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Letter to the editor

Lumbar disc deherniation: A rare “come and go” phenomenon

Dear editor,

We would like to report the findings of an atypical disc herniation regression. This phenomenon has been reported often and its overall prevalence has reached 66.6% [1]. Three mechanisms have been put forward in literature to explain it. The first hypothesis states that the herniated disc retracts back into the intervertebral space through the tear in the annulus fibrosus [2]. The second hypothesis argues that the regression is due to dehydration and shrinkage of the disc fragment [3]. The last hypothesis takes into account the enzymatic degradation and phagocytosis of cartilaginous tissue due to an inflammatory reaction and neovascularization of disc herniation [4]. The high incidence of this process and all pathophysiological mechanisms confirm this is a very dynamic phenomenon, which can “come and go” multiple times.

We report the case of a 54-year-old man who visited our clinic complaining of lower back pain and left L4 radiculopathy. Neurologically, he had slight dorsiflexion weakness in his left foot, hypoesthesia on the L4 dermatome, a diminished patellar reflex, and sensitive Valleix pressure points. The initial lumbar MRI revealed an upwardly migrating sequestrated disc at the L4-L5 level with both L4 and L5 left nerve root compression (Fig. 1A, B). Analgesics and physical therapy were advised, and after 3 weeks his symptoms had disappeared, including the motor weakness. An MRI obtained 4 months after the initial presentation showed resorption of the sequestrated disc (Fig. 1C, D). One year later, his symptoms recurred, and the neurological examination found left

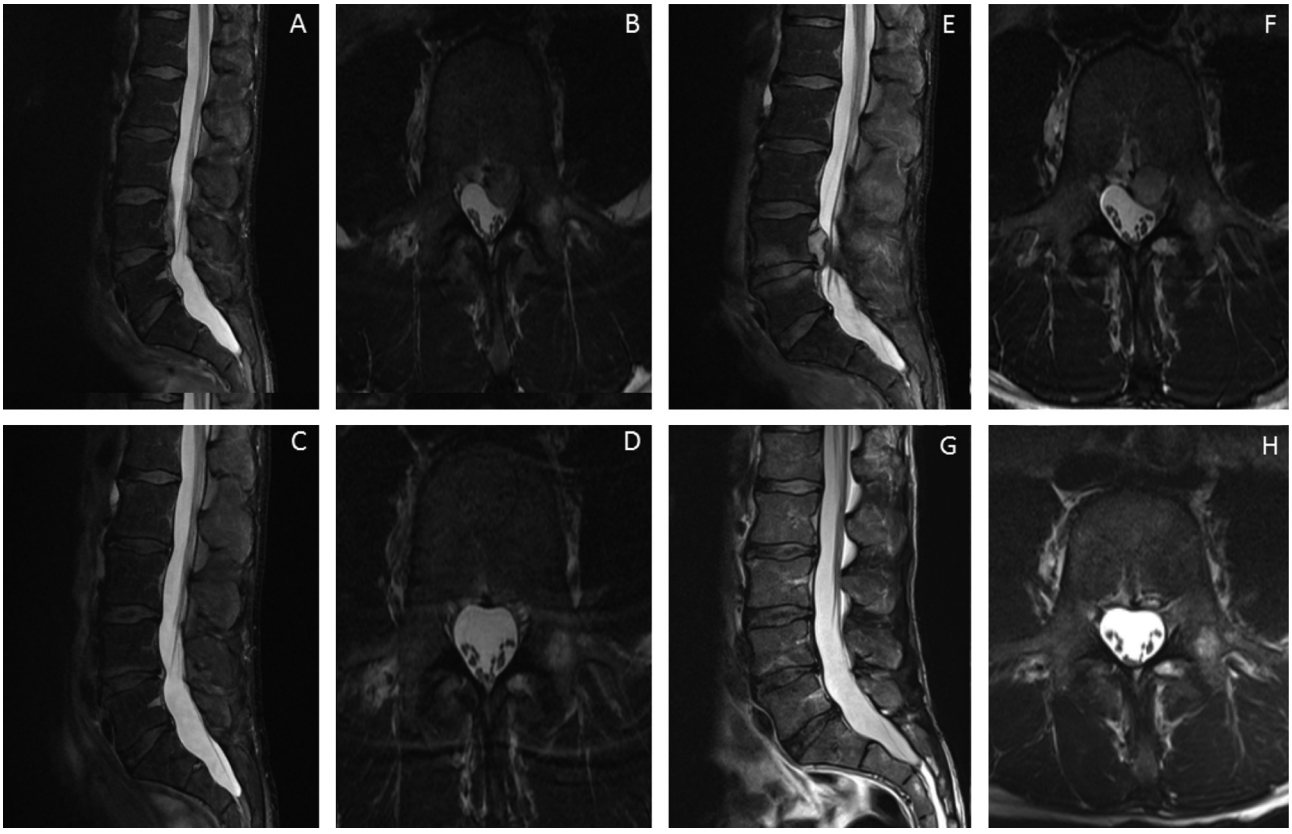

Fig. 1. Initial MRI study (T2-weighted image) of the lumbar spine (A: sagittal, B: axial) revealed a large upward migrated sequestrum at the L4-5 level compressing the dural sac and both left L4-L5 roots. Follow-up MRI study (T2-weighted image) (C: sagittal, D: axial) revealed spontaneous resorption of the disc fragment at L4-L5 after 4 months. One year later, the MRI (T2-weighted image) showed recurrence of (E: sagittal, F: axial) a left-sided large migrated sequestrum at the L4-L5 level. Just before the scheduled surgery, the MRI (T2-weighted image) (G: sagittal, H: axial) showed second complete disappearance of the discal fragment.

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L5 hypoesthesia, absence of left patellar reflex, positive Wasserman sign but no motor weakness. A new lumbar MRI showed a recurrence of the left-side migrated sequestrum at L4-L5 (Fig. 1E, F). Conservative management failed, thus surgical treatment was offered. Two months later, when he was admitted for surgery, the patient reported to us that his radicular pain had disappeared. The MRI showed the disc fragment had completely disappeared again, and the patient left the hospital completely asymptomatic (Fig. 1G, H).

Several studies have shown spontaneous regression of lumbar disc herniations at different levels and at different time periods in the same patient [5]. Nevertheless, to the best of our knowledge, this is the only case where the same disc herniation regressed twice at different times and at the same level (L4-L5). Thus, this "come and go" phenomenon deserves to be reported to the scientific community. We recommend repeating the imaging just before the scheduled surgery, especially if symptoms have changed.

Disclosure of interest

Dr. Tessitore: training fees from: Spineart, Medtronic, Depuy Synthes, Nuvasive and consultancy fees from: Brainlab.

The other authors declare that they have no competing interest.

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