Low back pain management

- Facilitators and barriers to deferring imaging for acute low back pain: a qualitative study
- Balancing Benefits and Risks of the Use of Cage in Lumbar Spondylolisthesis Surgery: A Meta-Analysis
- Enhancing back pain and sciatica diagnosis: Coronal short tau inversion recovery's role in routine lumbar magnetic resonance imaging protocols
- Electric currents in disc health: The role of ion channels in intervertebral disc pathophysiology
- Penile Pain With Allodynia Following Spinal Cord Stimulation (SCS) Implant: A Case Report
- Using graph machine learning to identify functioning in patients with low back pain in terms of ICF
- Is Lifting Technique Related to Pain and Functional Limitation? A Replicated Single-Case Design Study of Five People With Lifting-Related Chronic Low Back Pain
- Mapping Vocational Rehabilitation Interventions for People with Chronic Low Back Pain: A Scoping Review

see Low back pain diagnosis.

see Low back pain treatment.

Prospective diagnostic concordance studies

In a secondary analysis of RCT comparing diagnostic & management decisions Janny Mathieu et al. from:

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published in Scientific Reports to assess agreement in diagnosis and management between chiropractors and neurosurgeons for patients referred for Low back pain consultation. Diagnostic concordance was moderate (74.7%, κ = 0.51), management concordance strong (82%), suggesting chiropractors are competent for triage of non-surgical low back pain, potentially easing surgical consult load [1)]

Critical review:

- **Strengths**:

1. Real-world, clinically relevant sample (mean age ~60, N=101).
2. Direct comparison with neurosurgeons using standardized categories.
3. Good statistical rigour with κ, CI, p-values reported.

- **Limitations**:

1. Secondary RCT analysis; original trial focused on triage communication, not concordance.
2. Moderate κ value indicates appreciable diagnostic disagreement.
3. Setting: tertiary spine clinic—referral bias and limited generalizability to primary care.
4. Chiropractors less often labeled non-specific LBP (31.6% vs neurosurgeons 43.2%, p = 0.02), which may reflect over-triage or differing diagnostic threshold
5. Blinding unclear; could influence neurosurgeon assessments.
6. No clinical outcomes or patients' care trajectory data presented here.

Final verdict (score: 6/10)

This well-performed concordance study supports the potential role of chiropractors in neurosurgery triage pathways. However, moderate diagnostic agreement and tertiary clinic setting limits full endorsement. More prospective trials linking triage accuracy to patient-centered outcomes are needed.

Takeaway for neurosurgeons: Chiropractors demonstrate acceptable diagnostic and strong management alignment with neurosurgeons. They may effectively triage non-surgical low back pain, helping reduce surgical wait times—but diagnostic nuance remains essential.

Bottom line: Chiropractor-based triage shows promise for improving low back pain pathways, yet definitive benefit requires prospective validation with patient outcomes.

Citation

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[1)]
Mathieu J, Beauséjour M, Châtillon CÉ, O'Shaughnessy J, Tétreau C, Hincapié CA, Schweinhardt P, Descarreaux M, Marchand AA. Diagnostic and management concordance between chiropractors and neurosurgeons for patients with low back pain. Sci Rep. 2025 Jul 2;15(1):23248. doi: 10.1038/s41598-025-04529-9. PMID: 40603946.