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Images in Rheumatology

Adult-onset Acute Calcific Discitis

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Acute calcific discitis is a rare condition of unknown etiology, observed mainly in childhood.[1] Few cases have been described in adults, and most of these involve the thoracic spine.[2]

A healthy 20-year-old woman with a 4-week history of severe and disabling neck pain was admitted. Symptoms were more prominent at night and were triggered by movement. Neurologic examination was normal and inflammatory markers were not increased. A calcification within the C2–C3 intervertebral disc space was detected on radiographs (Figure 1A). Magnetic resonance imaging (MRI; Figures 2A,B) and computed tomography (CT; Figure 2C,D) confirmed calcification of C2–C3 nucleus pulposus with reactive bone marrow edema. A diagnosis of adult-onset acute calcific discitis was made. Treatment with naproxen (500 mg BID) and pregabalin (75 mg BID) was able to control the pain and was discontinued after 6 weeks. Calcification resorption was confirmed by radiograph after 6 months (Figure 1B).

Diagnosis should be considered in patients with sudden onset, intense spine pain with or without fever, and/or raised inflammatory markers, and confirmed by imaging. MRI shows a hypointense T1 and T2 signal of the intervertebral disc space, with bone marrow edema of the vertebral body. The typical CT scan finding is calcification of the nucleus pulposus without endplate destruction.

Clinical course is benign with good response to nonsteroidal antiinflammatory drugs, but complications such as myelopathy due to herniation of the calcified fragment and residual disc space narrowing can occur in rare circumstances. In most cases, the calcification spontaneously resolves.[3]

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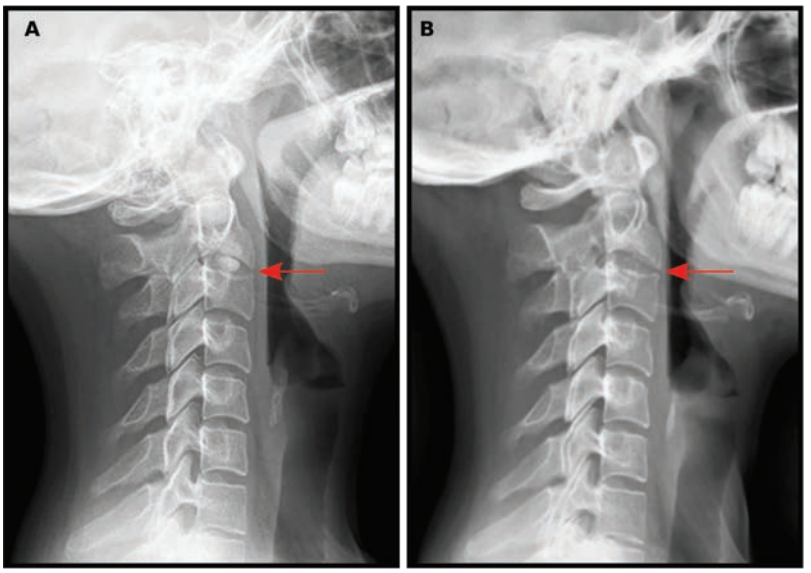

Figure 1. (A) Plain radiographs of cervical spine (lateral view) at hospital admission show calcification of C2–C3 intervertebral disc space (arrow). (B) Plain radiographs of cervical spine (lateral view) 6 months after admission show almost complete resorption of the calcification within the C2–C3 intervertebral disc space (arrow).

Figure 2. Sagittal magnetic resonance imaging of the cervical spine demonstrates a hypointense (A) T1, and (B) T2 signal of the intervertebral disc space, with bone marrow edema of the vertebral body. (C) Sagittal and (D) axial computed tomography scans of the cervical spine show calcification of C2–C3 intervertebral disc space at hospital admission.