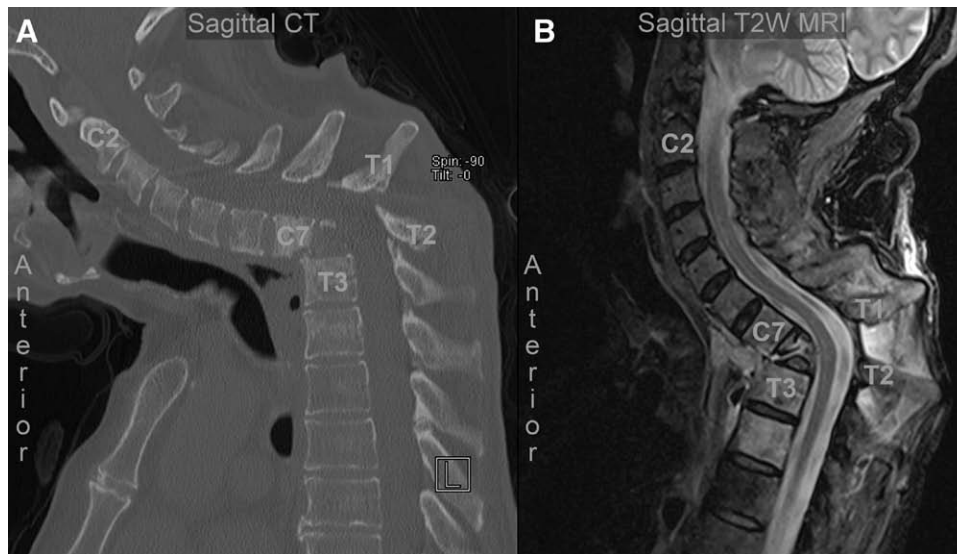


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Images in Anesthesiology: Vertebral Osteomyelitis

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A 53-YR-OLD man with esophageal cancer who underwent a previous transhiatal esophagectomy which was complicated by chronic aspiration presented to our Institution with neck pain and progressive spine deformity. Non-contrast sagittal reformat computerized tomography (fig. A) and T2 weighted fat saturated sagittally acquired magnetic resonance imaging (fig. B) revealed severe cervicothoracic kyphosis with nearly complete collapse of T1 and T2 vertebral bodies and associated

surrounding changes of chronic osteomyelitis. No radiographic spinal cord compromise was identified, and he demonstrated an intact neurologic examination. Prevertebral fistula formation and vertebral osteomyelitis were diagnosed. A halo brace was placed in preparation for fistula takedown and staged C4-T4 decompression with fusion.

At the first of his definitive procedures, the airway examination demonstrated a halo brace, limited (2.5 cm) mouth opening, upper and lower dentures, Mallampati IV, and copious secretions. Given his airway examination and to eliminate any spinal movement, an awake oral fiberoptic intubation was chosen to secure the airway. Glycopyrolate and midazolam were administered. The airway was topicalized with nebulized 2% lidocaine. With the patient sitting with the halo brace, oral fiberoptic intubation was successful following multiple attempts with difficult vocal cord visualization because of severe anatomical distortion and copious secretions. The procedure was otherwise uneventful, and he eventually received a tracheostomy.

The majority of patients with vertebral osteomyelitis do not require surgical treatment¹; however, when brought to the operative environment they present many challenges to anesthesiologists.^{2,3} One series reported awake fiberoptic intubation in 39% of cervical spine surgery patients because of spinal instability, myelopathy, or spinal stenosis.² Patients with spinal instability and deformity require airway management individualized to both preservation of spinal cord integrity and difficult airway anticipation.

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