

Spontaneous Resolution of a Large Disc Extrusion During COVID-19 Restrictions

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INTRODUCTION

Back pain is one of the most common complaints in PM&R and a significant source of disability worldwide. The management of lumbosacral radiculopathy caused by disc herniation is primarily symptomatic relief with conservative treatment versus surgery. In rare cases, a herniated disc can spontaneously resolve. The COVID-19 pandemic has created conditions where elective treatment options are limited based on evolving social distancing guidelines.

CASE DESCRIPTION

A 67 year-old male presented in March 2020 with acute S1 radiculopathy due to a large paracentral L5-S1 disc extrusion measuring 15.4 x 7.4 x 9.6 mm. The patient presented with significant weakness in ankle plantarflexion. Surgical intervention was delayed due to COVID-19, and conservative options were provided in the interim. The patient was treated with physical therapy and transforaminal epidural spinal steroid injection.

The patient subsequently experienced improvement in pain and motor function. He was scheduled for surgery in August 2020, and a repeat MRI was ordered. MRI demonstrated resolution of disc extrusion, and the decision was made to cancel surgical intervention. He has had continued improvement in lower extremity strength and continues with therapy efforts.

IMAGING

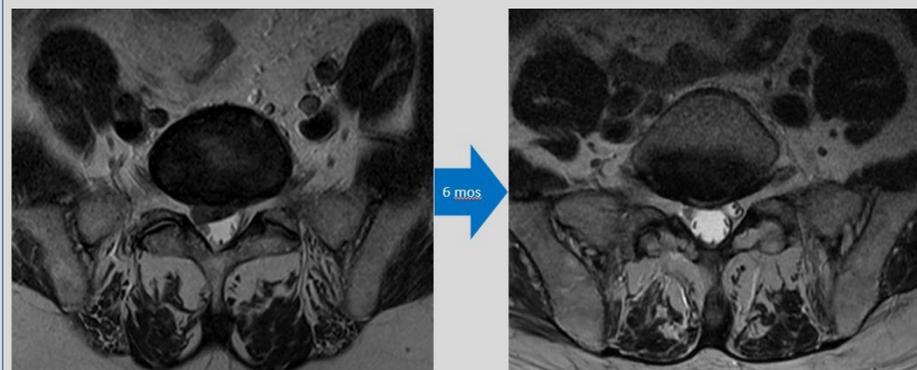


Figure 1. Axial T2-weighted MRI demonstrating initial L5-S1 disc extrusion at presentation followed by resolution.

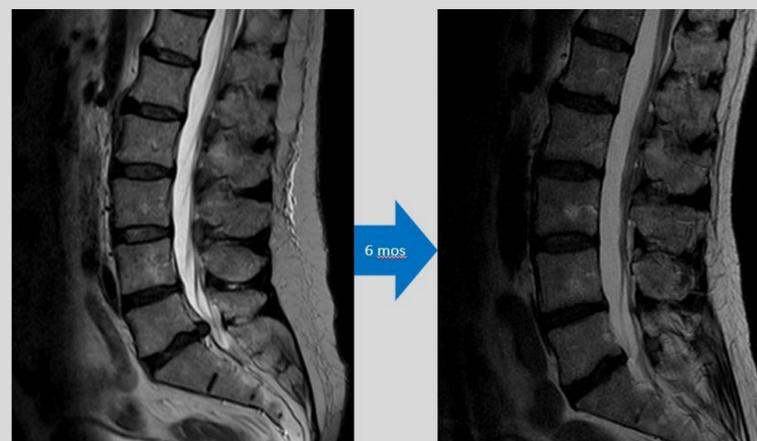


Figure 2. Sagittal T2-weighted MRI demonstrating initial L5-S1 disc extrusion at presentation followed by resolution.

DISCUSSION

Spontaneous resolution of disc herniation has been documented to occur more commonly in the lumbar region of the spine. Three mechanisms have been previously described to explain spontaneous resolution: retraction of the herniated disc into the intervertebral space, dehydration and shrinkage of the herniated disc, and resorption of the disc through an inflammatory process. The COVID-19 pandemic has created a need to reduce infection risk in order to decrease hospital burden due to stressed resources. Persistent radicular symptoms are an indicator for surgical intervention; however, conservative treatment is a viable approach for non-emergent, disc herniations.

CONCLUSION

This case demonstrated the spontaneous resolution of a lumbar disc herniation through conservative treatment, and further seeks to illuminate the limitations COVID-19 has placed on the full spectrum of treatment.

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