Acta Scientific Orthopaedics (ISSN: 2581-8635)

Volume 9 Issue 6 June 2026

Review Article

Non-Surgical Management of Sciatica Associated with Lumbar Disc Disorders: Clinical Context and Patient Experiences with Non-Surgical Spinal Decompression Treatment at ANSSI Wellness

Prashant Vichare*

ANSSI Wellness, *Ghatkopar West, Mumbai, Maharashtra 400086, India*

***Corresponding Author:** Prashant Vichare, ANSSI Wellness, Ghatkopar West, Mumbai, Maharashtra 400086, India.

Received: October 19, 2026

Published: November 19, 2026

© All rights are reserved by **Prashant Vichare.**

Abstract

Sciatica is a clinical syndrome involving radiating pain, sometimes accompanied by sensory or motor disturbances, due to irritation or compression of the sciatic nerve. Lumbar disc herniation and degenerative spinal changes are common potential causes. Persistent symptoms can impair mobility, work, sleep, and quality of life. This educational narrative reviews sciatica's presentation, causes, diagnosis, and treatment options, including conservative care, surgery, and Non-Surgical Spinal Decompression Treatment (NSSDT) at ANSSI Wellness, India. It draws on published clinical literature and four patient histories presented as descriptive accounts. Management requires individualized assessment and correlation of symptoms with diagnostic findings. Although the patient accounts describe perceived improvements in pain and daily functioning following decompression and supportive rehabilitation, they cannot establish treatment efficacy or causation. Given the variable evidence for spinal decompression, prospective studies with validated outcome measures, appropriate comparison groups, and independent assessments are needed to evaluate NSSDT's effectiveness, limitations, and long-term outcomes.

Keywords: Sciatica; Lumbar Disc Herniation; Lumbar Radiculopathy; Non-Surgical Treatment; Spinal Decompression; Physiotherapy; Patient Experience; Rehabilitation

Abbreviations

NSAIDs: Non-steroidal Anti-Inflammatory Drugs; ANSSI: American Non-Surgical Spine Institute.

Introduction

Sciatica is commonly used to describe pain radiating from the lower back or buttock into one leg along the distribution of the sciatic nerve or its contributing nerve roots. The term describes a symptom pattern rather than a single disease. Patients may experience radiating pain, tingling, altered sensation, or weakness, with the precise presentation depending on the underlying cause and the degree of nerve involvement.

The epidemiology of sciatica is difficult to summarize using a single global prevalence figure. Estimates vary with diagnostic definitions, study populations, and methods of assessment. A clinical review by Koes and colleagues reported that approximately 5-10% of people presenting with low back pain have sciatica, while an annual prevalence estimate of 2.2% has been reported for disc-related sciatica in the general population. These figures should be

interpreted as estimates from the literature reviewed, rather than as a current, universally applicable global rate.



Figure 1: Sciatica is a symptom of an irritated sciatic nerve or its contributing nerve roots, described as pain radiating from the lower back.

Although many acute episodes improve with conservative management, a proportion of patients experience persistent symptoms. Continuing pain and restricted movement can interfere with employment, household activities, social participation, and psychological well-being. For people whose work involves prolonged sitting, driving, repeated lifting, or physically demanding activity, symptoms may be especially disruptive.

This article examines sciatica associated with lumbar disc disorders and considers how patients navigate treatment decisions when symptoms persist. Four patient histories are used to illustrate different experiences.

These accounts are considered alongside published evidence. The purpose is not to establish the superiority of a particular intervention, but to explain the condition, outline established clinical decision-making principles, and identify questions that warrant further research into non-surgical spinal decompression.

Causes and clinical mechanisms of sciatica

Lumbar disc herniation and nerve-root irritation

Intervertebral discs lie between adjacent vertebral bodies and contribute to spinal load distribution and movement. Each disc contains a central nucleus pulposus surrounded by an annulus fibrosus. With age and degeneration, disc composition and mechanical properties may change. A disc may bulge beyond its usual margins or develop a more focal herniation.

When disc material contacts or compresses a lumbar nerve root, the resulting symptoms may include radiating leg pain, numbness, tingling, and, in some cases, muscle weakness. Inflammatory processes around an affected nerve root can also contribute to pain. Lumbar disc herniation is a common cause of sciatica, but it is not the only one; spinal stenosis and other disorders may also produce nerve-root symptoms.

Disc abnormalities identified on imaging do not necessarily explain a patient's symptoms. Some people have structural changes without corresponding pain or neurological impairment. A clinically meaningful diagnosis therefore requires assessment of the symptom distribution, examination findings, and imaging results where imaging is indicated.

Activity-related considerations

Daily activities can influence spinal loading and the way symptoms affect daily life. Repeated heavy lifting, lifting while bending or twisting, and whole-body vibration associated with driving have been reported as potential occupational risk factors for sciatica. Prolonged desk work may also create practical challenges when sitting aggravates an existing spinal condition.

Different experiences of patients

The four patient histories illustrate different circumstances:

- Mr. Shrinivas Dande, aged 51, worked in information technology and reported difficulty maintaining comfortable sitting positions during desk-based work. He eventually found it difficult to sit for more than approximately 30 minutes and experienced pain when getting down from bed.
- Mr. Sambhaji Babar, aged 40, was employed in the Maharashtra Police. His history describes an injury during police training more than seven years before his account of treatment. He subsequently experienced chronic back pain and burning pain radiating down his right leg.
- Mr. Owais Khan reported sciatica symptoms for nearly three years, with problems involving the L4-L5 and L5-S1 levels described in his history. Leg numbness and difficulty standing for prolonged periods, bending, and sitting on the floor affected his routine.

- Mr. Sahaji Dongare reported approximately two years of persistent back pain with symptoms described as early-stage sciatica. He had previously tried several approaches, including physiotherapy, chiropractic care, homoeopathy, injections, and medication, without experiencing lasting relief according to his account.

These cases demonstrate how different occupational and personal circumstances may shape the experience of sciatica.

Symptoms and effects on daily functioning

The characteristic symptom of sciatica is radiating leg pain, often extending from the buttock into the thigh and sometimes below the knee. The pain may be described as sharp, burning, electric, or shooting. Patients may also report pins and needles, numbness, or weakness. Symptoms can be aggravated by particular movements, coughing, sneezing, or prolonged positions, although individual presentations vary.

The functional effects may be as important as pain intensity. A person may struggle to remain seated through a work meeting, walk a usual distance, bend to dress, sleep comfortably, or complete household activities. Persistent symptoms may also contribute to reduced confidence in movement and anxiety about triggering further pain.

Most cases of sciatica do not require emergency surgery, but certain symptoms may indicate serious nerve compression or another significant condition. New difficulty passing urine, loss of bladder or bowel control, numbness around the genitals or anus, or severe or progressive weakness, particularly when symptoms affect both legs, requires urgent medical evaluation.

Patients should also seek prompt assessment when pain is accompanied by significant trauma, fever or systemic illness, or other features raising concern about an underlying serious condition. Persistent or worsening symptoms warrant clinical review rather than repeated self-treatment alone.

Diagnosis and initial management

Clinical assessment and imaging

Diagnosis generally begins with a detailed history and physical examination. A doctor may ask about the onset and duration of symptoms, the distribution of pain, aggravating and relieving factors, occupational demands, prior treatments, and effects on daily activities.

The physical examination may include assessment of lower-limb strength, sensation, reflexes, gait, and relevant nerve-tension tests such as the straight-leg-raising test. No single examination approach should be interpreted in isolation; findings must be considered together with the history and the overall clinical presentation.



Figure 2: Diagnosis generally begins with a detailed history and physical examination and may involve imaging tests, if needed.

Magnetic Resonance Imaging (MRI) can demonstrate disc herniation, degenerative changes, and possible nerve-root compression. However, imaging is not routinely necessary for every episode of low back pain or sciatica. For example, guidance from the National Institute for Health and Care Excellence (NICE) recommends considering imaging in specialist settings when the result is likely to change management. Imaging findings should be correlated with symptoms and examination results rather than automatically treated as the cause of pain.

Initial symptom relief and its limitations

Initial management may include education, advice to remain appropriately active, exercise-based rehabilitation, and selected medication. These interventions aim to reduce symptoms and improve function while the underlying condition is monitored. Pain relief does not necessarily mean that a disc abnormality has resolved, just as a structural finding on MRI does not necessarily mean that ongoing pain will persist.

The patient histories describe temporary or insufficient relief from earlier treatment. Mr. Dande reported short-term improvement after an initial orthopedic consultation, followed

by recurring pain. Mr. Babar described medications that did not provide lasting comfort. Mr. Dongare reported limited durable benefit from several previous approaches.

Such experiences can motivate patients to seek further assessment or alternative treatment options. They should not, however, be interpreted as evidence that all conventional treatments are ineffective. Response varies with the diagnosis, symptom duration, treatment choice, and individual circumstances.

Medication and surgical treatment: benefits, risks, and decisions

Medication

Medication may have a role in selected patients, but benefits and risks depend on the drug, dose, duration, and individual medical history. Non-steroidal anti-inflammatory drugs (NSAIDs), for example, can cause gastrointestinal, kidney, liver, or cardiovascular adverse effects in susceptible individuals. NICE advises that, when NSAIDs are prescribed for sciatica, doctors should consider individual risk factors and use the lowest effective dose for the shortest appropriate period.

Patients may reasonably wish to avoid prolonged medication when benefits are limited or adverse effects are a concern. Medication should not be stopped abruptly without professional guidance when withdrawal or other risks may arise.

Surgical treatment

Surgery may be considered when symptoms remain severe or disabling despite appropriate non-surgical care, or when examination and imaging indicate a condition requiring intervention. For selected patients with disc herniation and radiculopathy, discectomy or another decompression procedure can provide faster relief than continued conservative management. Long-term differences between surgical and non-surgical approaches may be smaller for some patient groups, although outcomes depend on clinical circumstances.

Surgery also carries potential risks, including infection, bleeding, anesthetic complications, nerve injury, persistent symptoms, recurrence, and the possibility of further intervention. Recovery time and postoperative rehabilitation vary with the procedure and the patient. These risks should be discussed in the context of the expected benefits, not used to imply that surgery is inherently unsafe.

The patient histories describe reluctance to undergo spinal surgery and a preference to explore non-surgical options. Such preferences are an important part of shared decision-making. However, the histories do not document the full surgical assessments, the exact procedures discussed, or whether each patient met formal criteria for surgery.

Non-surgical spinal decompression treatment

Treatment concept and proposed mechanism

Non-Surgical Spinal Decompression Treatment (NSSDT) is a non-invasive, machine-assisted intervention for selected patients with spinal disc-related symptoms. It uses a computer-regulated table and harness to apply controlled, individualized decompression forces to the spine.

The resultant negative pressure may alter mechanical loading around the affected spinal segment. This is an attempt to reduce intradiscal pressure and relieve pressure on nearby nerve structures. Disc rehydration and restoration of disc spacing are also proposed mechanisms in some spinal decompression models.

Here, clinical improvement should be assessed through symptoms, function, neurological findings, and, where clinically indicated, follow-up imaging.

Treatment personalization and complementary rehabilitation

ANSSI Wellness combines decompression sessions with supportive interventions that may include physiotherapy, water-based therapy, electrical muscle stimulation (EMS), and advice on daily activities. The program also describes physiotherapists monitoring patients' progress and providing guidance on exercises, posture, and activity modification.



Figure 3: Personalized treatment programs include complementary therapies along with spinal decompression.

These elements should be selected according to the patient's diagnosis, tolerance, functional goals, and clinical response. Exercise-based rehabilitation and advice to maintain appropriate activity are recognized components of care for low back pain and sciatica.

The sessions and treatment plans are adjusted according to individual progress. No standard session duration or number of sessions should be assumed appropriate for every patient. Progress monitoring should include more than a general impression of improvement: pain intensity, walking and sitting tolerance, sleep, daily activities, neurological findings, and adverse effects can be recorded systematically.

Patients should follow clinician-specific advice about lifting, exercise, prolonged positions, and return to usual activities. Such guidance should encourage safe movement and functional recovery rather than unnecessary restriction. New weakness, worsening numbness, or other red-flag symptoms require reassessment, not simply continuation of the existing treatment schedule.

Patient experiences at ANSSI Wellness

The four patient stories describe patient-reported changes during a program combining NSSDT with other supportive care. They are summarized below as descriptive accounts.

Mr. Shrinivas Dande: limitations associated with sitting

Mr. Dande, a 51-year-old IT professional, reported severe difficulty sitting for longer than approximately 30 minutes and pain when getting down from bed. His account describes an initial period of short-term relief after orthopaedic treatment, followed by recurrent symptoms and investigations identifying a problem at L4-L5.

He subsequently chose NSSDT at ANSSI Wellness. According to his account, he began noticing relief after a few sessions and reported that most of his pain had disappeared by the end of treatment. He also described an improvement in his ability to walk for longer periods.

The account illustrates the importance of measuring functional outcomes alongside pain.

Mr. Sambhaji Babar: Symptoms following a training injury

Mr. Babar, a 40-year-old Maharashtra Police employee, described chronic back pain that developed after a training injury and later included sharp, burning pain radiating down his right leg. His symptoms reportedly interfered with sitting, walking, and eating meals comfortably. He stated that medication had not provided lasting relief.

He attended the ANSSI Wellness clinic in Kalyan, where his history describes an assessment by orthopedic specialist and a treatment plan combining NSSDT with physiotherapy. Mr. Babar reported gradual reduction in pain and improved posture and mobility, describing himself as pain-free at the end of treatment.

Mr. Owais Khan: Persistent symptoms and restricted movement

Mr. Khan reported nearly three years of sciatica symptoms associated in his history with the L4-L5 and L5-S1 levels. Leg numbness and difficulty standing for long periods, bending, and sitting on the floor affected his routine.

He visited ANSSI Wellness's Vashi clinic and received an individualized treatment plan. He reported approximately 80% improvement during the course of treatment and described greater comfort in daily activities. His account can be more accurately characterized as reported symptomatic improvement alongside changes in medication use.

Mr. Sahaji Dongare: Improvement after multiple previous approaches

Mr. Dongare described approximately two years of persistent back pain and symptoms extending into the leg. He reported having tried chiropractic care, physiotherapy, homoeopathy, injections, and medication without lasting relief.

He attended the ANSSI Wellness clinic in Kolhapur and received NSSDT, alongside the program's supportive care. He reported 90-95% pain relief after 17 sessions, with improved mobility and confidence.

The reported percentage is a patient estimate; the source material does not specify the measurement method used to calculate it.

Interpretation of the four narratives

Taken together, the accounts describe improvements that patients associated with the treatment experience. They also highlight common concerns: persistent pain, difficulty performing ordinary activities, uncertainty about the significance of spinal imaging findings, and a preference to explore non-surgical options.

These four patient narratives represent a part of a more elaborate success story of ANSSI Wellness. As India's leading institution for non-surgical spine care, ANSSI Wellness has successfully treated over 10,000 patients with spine problems with the help of its orthopedic expertise and USA-protocol-based decompression technology [1-9].

Conclusion

Sciatica is a symptom syndrome with several possible causes, including lumbar disc herniation and other conditions affecting spinal nerve roots. It can interfere substantially with sitting, walking, work, sleep, and everyday activities. Accurate clinical assessment, appropriate use of imaging, recognition of urgent warning signs, and individualized treatment planning are central to management.

Conservative care is appropriate for many patients, while surgery can offer faster relief for selected patients whose symptoms and clinical findings justify intervention. Neither medication nor surgery should be portrayed as universally appropriate or universally harmful.

The four patient narratives describe substantial perceived improvement during a program involving NSSDT and supportive rehabilitation. These accounts provide insight into patients' experiences and priorities.

A patient-centered approach should prioritize informed shared decision-making, measurable functional goals, appropriate rehabilitation, and timely escalation of care when clinical findings indicate the need.

Bibliography

1. Koes BW., *et al*. "Diagnosis and treatment of sciatica". *BMJ* 334.7607 (2007): 1313-1317.
2. National Institute for Health and Care Excellence. "Low back pain and sciatica in over 16s: assessment and management". NICE guideline NG59. London: NICE; (2016).
3. Wegner I., *et al*. "Traction for low-back pain with or without sciatica". *Cochrane Database System Review* 8 (2013).
4. Colombo C., *et al*. "Vertical traction for lumbar radiculopathy: a systematic review". *Archives of Physiotherapy* 11 (2021): 7.
5. Zou T., *et al*. "The incidence of regression after the non-surgical treatment of symptomatic lumbar disc herniation: a systematic review and meta-analysis". *BMC Musculoskeletal Disorder* 21 (2020): 530.
6. North American Spine Society. "Diagnosis and treatment of lumbar disc herniation with radiculopathy". Clinical guideline. Burr Ridge, IL: North American Spine Society; (2012).
7. National Health Service. "Sciatica".
8. Hahne AJ., *et al*. "Conservative management of lumbar disc herniation with associated radiculopathy: a systematic review". *Spine (Phila Pa 1976)* 35.11 (2010): E504.
9. Costa F., *et al*. "The role of conservative treatment in lumbar disc herniations: WFNS spine committee recommendations". *World Neurosurgery X* 22 (2024): 100277.