

Teaching NeuroImages: Leptomeningeal lung carcinoma

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Figure Axial and sagittal imaging



(A) Axial images from a CT after myelogram demonstrate left location of disease at C6 and L1. Though infrequently used in the era of MRI, this modality can have an important role in the evaluation of suspected leptomeningeal carcinomatosis. (B) The sagittal images reveal focal masses in the intradural, extramedullary space behind L1 and C6 consistent with metastases from the patient's known lung cancer.

A 55-year-old woman with lung cancer presented with leg numbness. Her systemic disease was well-controlled. MRI was precluded by a metallic cardiac device and spinal CT was unremarkable. On 2 occasions, examination of CSF demonstrated minimally elevated protein, but no abnormal cells. CT myelogram revealed bulky disease and CSF obtained a third time during the procedure confirmed the diagnosis

(figure). To detect leptomeningeal carcinomatosis with 90%–98% sensitivity, 3 taps are needed. False-negatives can be minimized by withdrawal of 10.5 mL of CSF and immediate processing.^{1,2}

AUTHOR CONTRIBUTIONS

Dr. Glover worked on manuscript draft, editing, and image editing. Dr. Brook worked in image acquisition, caption drafting, and editing. Dr. Welch worked as senior author and oversaw all drafting and editing.

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