A 39-year-old male with upper back pain

A 39-year-old immigrant from South-East Asia presented with several months of worsening upper back pain. He described night sweats and weight loss but denied any other complaints. On admission, computed tomography scan showed destruction of the 5th thoracic vertebral body with paraspinous soft tissue mass that narrowed the central canal (Figure 1, upper panel). Decompression surgery was done. Surgical samples for culture and histopathological examination were obtained (Figure 1, lower panel). The patient was diagnosed with spine tuberculosis (TB), Pott’s disease. He was started empirically on isoniazid (INH), rifampin (RIF), ethambutol (ETH) and pyrazinamide (PZA). Cultures subsequently grew mycobacterium tuberculosis.

Skeletal TB accounts for no more than 3% of all TB cases.¹ Pott’s disease accounts for half of skeletal TB cases.² Thoracic vertebrae are commonly affected followed by lumbar and cervical vertebrae.¹ Patients usually complain of pain and the presentation is indolent.³ The diagnosis might be missed until paralysis, deformity and sinus tracts develop. Other symptoms and signs of TB might be absent. Magnetic resonance imaging (MRI) is the best diagnostic modality.¹ MRI frequently demonstrates disc collapse/destruction, cold abscess, vertebral wedging/collapse, marrow edema and spinal deformities. Granulomas are seen in two-thirds of histopathology cases and cultures are positive in half of the samples.³ Pott’s disease is treated for 6–9 months; INH, RIF, ETH and PZA are given in the first 2 months of therapy and INH and RIF are given for the rest of the course.³ Surgery is indicated to drain abscesses, if spine instability is present or to relief spinal cord compression.²

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References

