

# Photoquiz

## Chronic back pain and an inguinal mass: what is your diagnosis?

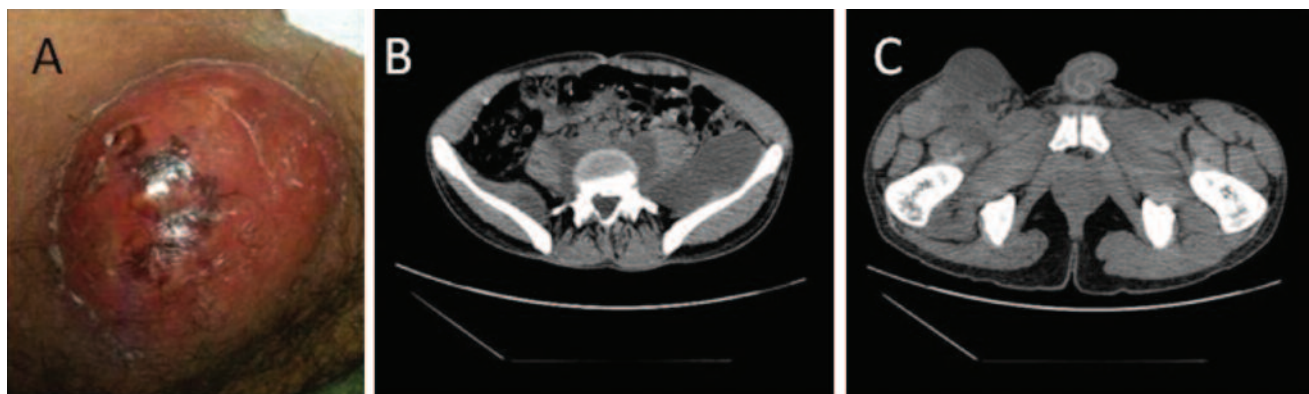
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A 21-year-old Tunisian man presented to our hospital with a 6-month history of low back pain, fever and weight loss. His prior history was unremarkable. On physical examination, the patient had bilateral cervical lymphadenopathy and a nontender, painful and fluctuant swelling of about 8x6 cm in size in the right inguinal region (Figure 1A). Blood tests were unremarkable, with the exception of erythrocyte sedimentation rate (36 mm/hr) and C-reactive protein (1.7 mg/dl). HIV test, VDRL and TPHA, Vidal-

Wright serodiagnosis and blood cultures were all negative. Quantiferon-TB test was positive. A chest X-ray showed no abnormal findings. The patient underwent abdominal computed tomography (CT) scan, showing the presence of osteolytic lesions of L5-S1 and bilateral fluid collections in the lumbar paravertebral spaces and along the course of psoas muscles, which were assumed to be abscesses (Figure 1B-C). The right abscess extended to the subcutaneous tissues of the inguinal region.

### WHAT IS YOUR DIAGNOSIS?



The patient had TB spondylodiscitis. In fact, a CT-guided percutaneous drainage of the psoas abscesses was performed and polymerase chain reaction assay for *Mycobacterium tuberculosis complex* detection on the aspirated material was positive. Cultures yielded pansensitive *Mycobacterium tuberculosis*.

The patient was treated with rifampicin, pyrazinamide, isoniazide and ethambutol for two months and then with rifampicin and isoniazid for 6 months. He recovered completely. A repeat CT scan at the end of the treatment showed no abnormalities.

Extra-pulmonary tuberculosis (TB) accounts for about 15-20% of TB cases. 3% of TB cases involve the skeleton and spinal TB represents approximately 50% of all cases of skeletal TB<sup>1</sup>. Paraspinal and psoas abscesses secondary to TB spondylodiscitis may develop and extend to adjacent structures<sup>2,3</sup>. The differential diagnosis includes infections due to *Staphylococcus aureus*, *Escherichia coli*, streptococci and anaerobes. Brucellosis may be responsible for spondylodiscitis and rarely psoas abscesses in endemic areas<sup>4</sup>.

Early diagnosis is often difficult because of the insidious and non-specific presentation. Patients may complain of chronic back pain, with or without muscle spasm and rigidity. Magnetic Resonance Imaging and CT scan are the most useful methods for detection of spinal lesions and abscesses, especially in early stages of the disease. However, the ultimate diagnosis relies on

microbiological cultures of specimens obtained through surgery biopsy or CT-guided drainage. Conservative treatment with percutaneous drainage of the abscesses along with antituberculous therapy is recommended when vertebral lesions are located in one or two vertebrae with no serious spinal instability. Therapy should be given for a minimum duration of 6 months. Isoniazid and rifampin should be administered during the whole course of therapy and associated with pyrazinamide and ethambutol for the first 2 months of treatment. Surgical treatment is contemplated in case of neurologic deficit, spinal instability or no response to medical therapy<sup>5</sup>.

## References

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