

Pathological fracture and osteolysis of the rib with pleural effusion – is this malignant?

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CASE REPORT

A 35-year-old man was referred to our hospital for further diagnostic procedures. At admission, the patient presented with right-sided chest pain and dry cough of six weeks duration. He had no history of chest trauma or rib fractures, and the medical histories of the patient and his family were unremarkable.

On physical examination, the patient was afebrile, in general good condition and there was dullness over the right hemithorax extending up to the angle of the scapula, along with a corresponding reduction in the breath sounds. His chest X-ray showed massive right-sided pleural effusion (*figure 1*) and a diagnostic and therapeutic thoracentesis was performed. Pleural fluid analysis revealed a haemorrhagic exudate with protein 49 g/l, glucose 7.1 mmol/l, lactate dehydrogenase 129 U/l and adenosine deaminase 23.6 U/l. Pleural fluid examination

Figure 1. A chest X-ray shows a large right sided pleural effusion

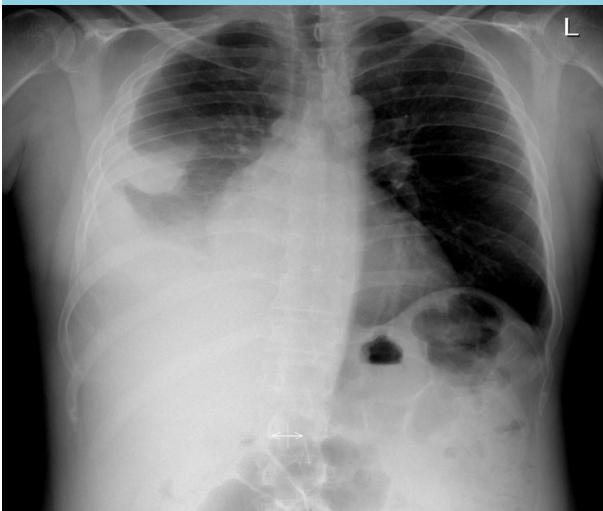


Figure 2. Chest CT shows osteolysis of the seventh and pathological fracture of the eighth right rib



was negative for malignant cells. Chest computed tomography demonstrated a large right-sided pleural effusion with osteolysis of the seventh right rib, a pathological fracture of the eighth right rib without changes in the lung parenchyma (*figure 2*). The patient underwent right-sided thoracotomy with decortication of lung and partial resection seventh and eighth ribs.

WHAT IS YOUR DIAGNOSIS?

See page 370 for the answer to this photo quiz.