

Spontaneous Total Resolution of Severe Lumbar Disc Herniation

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The phenomenon of spontaneous resolution of herniated intervertebral discs has been occasionally reported.¹ Most reported cases are young patients, and the resolution is believed to be due to the inflammatory response.² We encountered such a patient, a 42-year-old male, with symptomatic L5-S1 intervertebral disc herniation. At initial presentation, he had bilateral sciatica, which was more predominant on the right side. He was unable to stand straight or lie flat. A bilateral slump test was positive; yet, neurological integrity was maintained. Magnetic resonance imaging (MRI) revealed a huge right sided L5-S1 intervertebral disc herniation of grade 3AB as per MSU classification with grade 3 nerve root compromise as per Pfirrmann's grading (Fig. 1).³⁻⁵

Conservative modalities of management such as rest, oral analgesics and physiotherapy were initiated. The patient attained a tolerable level of pain relief and hence sur-

gery was not considered. He was followed up on in our out-patient clinic every 3 months. A MRI scan was repeated one year after the initial presentation which demonstrated signs of resolution of the herniated L5-S1 disc. By 2 years, there was complete disappearance of the herniation evidenced in the MRI probably due to the inflammatory response (Fig. 2).² The patient was asymptomatic at the end of our follow up and has consented for his radiological images to be reported. We consider the reported images to be illustrative of this occasional phenomenon of spontaneous resolution of herniated intervertebral discs.

CONFLICT OF INTEREST STATEMENT

None declared.



FIG. 1. (A) T2 weighted sagittal cut MRI showing a huge intervertebral disc herniation at L5-S1 level. (B) Axial cut MRI showing the Grade 3AB disc herniation towards the right side

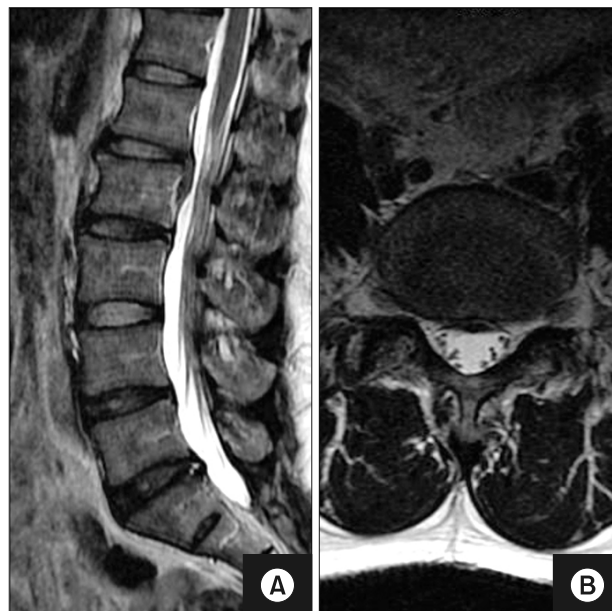


FIG. 2. (A) T2 weighted sagittal cut MRI done 2 years after initial presentation showing complete resolution of the herniated intervertebral disc at L5-S1 level. (B) Axial cut MRI showing complete resolution of disc herniation.

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REFERENCES

1. Altun I, Yüksel KZ. Lumbar herniated disc: spontaneous regression. *Korean J Pain* 2017;30:44-50.
2. Cunha C, Silva AJ, Pereira P, Vaz R, Gonçalves RM, Barbosa MA. The inflammatory response in the regression of lumbar disc herniation. *Arthritis Res Ther* 2018;20:251.
3. Mysliwiec LW, Cholewicki J, Winkelpleck MD, Eis GP. MSU classification for herniated lumbar discs on MRI: toward developing objective criteria for surgical selection. *Eur Spine J* 2010;19:1087-93.
4. Kaliya-Perumal AK, Luo CA, Yeh YC, Tsai YF, Chen MJ, Tsai TT. Reliability of the Michigan State University (MSU) classification of lumbar disc herniation. *Acta Ortop Bras* 2018;26:411-4.
5. Kaliya-Perumal AK, Ariputhiran-Tamilselvam SK, Luo CA, Thiagarajan S, Selvam U, Sumathi-Edirolimani RP. Revalidating Pfirrmann's magnetic resonance image-based grading of lumbar nerve root compromise by calculating reliability among orthopaedic residents. *Clin Orthop Surg* 2018;10:210-5.