Radiculopathy Caused by Discal Cyst

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Discal cyst is an intraspinal cyst with a distinct communication with the corresponding intervertebral disc. It is a rare condition and could present with radiculopathy similar to that caused by lumbar disc herniation. We present a patient with a large discal cyst in the ventrolateral epidural space of the 5th lumbar vertebral (L5) level that communicated with the adjacent 4th lumbar and 5th lumbar intervertebral disc, causing L5 radiculopathy. We alleviated the radiating pain with selective transforaminal epidural blocks. (Korean J Pain 2014; 27: 86-89)

Key Words:
epidural, injections, intervertebral disc displacement, radiculopathy, spine.

CASE REPORT

A 74-year-old female patient visited our department due to pain in the left lower limbs for 6 months. Her past medical history was unremarkable.

Discal cyst is an intraspinal cyst with a distinct communication with the corresponding intervertebral disc [1]. It is a rare condition and could present with radiculopathy similar to that caused by lumbar disc herniation. Usual treatments for discal cysts include surgical removal of the cyst [1-4] and, percutaneous computed tomography (CT)-guided aspiration of the cyst and steroid injection [5].

We experienced a case of leg pain due to lumbar discal cyst, and we alleviated the radiating pain with selective transforaminal epidural blocks.

The patient complained of a continuous dull pain along the left 5th lumbar vertebral (L5) and 1st sacral vertebral (S1) dermatomes. The pain level was 9 on the numeric rating scale (NRS) from 0 (no pain) to 10 (worst pain imaginable). The pain was exacerbated by walking and was alleviated by sitting or lying in bed. The patient was unable to walk more than 20 m due to pain.

Physical examination revealed sensory loss of 50% along the left L5 and S1 dermatomes without weakness. On deep tendon reflex (DTR) testing, the knee jerk and ankle jerk were normal. The straight leg raise test showed a positive result at 45° in the left lower limb. The pulsation of the dorsalis pedis artery was normal.

Magnetic resonance imaging (MRI) of the lumbar spine showed a large cyst in the ventrolateral epidural space of the L5 level that communicated with the adjacent 4th lumbar intervertebral disc.
Bar and 5th lumbar intervertebral disc (Fig. 1). The cyst showed high signal intensity on T2-weighted images and low signal intensity on T1-weighted images (Fig. 2). After addition of contrast, the cystic mass had a thick wall with rim enhancement (Fig. 3). The patient was diagnosed with radiculopathy due to a discal cyst. Left L5 and S1 selective transforaminal epidural blocks were performed using 20 mg triamcinolone and 2 ml of 0.3% mepivacaine for the left lower limb radiating pain, Pregabalin 150 mg, tramadol 50 mg, and a muscle relaxant were administered daily for 2 weeks. Two weeks later, the patient’s left lower limb radiating pain had been somewhat alleviated, as judged by the decrease in the pain score on the numeric rating scale (NRS) to 6 following the treatment. L5 and S1 transforaminal epidural blocks were then repeated using 40 mg triamcinolone and 2 ml of 0.3% mepivacaine. Pregabalin 300 mg and tramadol 100 mg were administered daily for 4 weeks. One month after the 2nd procedure, the left lower

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**Fig. 1.** T2-weighted magnetic resonance imaging (MRI) of the lumbar spine. Sagittal image showed a cyst in the ventrolateral epidural space of the 5th lumbar vertebral (L5) level that communicated with the adjacent 4th lumbar and 5th lumbar intervertebral disc (arrow).

**Fig. 2.** Axial T2-weighted (A) and T1-weighted (B) magnetic resonance imaging (MRI) of the 5th lumbar vertebra. The cystic mass showed high signal intensity on T2-weighted images and low signal intensity on T1-weighted images (arrow).

**Fig. 3.** Contrast-enhanced T1-weighted magnetic resonance imaging (MRI) of the lumbar spine. Sagittal (A) and axial (B) images showed that the cystic mass had a thick wall with rim enhancement.