
Leptomeningeal leukemia masquerading as cauda equina syndrome: appraisal by magnetic resonance imaging

A 51-year old lady with acute myeloid leukemia (FAB M4) in first complete remission presented with a 4-day history of sacral pain, lower limb weakness, perineal numbness and fecal incontinence. Physical signs were consistent with cauda equina syndrome that prompted an urgent magnetic resonance imaging (MRI). Instead of finding a compressing mass lesion, MRI showed infiltration of the L5 and S1 nerve roots. (Figure 1A and B). Subsequent lumbar puncture confirmed leptomeningeal leukemia. Bone marrow aspiration showed 12% blasts. She received systemic and intrathecal chemotherapy and is currently in second complete remission.

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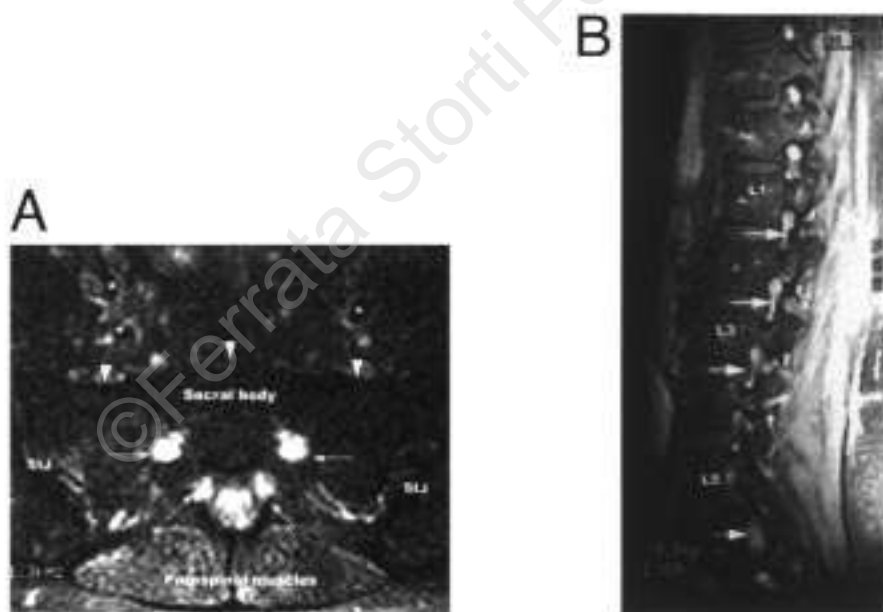


Figure 1. A. T2-weighted fast spin echo (FSE) axial scan of the lumbar spine shows hyperintense signals surrounding the cauda equina (arrows). SIJ denotes the sacral-iliac joints. Arrowheads outline the anterior surface of the sacrum and *denotes the iliac vessels. B. Post-contrast T1-weighted SE sagittal scan of the lumbar spine confirms leptomeningeal enhancement around the nerve roots (arrows) exiting from the neural foramina.