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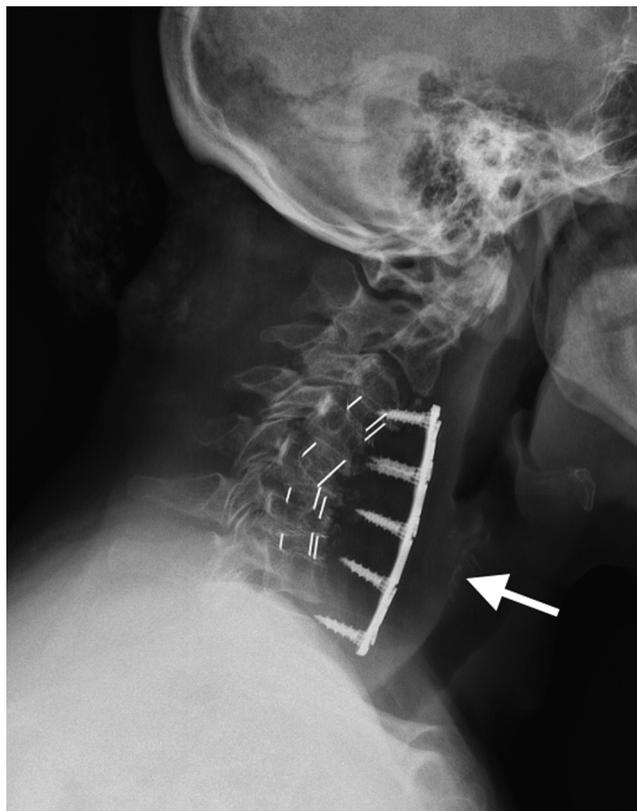
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Figure. Lateral radiograph of the cervical spine and surgical hardware, with associated bulging prevertebral soft tissue (arrow).

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A 59-year-old woman with a history of cervical spondylosis and central stenosis with myelopathy presented to the emergency department (ED) after a C3 through C7 anterior cervical decompression and fusion procedure. She had presented to the ED on several occasions postoperatively with symptoms including neck, back, bilateral hand, and leg pains. She then presented again to the ED 2 weeks after the procedure, complaining of persistent pain accompanied by progressive numbness of the feet. Examination revealed slight weakness (4 out of 5 strength) in the lower extremities. Radiograph of the cervical spine was obtained (Figure).

For the diagnosis and teaching points, see page 27.

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DIAGNOSIS:

Acute cervical implant extrusion with anteriorly displaced plate and surgical fixation screws. Radiograph of the cervical spine demonstrated separation of the plate and associated surgical fixation screws from the respective vertebral bodies (C4 through C7). The patient was admitted for operative hardware revision. Postsurgical outcome was ultimately improved compared with preprocedural baseline.

Complications of anterior cervical spine procedures include dysphagia, esophageal perforation, dural penetration, recurrent laryngeal nerve palsy, hematoma formation, and wound infection.¹

Two-year revision rates for anterior cervical decompression and fusion in one study were 2% to 9% for single-level fusions and 4% to 10% for multilevel ones, and most commonly as a result of adjacent segment disease.² Acute mechanical hardware failure is a rare complication, reported in less than 1% of cases and typically occurring within a month of the index operation according to a large retrospective multicenter study.³ Although aggravation of preexisting myelopathy can rarely occur, the majority of patients should be expected to experience relief from myelopathy symptoms postoperatively. As such, residual, recurrent, or increased myelopathic symptoms should prompt consideration of potential acute complications such as hardware failure, which may be revealed by radiographs or advanced imaging modalities.

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