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Ivan Urits, MD[1]
Omar Viswanath, MD[2-4]
Vwaire Orhurhu, MD[1]
Alan D. Kaye, MD, PhD[5]
Cyrus Yazdi, MD[1]

Case at a Glance: Radiographic Findings of a Symptomatic Lumbar Synovial Cyst Causing Radiculopathy

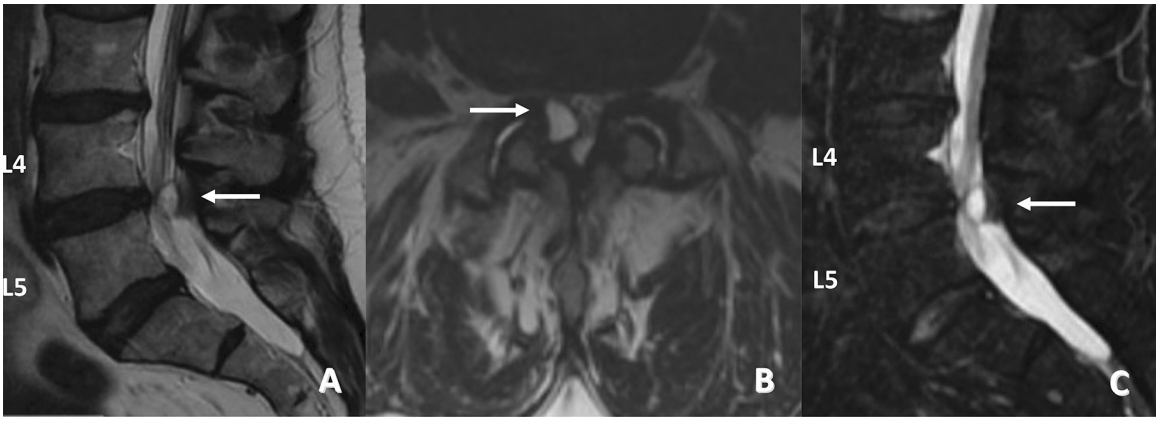

Fig. 1. A) T1 sagittal computed tomographic (CT) image demonstrating a synovial cyst causing significant crowding at the L4-L5 vertebral level. B) T2 axial cut demonstrating severe central canal stenosis. C) T2 sagittal CT image.

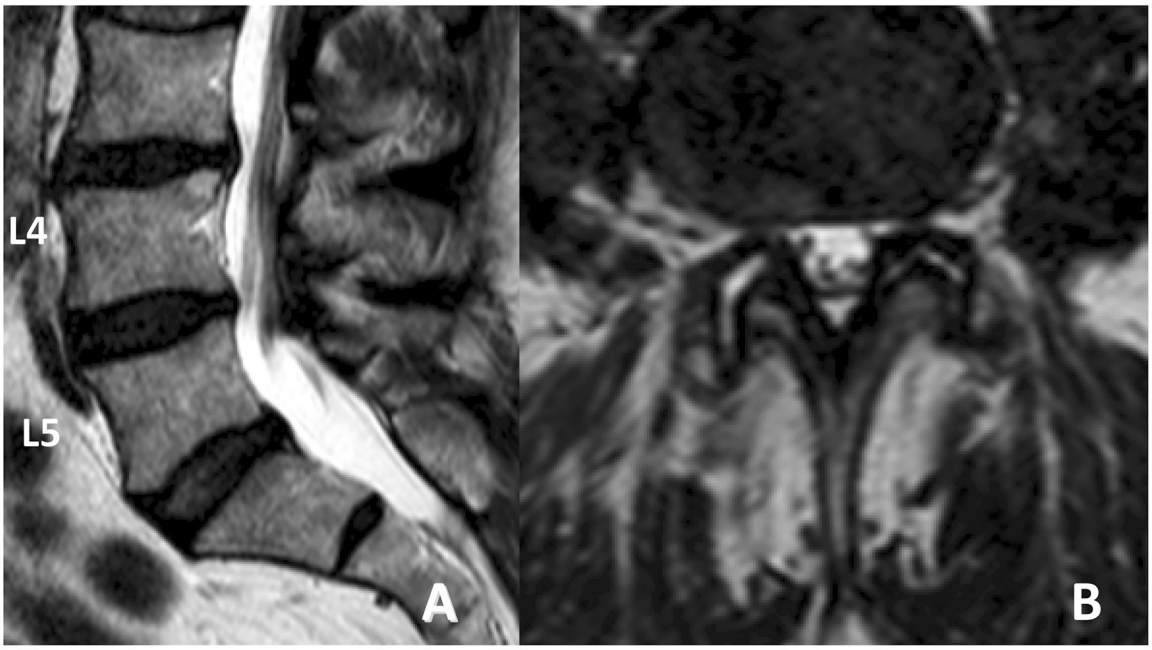

Fig. 2. A) T2 sagittal and B) axial CT images demonstrating no synovial cyst recurrence.

From: [1]Department of Anesthesia, Critical Care, and Pain Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA; [2]Valley Anesthesiology and Pain Consultants, Phoenix, AZ; [3]Department of Anesthesiology, University of Arizona College of Medicine, Phoenix, AZ; [4]Department of Anesthesiology, Creighton University School of Medicine, Omaha, NE; [5]Department of Anesthesiology, Louisiana State University Health Sciences Center, New Orleans, LA

Corresponding Author: Ivan Urits, MD, E-mail: iurits@bidmc.harvard.edu
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Spinal synovial cysts originate from the facet joints of the spine and are observed most commonly at the L4-L5 vertebral level (1). Though not considered as a common cause of radicular back pain, spinal synovial cysts are increasingly diagnosed related to recent advances in magnetic resonance imaging (MRI) and computed tomography (CT) technologies (2). These radiographic images demonstrate the dramatic findings of a large synovial cyst causing moderate to severe central canal stenosis at the L4-L5 vertebral level (Fig. 1).

Our patient was a 60-year-old male that presented with chronic low back pain and right lower extremity radiculopathy. Percutaneous aspiration and decompression may offer immediate symptom relief, however, symptomatic cyst recurrence causing back pain can be as high as 22% at 2 year follow-up (3). Surgical excision is recognized as the gold standard for the treatment of synovial cysts causing recalcitrant pain or neurological compromise (4-6). In our patient, a 22-gauge, 3-inch spinal needle was used to enter and aspirate the synovial cyst, under fluoroscopic guidance. Following the procedure, he reported excellent pain relief with complete resolution of his radicular symptoms. A follow-up lumbar spine MRI confirmed continued remission of his cyst at 6 months after his aspiration procedure (Fig. 2). In patients with nonremitting chronic low back pain, lower extremity radiculopathy, or lower extremity neurological deficits, CT and MRI are important diagnostic modalities for lumbar synovial cysts.

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