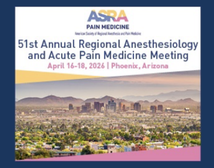
Lumbar Facet Synovial Cyst Rupture for Neurogenic Claudication: A Case Report

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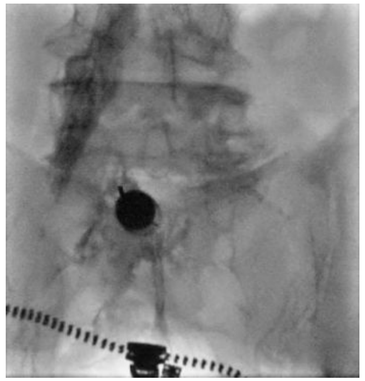
Introduction

- Lumbar facet synovial cysts are an uncommon result of degenerative facet arthropathy.
- They can cause radiculopathy or neurogenic claudication by compressing the thecal sac and neural structures.
- Surgery is the traditional standard; fluoroscopically guided percutaneous rupture is a minimally invasive alternative with favorable outcomes in selected patients.[1-5]

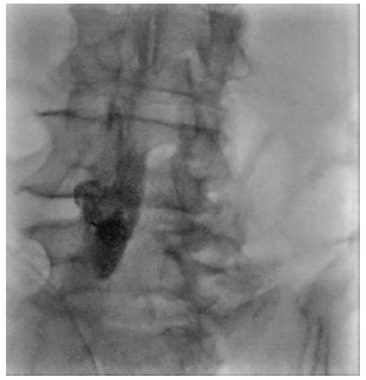
Case Presentation

70-year-old man with CAD, hyperlipidemia, and prostate cancer.
History: 20 years of low back pain with progressive bilateral leg pain (neurogenic claudication); walking limited to ~100–150 yards.
Failed: NSAIDs, muscle relaxants, exercise, and prior epidural steroid injections.
MRI: grade I L4–L5 anterolisthesis, multilevel spondylosis, and a left L4–L5 facet synovial cyst with significant central canal narrowing and cauda equina compression.

KEY TAKEAWAY
Cranial and caudal contrast spread marks successful hydraulic cyst rupture, with rapid clinical improvement.



A. Pre-rupture: contrast via the left L4–L5 facet joint opacifies the cyst.



B. Post-rupture: contrast spreads cranially and caudally, confirming rupture.

Materials and Methods

- Fluoroscopic access of left L4–L5 facet joint.
- Contrast confirmed cyst–joint communication.
- Facet steroid to rupture cyst, then interlaminar ESI.

Results

1 wk — 80–90% pain relief; bilateral leg symptoms resolved

3 wk — ~800 ft walking without rest (from 100–150 yd)

- Sustained ~80% overall improvement; mild intermittent foot pain.
- Back to bicycling and golfing.
- No procedural complications.

Discussion

- Percutaneous rupture may give meaningful relief and delay surgery in selected patients.[1-5]
- Shows the fluoroscopic endpoint of rupture, rarely depicted in the literature.
- Rapid improvement supports the cyst as the primary pain generator.

References: 1. Allen TL, et al. Spine J. 2009;9(5):387-395. 2. Martha JF, et al. Spine J. 2009;9(11):899-904. 3. Melfi RS, Aprill CN. Pain Med. 2005;6(2):122-128. 4. Lutz GE, Shen TC. Arch Phys Med Rehabil. 2002;83(12):1789-1791. 5. Giordan E, et al. Int J Spine Surg. 2022;16:124-138. *No patient-identifiable information; exempt from IRB review per NYU and VA Health policy.*