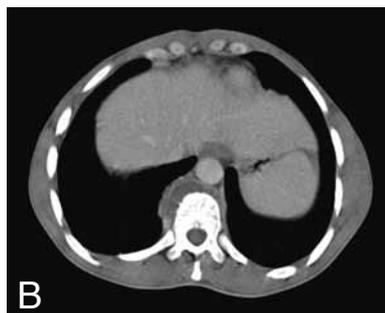
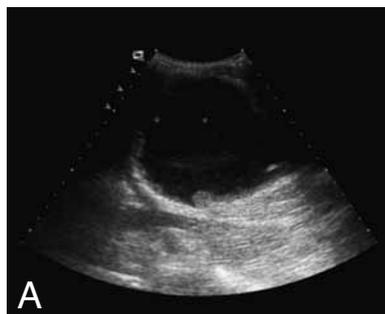


IMAGES IN CLINICAL RADIOLOGY



Cold lumbar abscesses due to tuberculous spondylitis

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A 33-year-old man, originating from Morocco, came to the hospital with a one-month history of right paralumbar mass. His general condition was good except for some weight loss. He had no fever. Blood tests showed a moderate inflammatory syndrome.

Sonography revealed a huge heterogeneous cystic mass with thickened and nodular walls bulging under the skin in right flank (Fig. A).

The abdominal CT scanner that completed the exploration showed extensive paravertebral collections spreading into both psoas muscles with subcutaneous extension on the right side (Fig. B, C). It also revealed irregular osteolytic lesions of several vertebral bodies from T10 to L5 (Fig. D). However, there was no formal evidence of intervertebral disc involvement.

A CT-guided aspiration of 300 ml of fluid was performed and microbiologic analyses allowed identification of *Mycobacterium Tuberculosis* DNA, which led to the diagnosis of cold abscesses associated with tuberculous spondylitis. Antituberculous drug treatment was initiated with an excellent clinical and radiological response (Fig. E) after six weeks already with complete disappearance of collections.

Comment

In recent years, there has been a resurgence of tuberculosis in both developing and developed countries. Risk factors include human immunodeficiency virus epidemic, poor nutritional status, outbreaks in congregate settings, appearance of drug-resistant strains of *Mycobacterium tuberculosis* and an increase in migration from developing countries.

Approximately 3% of tuberculosis cases involve the skeleton. Nearly 50% of those cases affect vertebrae (Pott's disease) with paraspinal abscesses in another 75%.

Haematogenous dissemination from a primary focus in the lungs or the lymph nodes is the most common means of spread.

Cold abscess occurs mainly associated with osteomyelitis due to tuberculosis or actinomycosis. It develops slowly, without local redness, heat, pain or fever and can lead to a huge abscess with risk of fistula formation.

The diagnosis is often delayed because of both non-specific symptoms and subacute presentation of the disease.

CT and MRI are the most useful tests to establish the diagnosis and to clarify extension of the disease. Two distinct patterns of spinal tuberculosis have been identified: the first involves intervertebral disc and adjacent vertebral bodies; the second is characterized by destruction of one or more vertebrae without discitis.

Aspiration of collection under imaging guidance allows adequate sampling for microbiologic analysis.

The differential diagnosis of spinal tuberculosis includes subacute or chronic infections caused by bacteria or fungi and noninfectious causes, such as metastatic disease.

Percutaneous drainage of the abscess is advocated by some authors in association with antituberculous drug treatment with a low induced morbidity. Surgery will be kept for the cases of ineffective drug treatment, spinal instability or deformity and neurological complications.

Reference

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