Cervical spine fracture associated with ankylosing spondylitis

Figure Cervical spine fracture

Coronal CT images show fracture through body of C2 (A, arrow) with 2.1-cm lateral displacement. Diffuse ligamentous fusion of the lumbosacral spine (B) was noted on sagittal CT images. Axial T2-weighted MRI (C) shows epidural hematoma at the C2 level (arrow) and thrombus in the left vertebral artery (arrowhead).

A 53-year-old man with ankylosing spondylitis (AS) was found unresponsive on the ground. He was comatose and quadriplegic with absent cough and gag reflexes but preserved corneal and pupillary responses. CT of the spine (figure) showed displaced C2 fracture, severely deformed spinal cord, and complete spinal ankylosis. He developed hemodynamic instability with persistently poor arousal, and his family elected to withdraw care. AS, chronic inflammatory disease of the axial skeleton, results in ossified ligaments and loss of elasticity, predisposing to spinal fractures following minor trauma. Three-quarters of these fractures occur in the cervical spine, with associated mortality rate of 35%.¹

Shamik Bhattacharyya, MD, Minjee Kim, MD

From Brigham and Women's Hospital, Massachusetts General Hospital, and Harvard Medical School, Boston, MA.

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Correspondence to Dr. Bhattacharyya: sbhattacharyya3@partners.org

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Shamik Bhattacharyya and Minjee Kim

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