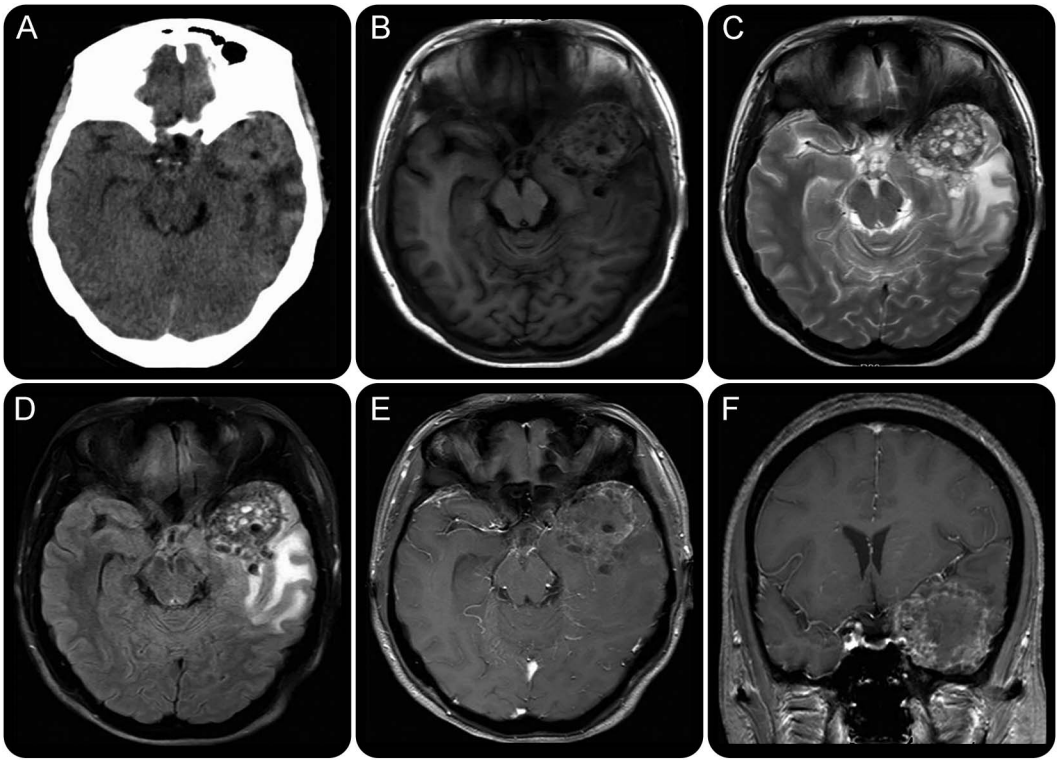
Alveolar echinococcosis presenting with simultaneous cerebral and spinal involvement

Figure 1 Brain CT and MRI



(A) Axial CT scan reveals a heterogeneous solid mass containing multiple hypodense cystic areas and shows extensive peripheral edema. (B) Axial T1-weighted, (C) axial T2-weighted, and (D) fluid-attenuated inversion recovery sequence MRI show an inhomogeneous spherical mass with multiple central cystic-necrotic areas. (E) Axial enhanced T1-weighted and (F) coronal enhanced T1-weighted MRI show irregular peripheral enhancement of the lesion.

A 37-year-old Tibetan shepherdess presented with headache and weakness of the lower limbs for 10 months. Examination disclosed a positive straight-leg-raising test. Neuroimaging showed a heterogeneous mass in the left temporal lobe (figure 1) and an intradural mass in the lumbosacral canal with L4 vertebral body destruction (figure 2). Chest and abdominal CT scans were negative. Two operations yielded a tissue diagnosis of alveolar echinococcosis and postoperative albendazole therapy was started. Simultaneous involvement of brain and the spinal cord in primary extrahepatic alveolar echinococcosis is rare. Early diagnosis and radical surgery followed by continuous benzimidazole treatment are crucial.[1]

Jian Cheng, MD, Jinli Meng, MD,* Wanlin He, MD, Xuhui Hui, MD*

*These authors contributed equally to this work.

From the Department of Neurosurgery (J.C., X.-H.H.), West China Hospital, Sichuan University; and Department of Radiology (J.-L.M., W.-L.H.), Hospital of Chengdu, Office of People's Government of Tibetan Autonomous Region (Hospital C.T.), Chengdu, P.R. China.

Author contributions: Jian Cheng: study design, data collection and analysis, drafting the manuscript, revising the manuscript. Jinli Meng: data collection, drafting the manuscript, revising the manuscript. Wanlin He: acquisition of data, analysis and interpretation of data, study supervision. Xuhui Hui: study concept and design, study supervision, revising the manuscript for important intellectual content.

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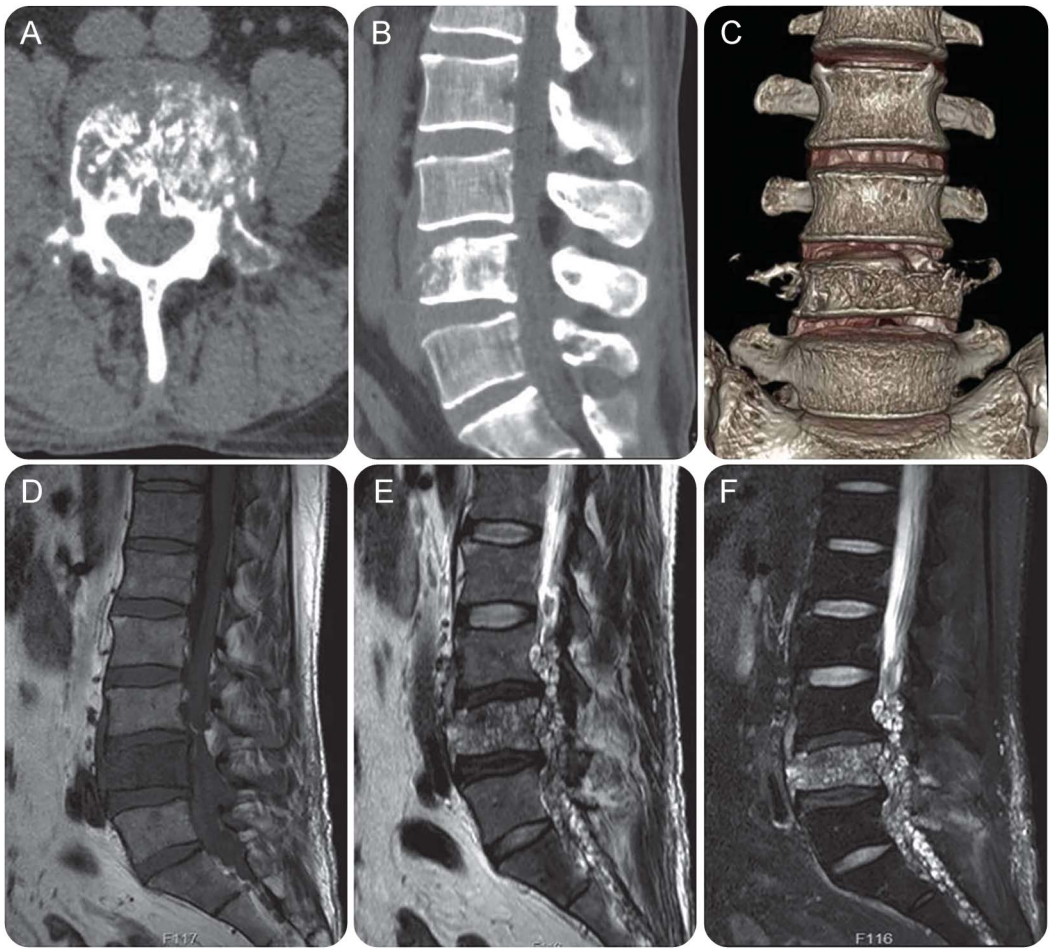
Figure 2 Spine CT and MRI



(A) Axial, (B) sagittal, and (C) 3D CT images of the lumbar spine reveal extensive vertebral body destruction of L4. (D) T1-weighted image, (E) T2-weighted image, and (F) T2-weighted short tau inversion recovery image of the lumbar spine in sagittal orientation show a heterogeneous invasive mass at L3-S2 with L4 vertebral body destruction.

Disclosure: The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

Correspondence to Dr. Hui: 892910276@qq.com

1. Brunetti E, Kern P, Vuitton DA. Expert consensus for the diagnosis and treatment of cystic and alveolar echinococcosis in humans. Acta Trop 2010;114:1–16.

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