

A CLERK WITH BACK PAIN

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CASE HISTORY

A 43-year-old clerk presented with generalized weakness, malaise, fever, and sweating for several weeks duration. Other symptoms included non-productive cough and backache for a few weeks duration. There was no history of morning stiffness, neither was there any history of any trauma.

He had a history of diabetes mellitus for 10 years. He had a history of 40 pack years of smoking.

On examination, the temperature was 37.5°C. The patient was a bit pale. There was no lymphadenopathy. Lungs were clear and the heart rate was regular, with no murmur. The abdomen was soft, with no organomegaly or tenderness noted, and pedal edema was absent. Neurological examination revealed no focal motor weakness. The reflexes were equal bilaterally and Babinski's reflex was absent. He had mild kyphosis and spinal movements were full. There was no spinal tenderness.

Full blood count showed haemoglobin (Hb) 10gm%, white blood cell (WBC) was within normal limit but there was relative lymphocytosis. Electrolytes, blood urea nitrogen (BUN), creatinine, albumin were normal. The alkaline phosphatase

was slightly high. Other liver enzymes were within normal limit. Erythrocyte sedimentation rate (ESR) was 82 mm/h. His spine x-ray is shown below.

QUESTION:

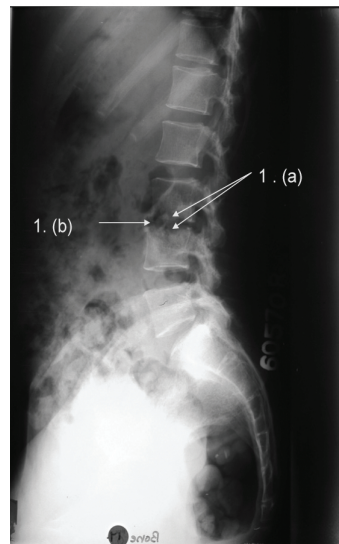
1. Describe the findings in the x-ray.
2. What is your diagnosis?

ANSWER:

1. a) Erosion of the superior end plate of the L4 vertebra and inferior end plate of the L3 vertebra.
b) Narrowed disc space (reduction of the height of the disc space) between L3 and L4 vertebra.

No significant vertebral collapse or gibbous. No abnormal soft tissue shadow anterior to the spine.

2. Tuberculosis of the lumbar spine.



DISCUSSION

Due to the indolent nature of the infection, radiological manifestations are usually advanced when the patient clinically present with symptoms. Erosion of the end plates, of the contiguous vertebra starting from the anterior aspect, is the cardinal radiological feature seen in the plain radiograph. This is due to the spread of the infection from the vertebral body to the disc space. Progressive narrowing of the disc space associated with vertebral collapse leads to the gibbous deformity. (not seen in this X-ray). Para spinal abscess formation is seen as a soft tissue shadow anterior to the spine in the plain radiograph. (not seen in this patient).

Infection may spread, beneath the anterior or posterior longitudinal ligament, or to the spinal epidural space forming epidural abscesses. Multi-detector computerized tomography (CT) is helpful in demonstrating the extent of vertebral and disc space destruction and paraspinal abscess formation. Magnetic resonance imaging (MRI) is particularly useful in diagnosing paraspinal and epidural abscesses and subligamentous spread. Differentiation from pyogenic infection is

mainly by the erosive changes beginning at the anterior aspect of the vertebra. Predominant involvement of the end plates and the clinical features makes vertebral metastases an unlikely diagnosis.

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Two out of five adult primary care patients have premature ejaculation

Tang WS, Khoo EM. Prevalence and correlates of premature ejaculation in a primary care setting: a preliminary cross-sectional study. *J Sex Med.* 2011. DOI: 10.1111/j.1743-6109.2011.02280.x

This is a cross-sectional study of 207 adult men aged 18-70 years at a primary care clinic using the Premature Ejaculation Diagnostic Tool (PEDT). Multivariate analysis showed that erectile dysfunction, sexual intercourse ≤ 5 times in 4 weeks, and Indian ethnicity were predictors of PE.

Process of care and prescribing practices for hypertension suboptimal in Malaysian primary care

Tong SF, Khoo EM, Nordin S, *et al.* Process of care and prescribing practices for hypertension in public and private primary care clinics in Malaysia. *Asia Pac J Public Health.* 2011. DOI: 10.1177/1010539511402190

This is a cross-sectional conducted in 100 public health clinics and 114 private primary care clinics in Malaysia. Overall, 21% of the prescription practices were less than optimal. The process of care and the use of antihypertensive medications were not satisfactory in both settings.