

# Neurotherapy as an intervention for lumbar spondylosis



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## ABSTRACT

Lumbar spondylosis (LS) is a common degenerative spinal condition that contributes significantly to chronic low back pain and disability, particularly in older adults. This case report investigates the effectiveness of neurotherapy as a non-invasive treatment for LS. A 35-year-old woman with magnetic resonance imaging (MRI)-confirmed LS, opted against surgical intervention, and underwent 48 neurotherapy sessions over a 12-week period. The therapy targeted seven specific anatomical zones, aiming to enhance circulation, reduce nerve compression, and improve intervertebral spacing. Post-treatment MRI demonstrated a notable increase in L5-S1 disc space from 3.0 mm to 7.0 mm, indicating reduced spinal compression. In addition, the patient reported significant pain relief and improved mobility. These findings suggest that neurotherapy offers both symptomatic and structural benefits, making it a promising alternative to traditional treatments for LS. This case highlights the potential of neurotherapy as a non-invasive therapeutic option to address the root causes of LS and enhance patient outcomes.

**Key words:** Lumbar spondylosis; Low back pain; Neurotherapy; Non-invasive; Treatment

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## INTRODUCTION

Low back pain (LBP) is one of the most common health problems, affecting 60–85% of adults during their lifetime. It is a global public health concern impacting both developed and developing nations through increased healthcare costs, insurance claims, reduced productivity, and disability-related compensation.<sup>1</sup> Lumbar spondylitis (LS) is a chronic, non-inflammatory degenerative condition of the intervertebral discs and facet joints, with prevalence increasing with age.<sup>2</sup> Radiologic features of LS include osteophytes, endplate sclerosis, and disc space narrowing.<sup>3</sup> Although often asymptomatic, disc degeneration is strongly linked to LBP and may cause sciatalgia and spinal stenosis, ultimately leading to chronic pain and disability.<sup>4</sup>

Several treatments have been explored. A pilot study showed collagen improved LBP in LS,<sup>5</sup> while glucosamine

sulfate with chiropractic care and nutrients preserved joint function.<sup>6</sup> However, surgical interventions often involve high costs, limited insurance, post-operative complications, lifestyle changes, and weight gain. Gibson and Waddell criticized existing LS trials for poor design, bias and limited long-term outcomes.<sup>7</sup> Ayurvedic therapies have shown temporary relief by improving mobility and reducing pain,<sup>8</sup> but it does not address spinal compression. Thus, a novel treatment is needed—one that relieves pain while addressing spinal compression by enhancing the intervertebral gap for lasting improvement.

## CASE PRESENTATION

This case of LS was managed over a 3-month period (September–December 2022) at a healthcare facility in Eastern India. Written informed consent, including approval for clinical photography, was obtained from the

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patient. Ethical clearance was granted as per institutional guidelines. The authors declare no conflicts of interest, and all data are derived from documented clinical records.

A 35-year-old married woman presented with severe LBP. MRI confirmed LS and surgical intervention was advised. However, the patient opted for neurotherapy as a non-invasive alternative due to her reluctance toward surgery. Neurotherapy, an emerging modality in complementary medicine, has shown promising results in managing LS. It employs circulation-based pressure stimulation targeting specific zones aligned with vascular pathways to enhance blood flow, relieve spinal compression, and restore physiological balance.<sup>9,10</sup>

This case highlights the relevance of non-invasive interventions in chronic musculoskeletal conditions.

The patient underwent 48 neurotherapy sessions over 3 months (four sessions per week), each tailored to stimulate targeted pressure points. These sessions aimed to relieve sensory disturbances, such as pain and tingling, while promoting lumbar nerve decompression and functional recovery. The following section outlines the key therapeutic techniques applied during treatment:

- A. (4) Para therapy for parathyroid hormone (PTH) regulation: Pressure was applied alternately to the elbow and shoulder joint of the right arm for 6 s each, repeated 4 times. The stimulation of the 4 Para points targeted PTH regulation, which is essential for calcium metabolism and bone health. Optimizing PTH levels helps maintain bone density, prevent further degeneration, and provide adequate support to the spine.
- B. Whole digestion (WD) Therapy for lower pelvic circulation: Pressure was applied at three points along the arm, from the elbow to the wrist, with six repetitions at each point, totaling 18 applications. The WD therapy aimed to improve circulation in the lower pelvic region, promoting better oxygenation and nutrient supply to spinal tissues. This enhanced blood flow helps alleviate nerve compression, reduce inflammation, and support recovery.
- C. Pan points for plasmin activation: Pressure was applied 8 times for 6 s each at the muscle alongside the pelvic bone. The stimulation of the 8 Pan points was designed to activate plasmin, an enzyme responsible for breaking down fibrin clots and improving blood circulation. This process reduces vascular congestion and enhances tissue repair in the affected spinal region.
- D. Liver points for mast cell activation: Pressure was applied at three consecutive points along the left arm and leg—from the elbow to the wrist and from the upper to the lower thigh. The pressure was applied simultaneously to both the hand and leg, repeated 7 times. The 7 Liver points were utilized to activate

mast cells, stimulating the secretion of heparin, a natural anticoagulant. Heparin prevents clot formation and promotes microcirculation, ensuring an adequate blood supply to the compressed spinal nerves.

- E. L5-S1 rubbing point for lumbar circulation: Rubbing was performed to the L5-S1 region to restore circulation in the lower lumbar spine. This technique improved blood flow and alleviated nerve compression, helping to reduce sciatic pain, numbness, and mobility issues associated with spinal stenosis.
- F. Blood supply to the leg: Following the L5-S1 rubbing, continuous rubbing was performed from the hip to the heel on both legs, with fifteen repetitions on each leg. This technique aimed to enhance circulation in the targeted areas, supporting improved blood flow around the lumbar region.
- G. Ankle rotation point for lower limb circulation: The ankle rotation point, believed to be the key location for restoring lumbar circulation, was systematically stimulated to alleviate pain in the waist region. This technique aimed to improve vascular flow and nerve conduction to the lower limbs, relieving leg weakness, numbness, and tingling – common symptoms of lumbar nerve compression (Figure 1).

Following 12 weeks of consistent neurotherapy sessions (four sessions per week), a follow-up MRI of the lumbosacral spine demonstrated a significant improvement. The initial imaging had shown an intervertebral gap of 3.0 mm at the L5-S1 level, along with findings suggestive of an acute annular tear, a large posterior disc extrusion, spinal canal stenosis, and compression of the cauda equina. Post-treatment, the intervertebral gap at L5-S1 increased to 7.0 mm, indicating a notable reduction in spinal compression and improvement in disc spacing. The patient also reported substantial pain relief, confirmed improved mobility, and affirmed the effectiveness of this alternative, non-invasive therapy in addressing both symptoms and underlying spinal compression.

## DISCUSSION

Chronic LBP due to LS presents significant treatment challenges, particularly among women and the elderly, especially when left untreated in the early stages. While surgical interventions may offer relief, they are often associated with notable post-operative risks. Ayurvedic approaches may provide temporary relief but have limited scope and potential side effects.<sup>8</sup> More importantly, they may not address the root pathophysiology, resulting in disease progression over time.

Neurotherapy, in contrast, a novel non-invasive intervention that offers a potentially effective and holistic approach to



**Figure 1:** (a-g) Site of application of pressure at key neurotherapy points used in the management of lumbar spondylosis and associated low back pain

managing LS. Though its use in this context is novel, preliminary observations suggest positive outcomes.<sup>9,10</sup> By acting on multiple physiological systems, neurotherapy aims to restore systemic balance rather than treat isolated symptoms. In this case, application at seven anatomical points appeared to enhance circulation, relieve nerve compression, and reduce inflammation – all of which are pivotal in the pathogenesis of LS.

Despite these encouraging results, this case report represents a single-patient outcome, which limits the generalizability of the findings. While no adverse effects were noted during the follow-up period, long-term efficacy and safety of neurotherapy for LS remain to be thoroughly evaluated. Larger, well-controlled clinical trials are necessary to validate its effectiveness, determine standard protocols, and establish its place within mainstream therapeutic strategies.

## CONCLUSION

Neurotherapy has shown encouraging results in managing LS conditions, positioning it as a valuable complementary approach in holistic care. This case underscores the growing need for integrative strategies in treating LS and LS-associated LBP. By enhancing circulation and alleviating neural compression, neurotherapy offers a non-invasive intervention that extends beyond symptomatic relief. It supports a shift toward long-term functional recovery and patient well-being. The clinical improvements observed reinforce the therapeutic potential of neurotherapy and call for further investigation into such multidisciplinary treatment options.

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**PD-** Conceptual framework, literature survey, scientific consultation, data interpretation, manuscript drafting, article submission; **DD-** Project supervision, methodological design, data collection, preparation of figures, manuscript revision.

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