

Spontaneous Regression of a Foraminal Discal Cyst: A Case Report



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PATIENT

A 23-year-old male with remote history of thoracolumbar instrumentation to L3 presented with right lumbar radiculopathy to an outpatient non-operative spine clinic at an academic medical center.

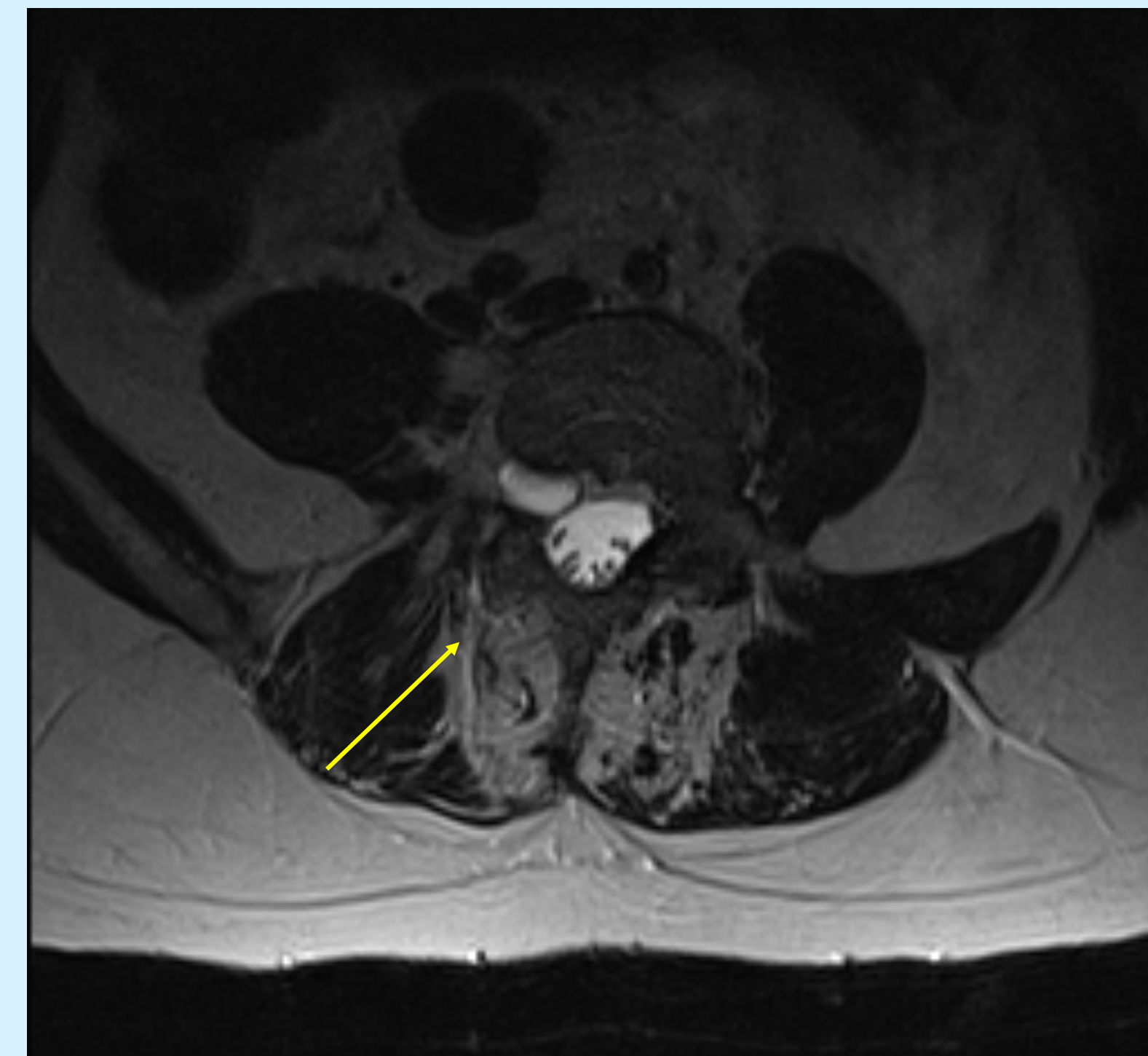
BACKGROUND

Discal cyst is a relatively newly identified cause of lumbago and lumbar radiculopathy. While the term was initially coined in 1999 by Kono et al.¹, in 2001 Chiba et al.² characterized various aspects of these cysts in order to differentiate from lumbar disc herniations and other intraspinal pathologies. Discal cyst is a rare occurrence and, as such, there is limited literature pertaining to this pathology and the pathogenesis is currently unknown. While there is no consensus for management of these lesions, most reported cases have been managed via surgical or other interventional procedure. We present a case of spontaneous regression and symptomatic improvement of a discal cyst without surgical or interventional treatment.

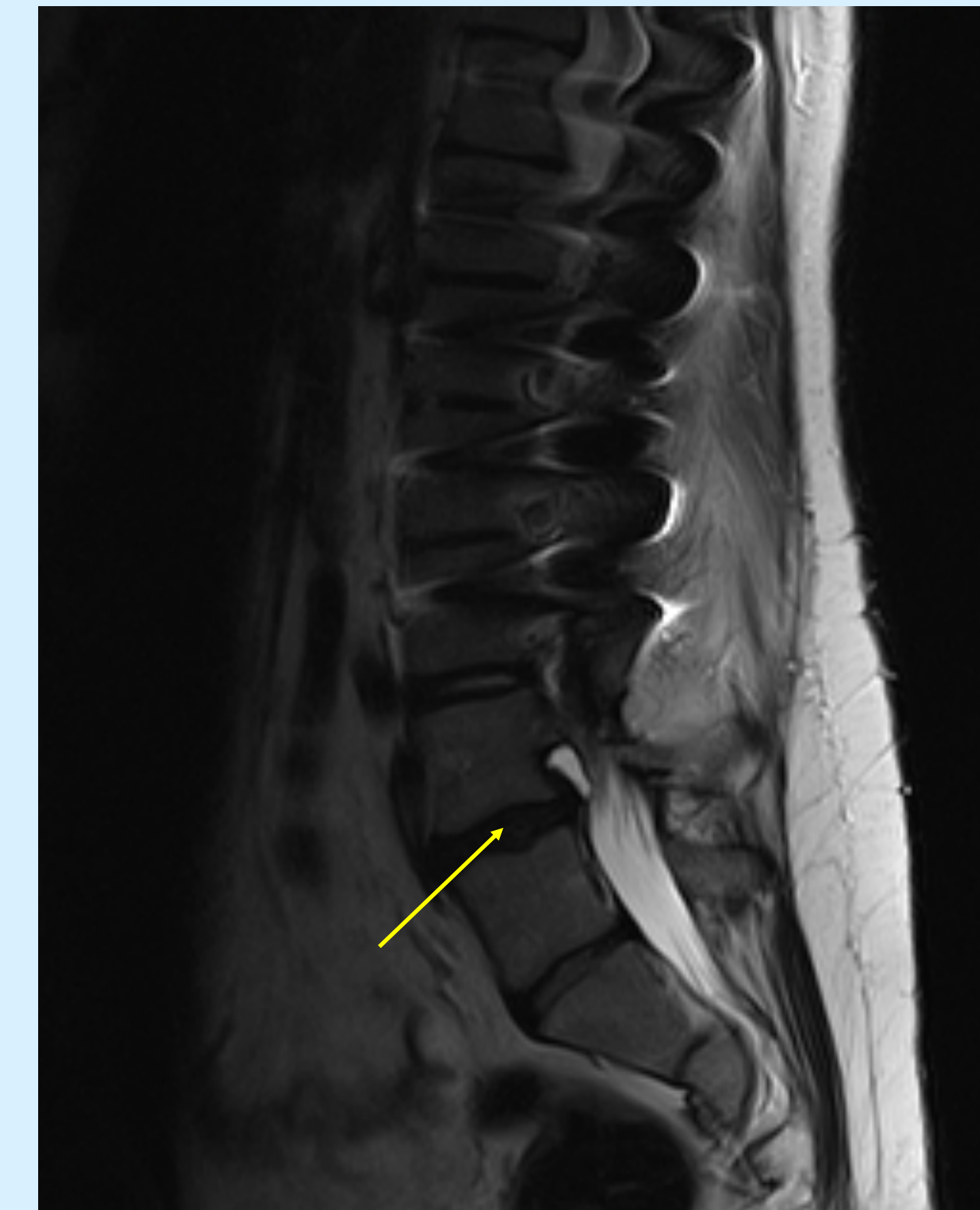
Discal cysts are extremely rare but should remain on the differential for patients presenting with lumbago and lumbar radiculopathy, especially when the patient is relatively young.

CASE DESCRIPTION

A 23-year-old male with remote history of thoracolumbar instrumentation to L3 presented with lower back pain radiating into right posterolateral leg with associated great toe extension weakness. On examination he was noted to have positive right dural tension sign and initial imaging was concerning for L4 spondylolysis. At one-month follow-up, he had progression of pain and new right dorsiflexion weakness despite physical therapy and steroid taper. Non-contrast MRI was notable for large T2-hyperintense structure in right L4-5 foramen; contrast MRI recommended.



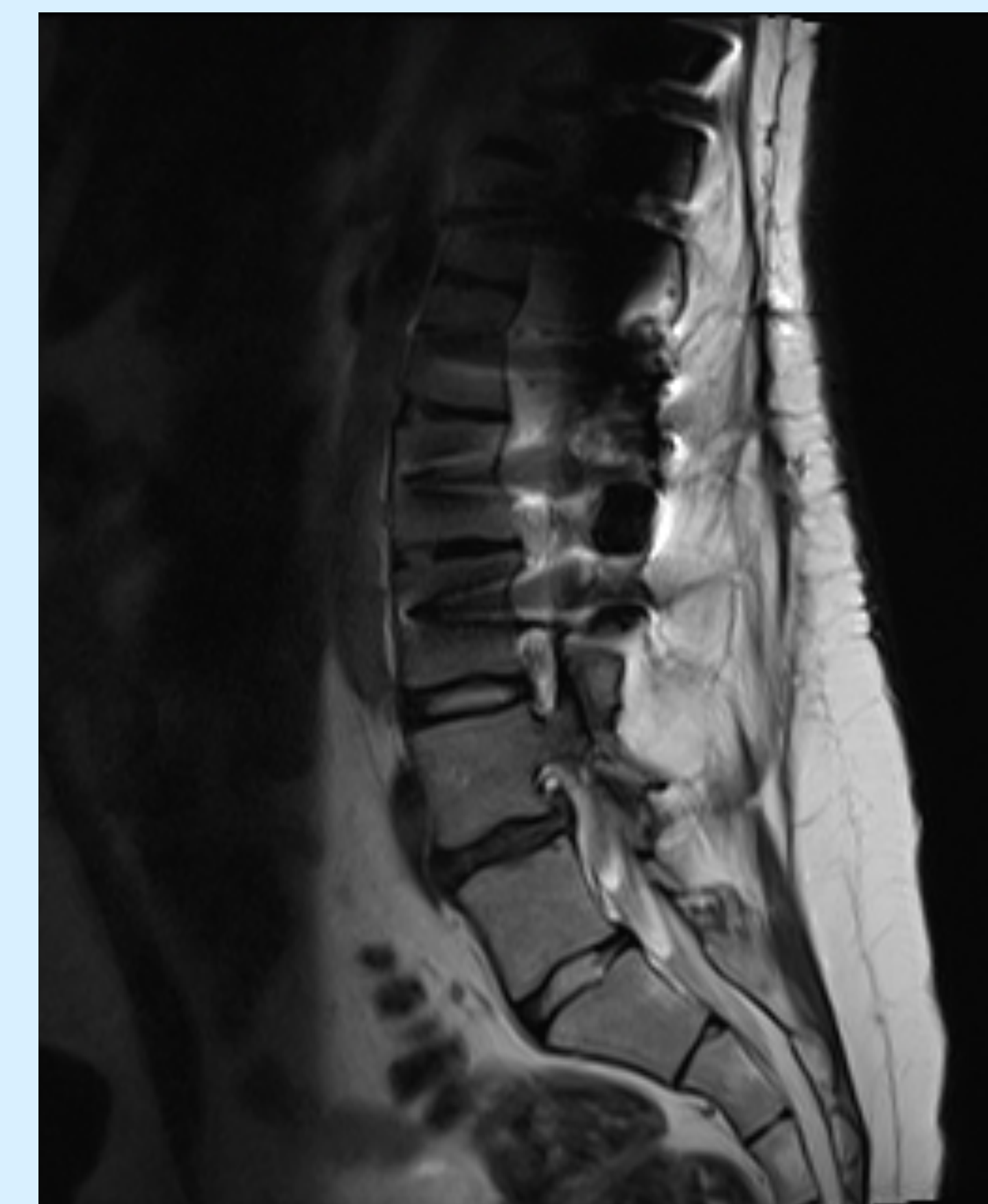
Non-contrast MRI – discal cyst noted at right L4-5 foramen.



One month after initial MRI, contrast MRI incidentally demonstrated approximately 75% size reduction of cystic structure and patient endorsed symptomatic resolution without need for additional medication or intervention. Four months after initial presentation he demonstrated no persistent functional impairments.



Follow up contrast MRI – spontaneous resolution of discal cyst.



DISCUSSION

Discal cysts are an uncommon intraspinal extradural mass that were relatively newly identified as a cause of lumbago and lumbar radiculopathy. They are more prevalent in a younger, male population that were characterized in 2001 to differentiate from other intraspinal pathologies². Clinically present as unilateral single nerve root compression most common at L4-5 level but thought to form acutely or because of a more stressful load. MRI demonstrates T2-hypointense rim and T2-hyperintense cystic contents. It is a rare occurrence with limited literature pertaining to the pathology and currently unknown pathogenesis. They may represent some form of lumbar spine degeneration but are not necessarily associated with an extensive amount.

CONCLUSION

Discal cysts are extremely rare, however should remain on the differential for patients presenting with lumbago and lumbar radiculopathy, especially when the patient is relatively young. The natural history remains unknown and most cases have previously demonstrated regression and symptomatic improvement following surgical or interventional procedures. It is important to recognize the possibility of spontaneous regression and that conservative management could be the treatment modality for patients presenting without severe or aggravating neurological conditions.

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