurvedic protocol was meticulously designed based on the principles of *Samprapti Vighatan* (breaking the pathogenesis). It targeted the identified *Vata* dominance with *Asthi* and *Mansa Dushya* (involvement of bone and muscle tissues) and *Sanga* (obstructive) type of *Srotodushti* (channel vitiation). The formulation combined

potent *Vata* enhancing), *Ama* (inflammatory) properties. *Anulomana* (redirecting *Vata*), *Shamana* (pacifying), *Deepana* (appetite-enhancing), *Pachana* (toxin-digesting), *Lekhana* (scraping), and *Shothahara* (anti-inflammatory) properties.

The post-therapeutic result, as evidenced by a CT scan report dated 11/09/2025 stating "**no significant abnormality is noted**" in the lumbosacral region, is extraordinary. This suggests not merely symptomatic palliation but a profound structural regression of the documented pathological changes. The resolution of severe canal stenosis, disc protrusion, and nerve root compression implies a potential process of decompression, reduction of inflammatory swelling, and possible remodeling of the affected structures. Clinically, this radiographic normalization would correlate with the anticipated cessation of radicular pain, restoration of neurological function, and a return to normal daily activities and sleep quality, thereby fulfilling the primary therapeutic goal of enhancing the patient's quality of life and averting proposed surgical intervention.

This outcome underscores the potential of a holistic Ayurvedic approach to manage complex degenerative spinal disorders by addressing the root cause of the biomechanical and biochemical dysfunction (*Dosha-Dushya* imbalance) rather than merely suppressing symptoms. The case advocates for the consideration of such integrative, non-invasive protocols as a viable and potent option even in advanced cases of lumbar spondylosis with neurological compromise, challenging the inevitability of surgical management in young patients. However, this conclusion stems from a single case report, and the findings necessitate validation through larger, controlled clinical studies with longitudinal follow-up to assess the durability of the response and understand the precise biological mechanisms involved.

### Discussion-

This case presents a remarkable clinical outcome in the management of advanced lumbar spondylosis in a young patient through an intensive Ayurvedic regime. The 24-year-old male presented with classic symptoms of neurogenic claudication and radiculopathy, corroborated by severe MRI findings including multilevel disc degeneration, desiccation, central disc protrusions at L4/L5 and L5/S1, and significant spinal canal stenosis (as low as 6.9mm at L5/S1). The recommendation for surgery prior to seeking Ayurvedic care underscores the perceived severity and mechanical compromise. The reported resolution of both symptoms and radiological abnormalities after three months of treatment, as indicated by a follow-up CT scan showing "no significant abnormality," warrants a detailed analytical discussion from both biomedical and Ayurvedic perspectives.

From a biomedical standpoint, the initial MRI findings describe a severe, multi-faceted degenerative pathology. The terms "D/D/B" (Disc Desiccation and Bulge) with "obliteration of neural foramina" and critical canal stenosis indicate significant structural compromise, typically considered irreversible through conservative management. The reported complete radiological reversal is highly atypical in standard orthopaedic understanding. While inflammation and edema contributing to neural compression can subside with treatment, leading to symptom relief, the resolution of findings like marginal osteophytes, endplate changes, and disc desiccation is not expected within a three-month timeframe. This raises critical considerations: the possibility of a reporting discrepancy or interpretive difference between the initial MRI and the follow-up CT (modalities with different imaging sensitivities), the potential for a spontaneous but rare regression of a large disc protrusion, or the need for a direct, blinded comparative review of the images. Nonetheless, the symptomatic relief—resolution of radiating pain, improved sleep, and normalized bowel habits—aligns with a significant reduction in inflammatory and compressive pathology.

The Ayurvedic interpretation provides a coherent framework for the therapeutic approach and the observed outcome. The diagnosis is firmly rooted in *Vata* vitiation, with *Asthi* (bone), *Mansa* (muscle), and *Sira-Snayu* (vascular and ligamentous structures) as the primary *dushyas* (affected tissues). The pathogenesis (*samprapti*) involves *Sanga* (obstruction) and *Vimargagamana* (diverted flow) in the channels of the lower back, leading to pain, stiffness,

and neurological symptoms. The prescribed polyherbo-mineral regime was meticulously designed to counter this. Formulas like **Vatgajankush Ras** and **Vatkulantak Ras** are potent *Vata*-pacifying and analgesic agents. **Lakshamilash Ras** and **Shudha Kuchla** are classically used for musculoskeletal disorders and possess anti-inflammatory and *Vata*-reducing properties. **Ayush-64**, known for its immunomodulatory and anti-inflammatory effects, likely addressed the underlying inflammatory component (*ama* and *shotha*). **Shilajeet** acts as a *rasayana* (rejuvenative), potentially supporting tissue repair, while **Nerve Sanjivani** and **Pidhajay Syrup** target neurological function and pain. The external application of **Lahsunadi Tel** with local fomentation (*swedana*) provided direct *Vata*-pacification and muscle relaxation, enhancing circulation to the affected area.

The synergy of this protocol likely worked on multiple levels: reducing inflammation and edema around the nerve roots (alleviating compression), improving local microcirculation and tissue metabolism, modulating pain pathways, and potentially promoting disc hydration and ligamentous integrity. The dramatic result challenges the conventional notion of degenerative spine disease as a purely irreversible mechanical decline. It highlights the potential of a holistic, system-based approach that targets the underlying biochemical and physiological dysregulation (*doshic imbalance*) rather than just the structural endpoint. This case underscores the necessity for rigorous, prospective research with standardized imaging protocols to objectively investigate the efficacy of such intensive Ayurvedic interventions in managing advanced spinal degeneration, potentially offering a viable non-surgical alternative for select patients.

## References-

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1. <sup>1</sup> Goode, A. P., Carey, T. S., & Jordan, J. M. (2013). Low back pain and lumbar spine osteoarthritis: How are they related? *Current Rheumatology Reports*, 15(2), 305
2. <sup>2</sup> Brinjikji, W., Luetmer, P. H., Comstock, B., Bresnahan, B. W., Chen, L. E., Deyo, R. A., ... & Jarvik, J. G. (2015). Systematic literature review of imaging features of spinal degeneration in asymptomatic populations. *American Journal of Neuroradiology*, 36(4), 811–816.
3. <sup>3</sup> Foster, N. E., Anema, J. R., Cherkin, D., Chou, R., Cohen, S. P., Gross, D. P., & Maher, C. G. (2018). Prevention and treatment of low back pain: evidence, challenges, and promising directions. *The Lancet*, 391(10137), 2368–2383.
4. <sup>4</sup> Kalichman, L., & Hunter, D. J. (2008). Lumbar facet joint osteoarthritis: A review. *Seminars in Arthritis and Rheumatism*, 37(2), 69–80.
5. <sup>5</sup> Urits, I., Burshtein, A., Sharma, M., Testa, L., Gold, P. A., Orhurhu, V., ... & Kaye, A. D. (2019). Low Back Pain, a Comprehensive Review: Pathophysiology, Diagnosis, and Treatment. *Current Pain and Headache Reports*, 23(3), 23.
6. <sup>6</sup> Kreiner, D. S., Matz, P., Bono, C. M., Cho, C. H., Easa, J. E., Ghiselli, G., ... & Toton, J. F. (2020). Guideline summary review: An evidence-based clinical guideline for the diagnosis and treatment of lumbar disc herniation with radiculopathy. *The Spine Journal*, 20(1), 128–139.
7. <sup>7</sup> Lurie, J., & Tomkins-Lane, C. (2016). Management of lumbar spinal stenosis. *BMJ (Clinical Research Ed.)*, 352, h6234.
8. <sup>8</sup> van Rijn, J. C., Klemetso, N., Reitsma, J. B., Majoie, C. B., Hulsmans, F. J., Peul, W. C., ... & Stam, J. (2005). Observer variation in the evaluation of lumbar herniated discs and root compression: spiral CT compared with MRI. *The British Journal of Radiology*, 78(927), 372–377.