A 44-year-old woman, with a childhood history of motor vehicle accident, was referred to neurosurgery due to progressive tetraparesis, inability to walk, generalized hyperreflexia, and bilateral extensor plantar reflexes (American Spinal Injury Association Impairment Scale D/ Japanese Orthopaedic Association score 7), without bowel/bladder dysfunction. Dynamic MRI (Figures 1 and 2) showed spinal cord edema/gliosis at the C1 level and atlanto-axial subluxation. During flexion, severe spinal canal stenosis was observed, confirming atlanto-axial instability. Posterior arthrodesis was performed and resulted in resolution of instability after 3 months. Dynamic MRI in the supine position can be an accurate technique to unveil occult cervical canal stenosis.\(^1\)\(^2\) Although most cases are revealed or aggravated during extension, flexion should also be tested.\(^2\)

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The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.
**Figure 2 MRI of the Cervical Spine, Axial View**

Axial T2-weighted imaging at rest at the level of C1 confirms the bilateral spinal cord hyperintense lesion, in keeping with gliosis/edema.

**Appendix Authors**

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
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**References**


Teaching NeuroImage: Dynamic MRI in the Evaluation of Cervical Myelopathy
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