Cervicothoracic junction instability after cervical fusion

A 70-year-old woman with a history of motor vehicle versus train accident, previous thoracic and lumbar fusion, and recent cervical fusion was admitted for severe upper back pain, difficulty with balance, weakness of lower extremities, and progressive kyphosis. On examination, the patient was found to have diffused myelopathy and paraparesis throughout her lower extremities. She requires a walker to maintain her balance and to ambulate.

Radiography (Fig. 1) and magnetic resonance imaging (Fig. 2) revealed canal compromise and spinal cord compression, with a severe acute compression fracture at the T4 level, which resulted in significant kyphotic deformity.

The patient underwent a T4 corpectomy and cervicothoracic revision fusion (Fig. 3). This case highlights the inherent instability of the cervicothoracic junction and the need for supplemental instrumentation across this junction when cervicothoracic fusion operations are undertaken [1,2].

References


Fig. 3. Lateral plain cervicothoracic postoperative radiograph demonstrating correction of the kyphotic deformity after T4 corpectomy and revision of the cervicothoracic fusion.