A 27-year-old Kenyan woman arrived in the United States and immediately presented to the emergency department with an eight-month history of progressive back pain, intermittent fever and bilateral leg weakness. She had undergone MRI imaging in Kenya and been diagnosed with Pott disease shortly after symptom onset. Despite completing six months of anti-tubercular therapy in Kenya, her weakness progressed to paraplegia. On presentation, she had 0/5 strength in her lower extremities bilaterally.

MRI imaging on the day of hospital admission revealed an extensive paraspinal abscess extending from T4 to T9, compressing the mediastinum, as well as multiple lytic lesions (Figure) from T3 to T9. Her thoracic spine was collapsed at T7 and T8, with spinal cord compression and kyphosis of 45 degrees. An interventional radiologist drained the abscess, which yielded immediate improvement in her lower extremity strength; she was able to passively flex and extend her legs. Thereafter, neurosurgeons performed a T8 laminectomy and T1 to T12 spinal fusion.

Discussion
This case demonstrates successful treatment of tuberculous spondylitis, also known as Pott disease. This is a rare manifestation, affecting only 2% of TB cases. Extrapulmonary TB of the spine typically spreads to the thoracic and upper lumbar area. Once two adjacent vertebrae are affected, infection can enter the intervertebral disc space, causing necrosis, vertebral collapse and kyphosis (the Gibbus deformity). The clinical presentation from symptom onset to diagnosis includes back pain and stiffness potentially progressing to neurologic compromise from spinal cord compression. Active pulmonary disease is not present in most cases, so a lack of pulmonary symptoms is not helpful in ruling out the diagnosis.

The approach to medical treatment for Pott disease is similar to that for pulmonary TB. Although duration of treatment is still uncertain, at least six months of first-line agents is recommended. A longer treatment period of nine to 12 months should be considered if rifampin is contraindicated or if the patient has extensive disease.

Although antimicrobial therapy is recommended for all patients, routine surgery for spinal tuberculosis is not. Currently, randomized controlled trials investigating indications for surgery are lacking; however, most experts agree that surgical intervention should be undertaken in the presence of neurological deficits, spinal instability, large paraspinal abscess or inadequate response to antimicrobial therapy.

References