

Author Year Country Research Design Score Total Sample Size	Methods	Outcome
<p>Martinez-Perez et al., (2017) Canada Observational N=48</p>	<p>Population: Spinal Cord Injury Without Radiographic Abnormality (SCIWORA) (n=48): Mean age=54±18.3yr; Gender: males=40, females=8; Level of injury: C=48; Time since injury: ≤72hr; American Spinal Injury Association (ASIA): A=2, B=5, C=15, D=26. Intervention: Individuals who were admitted to hospital with cervical SCI, received MRI imaging within 72 hr, diagnosed with SCIWORA, and had at least 1 yr of follow-up were included in this retrospective study. MRI was performed using a 1.5T magnet with axial T1-weighted images, T2-weighted images, and gradient echo (GRE); and sagittal T1-weighted images, T2-weighted images, and short TI inversion recovery sequences. Neurological status was assessed using the ASIA impairment scale at baseline and 1-yr follow-up. Neurological improvement was defined as the improvement of at least 1 point on the ASIA Impairment Scale. Outcome Measures: Disk integrity; swelling; intramedullary hematoma; extramedullary hematoma; edema; cervical canal stenosis; lesion length; maximal canal; maximal spinal cord compromise.</p>	<p>1. There were no significant associations with any of the outcome measures and neurological improvement, with the exception of MRI lesion length. In particular, shorter lesions on MRI were associated with neurological improvement (p=0.01).</p>
<p>Ouchida et al., (2016) Japan Observational N=68</p>	<p>Population: Spinal Cord Injury Without Radiographic Abnormality (SCIWORA) (n=68): Mean age=62(16-93)yr; Gender: males=52, females=16; Level of injury: C=68; Time since injury: ≤4hr; AIS: A=6, B=7, C=24, D=31. Intervention: Individuals diagnosed with SCIWORA were included in this study. T2-weighted sagittal images were acquired using a 1.5T MRI for all individuals. Additionally, individuals underwent a delayed MRI 2 weeks after injury. Outcome measures were assessed at diagnosis and 1-yr follow-up. Outcome Measures: Increased signal intensity (ISI) grade and range; prevertebral hyper-intensity range (PVH); Neurological status: Japanese Orthopaedic Association scoring system (JOA score).</p>	<p>1. There was no significant correlation between JOA and ISI grade and range at admission (p=0.11, r=-0.19; p=0.10, r=-0.20, respectively). However, there was a significant correlation between JOA and PVH at admission (p<0.001, r=-0.55). 2. There were significant correlations between JOA and ISI grade and range, as well as PVH on delayed MRI imaging (p<0.001, r=-0.49; p<0.05, r=-0.24; p<0.001, r=-0.46, respectively).</p>