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CASE IMAGE

Unexpected diagnosis of vertebral osteolysis

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Abstract

This is the case of a 50-year-old patient suffering from inflammatory low back pain. Radiological exploration showed posterior vertebral damage compatible with discovertebral pseudo-tumor tuberculosis. Pathological examination found no malignant cells, but caseous necrosis was present. The patient was put on antitubercular drugs. The evolution was favorable under treatement.

KEYWORDS

spondylodiscitis, tuberculosis, vertebral osteolysis

This is a 50-year-old patient, hypertensive, presenting with inflammatory low back pain associated with unquantified weight loss evolving for 7 months. The clinical examination was normal apart from pain on palpation of the lumbar spine and a nocturnal fever of 38 degrees which was objectified only once.

Erythrocytes sedimantation rate (ESR) and C-Reactive Protein (CRP) were, respectively, 108 mm and 54.4 mg/L. The rest of the biological tests were normal.

Plain radiographs showed corporeo-pedicular osteolysis of L2. The lumbar CT scan showed right corporeo-pedicular osteolysis of L2 infiltrating the soft tissues and extending to the right anterolateral epidural space suggestive of secondary cancer. MRI showed an L1–L2 expansive process with right discovertebral involvement and extension into the psoas compatible with the diagnosis of discovertebral infection (Figure 1A–C). Pathological examination found no malignant cells, but caseous necrosis was present. Bacteriological examination did not reveal any acid-alcohol resistant bacilli. In addition, the pulmonary X-ray assessment did not show signs of pulmonary tuberculosis.

The diagnosis of discovertebral tuberculosis was made, and the patient was put on antitubercular treatment for 9 months, quadruple (rifampicin, isoniazid, pyrazinamide, and ethambutol) for the first 2 months and double (rifampicin, isoniazid) for the rest.

The evolution was favorable with a follow-up of 2 years.

Spinal tuberculosis is most often manifested by spondylodiscitis; involvement of the body and the disc is the most typical.[1]

As previous reported, tuberculosis can be a challenging diagnosis and may mimic tumor.[2]

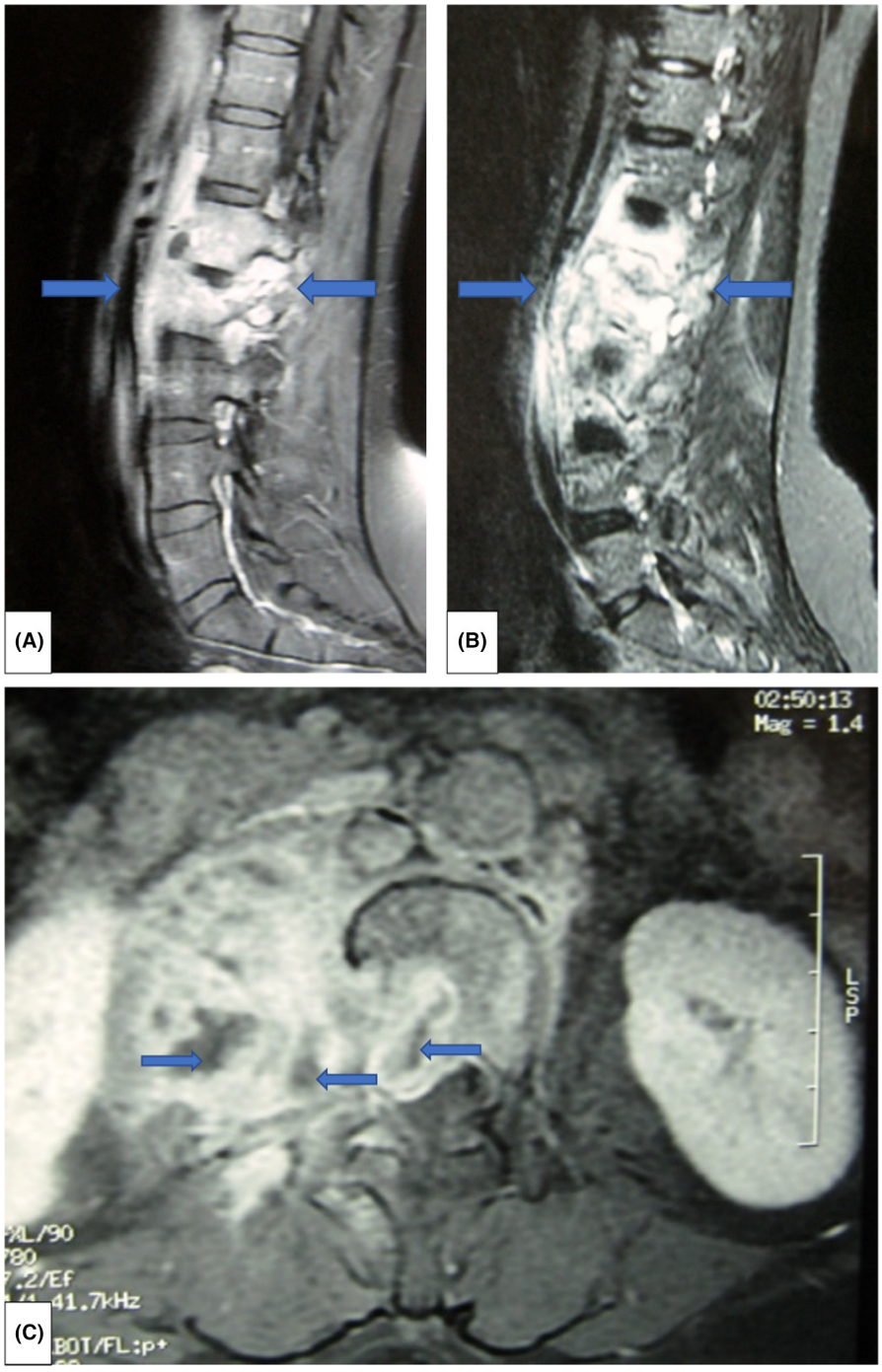

FIGURE 1 Spinal MRI: (A: T1 + Gado-STIR sequence, B: T2-STIR): sagittal section showing L1-L2 expansive process (bright high signal intensity), right discovertebral involvement with enhancement and irregularities in the adjacent vertebral plateaus, with intraosseous abnormalities and enhancement, and extension into the psoas (bright high signal intensity). (C) T1 with fat suppression + Gado sequence, axial section showing an extension of the lesion toward the paravertebral region, posteriorly compressing the right dural sac, heterogeneous enhancement, and some not enhanced components (typical of collections) are depicted (arrows).

AUTHOR CONTRIBUTIONS

Houssem TBINI: Conceptualization; data curation; writing – original draft. **Ines Mahmoud:** Supervision; validation; writing – review and editing. **Aicha Ben Tekaya:** Validation; visualization. **Leila Rouached:** Validation; visualization. **selma bouden:** Validation; visualization. **Rawdha Tekaya:** Validation; visualization. **Olfa Saidane:** Validation; visualization. **Leila Abdelmoula:** Validation; visualization.

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None declared.

CONFLICT OF INTEREST

The authors state no conflict of interest.

DATA AVAILABILITY STATEMENT

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

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