Case report 654*

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Imaging illustrations

Fig. 1. A Frontal and B lateral views show destructive lesions of L5. Note the absent anterior vertebral body line of L4 (arrow) in B. A right psoas mass is present.

Fig. 2. A Chest radiograph shows a right paratracheal mass (open arrow) and a destructive lesion of the right ninth rib (black arrow). B Detailed view of the right ninth rib.

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Clinical information

This 28-year-old black man presented with a 1-month history of increasing pain in the lower back and both legs. He denied any paresthesias, subjective weakness or weight loss. Physical examination was unremarkable.

Laboratory examination revealed white blood cell count (WBC) of 19.7, hemoglobin/hematocrit (Hb/hct) of 11.8/36.4, phosphorous of 5.0, albumin of 3.3, and alkaline phosphatase of 144. The serum was human immunodeficiency virus (HIV) negative.

Plain radiographs of the lumbar spine (Fig. 1) showed a destructive lesion of L5 with an associated mass in the right psoas region. The body of L4 was also involved.

Subsequent chest radiographs (Fig. 2) disclosed hilar adenopathy and a lytic lesion of the ninth rib. Computed tomograms (CT) of the lumbar spine revealed multiple bone lesions in the vertebrae and pelvis (Fig. 3). Magnetic resonance imaging (MRI) examination showed a vertebra plana of L5, multiple lesions of low signal intensity, and a paravertebral soft tissue mass at L5 (Fig. 4).

The patient underwent biopsies of the lumbar mass and an enlarged supraclavicular lymph node.

Fig. 3. A CT scan of L4. Note the two lytic lesions in the anterior portion of the vertebral body; observe the paraspinal mass. B CT scan of L5. Note the nearly total destruction of this vertebra. C CT scan of upper sacrum. Multiple lytic lesions are present in the sacrum and pelvis. Note the presacral mass.

Fig. 4. MRI examination (TE = 35 ms/TR = 2100 ms) shows vertebra plana of L5, destruction of the body of L4 anteriorly, and a prevertebral soft tissue mass. Also present are lesions of T12 and L3.