Lumbosacral radiculopathy treatment

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- Transdural Lumbosacral Disc Herniation: When a Benign Pathology Raises Diagnostic and Therapeutic Challenges
- Understanding the Landscape of Lumbar Epidural Steroid Injections: A Review of Interlaminar, Transforaminal, and Caudal Approaches
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- How I do it: minimally invasive surgical decompression for lumbosacral extraforaminal stenosis (Far-Out Syndrome)
- A Rare Atypical Presentation of Bruns-Garland Syndrome: A Case Report and Review of Pathophysiology and Management
- Bertolotti syndrome: an often overlooked cause of specific back pain
- The Relationship Between Psychosocial Factors and Response to Epidural Steroid Injection for Chronic Lumbosacral Radicular Pain: A Prospective Pilot Study

Much literature reports on selective nerve root blocks (SNRBs) in cases of lumbosacral radiculopathy. Unfortunately, authors only inconsistently reveal the exact needle tip position relative to the causative pathology at the time of injection. Different injection sites may provide different symptomatic benefits.

A clinical scenario was devised depicting a patient with radiculopathy secondary to an L4/5 vertebral disc prolapse. Participants were questioned on their chosen management of this patient, focusing particularly on SNRB technique. Questionnaires were sent to spinal surgeons, pain management specialists and musculoskeletal radiologists.

A total of 100 responses were detailed enough for inclusion. The majority (83%) of respondents reported they would inject local anaesthetic and steroids, 4% would inject local anaesthetic alone and 13% would inject a different substance. Over half (53%) would target the L5 nerve root, 26% the L4 nerve root, 12% the prolapsed disc itself and 9% two separate vertebral levels. Variation was also noted in needle tip location relative to the neural sheath.

When treating lumbar radiculopathy, there are apparent variations in the use and positioning of SNRBs for a given level of disc pathology. Needle tip position may have a direct influence on clinical outcome following SNRBs. Caution is therefore required when considering the validity of previously published studies investigating SNRBs and different injectates ¹⁾.

Chiropractic spinal manipulative therapy (CSMT) and lumbar discectomy are both used for lumbar disc herniation (LDH) and lumbosacral radiculopathy (LSR). Findings suggest receiving CSMT compared with other care for newly diagnosed LDH/LSR is associated with significantly reduced odds of discectomy over 2-year follow-up. Given socioeconomic variables were unavailable and an observational design precludes inferring causality, the efficacy of CSMT for LDH/LSR should be examined via randomised controlled trial to eliminate residual confounding². There is a growing interest in the development of efficient acupuncture-based treatments for LR comparable to western medicine. Structured traditional Korean medical treatments including intensified acupuncture stimulus on the EX-B2 point using the G-shaped posture modified from the sitting posture were applied to four LR patients, and the outcomes were evaluated based on objective clinical endpoints including a numeric rating scale (NRS), the Oswestry disability index (ODI), the manual muscle test (MMT), neurological symptoms, and plantar photography. Patients showed improvements in NRS, ODI, MMT, and neurological symptoms without adverse effects during hospitalization and follow-up visits. Moreover, we observed substantial dissolvement of hyperkeratinization and parchedness of the soles of the feet, which was not reported previously. These four cases demonstrate the clinical usefulness of traditional medicine and the diagnostic applicability of plantar photography. However, further randomized controlled trials are required to confirm our findings³

Currently, epidural intervention is a widely used and effective conservative treatment method for managing low back and radicular pain caused by LDH. In short-term and intermediate-term follow-up, the parasagittal interlaminar (PIL) epidural injection approach has the highest probability for pain relief and functional improvement ⁴⁾.

Transformainal epidural steroid injections can be used ⁵⁾

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