

Transverse Myelitis in an Ankylosing Spondylitis Patient

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Ankylosing spondylitis (AS) is generally considered to be an inflammatory disease of the spine with few extra-articular manifestations. Among them, transverse myelitis is very rare extra-articular manifestation in patients with AS. We have experienced a case of a young man with an AS who developed longitudinal transverse myelitis. A 20-year-old male patient with 1-year history of AS presented with insidious onset of numbness on right upper extremity. He was not complaining of any muscular weakness, imbalance, disturbance of gait, urinary or bowel incontinence or any change in mental status. On neurological examination there was hypoesthesia noted on the right side of the dermatome below fourth cervical (C4) level. The application of neck extension combined with ipsilateral rotation and lateral flexion exacerbated the pain and numbness of the right upper limb. Deep tendon reflexes were normoactive in all extremities. Laboratory studies revealed a positive HLA-B27. Both pelvic magnetic resonance imaging (MRI) and bone scan findings demonstrated typical abnormalities of AS at the sacroiliac joints (Fig. 1). On Spine MRI revealed a high signal intensity at cervical (C4-C6) levels (Fig. 2) and thoracic (T3-4) levels (Fig. 3) on T2-weighted images. Cranial MRI, visual evoked potentials, and sensory evoked potential were normal. In the cerebrospinal fluid examination, no oligoclonal band formation or cell was found. Short-term high-dose steroid pulse treatment was effective in slight symptom improvement, but mild residual symptoms remained. We here report a case of AS patient who developed transverse myelitis, a rare neurological complication of AS.

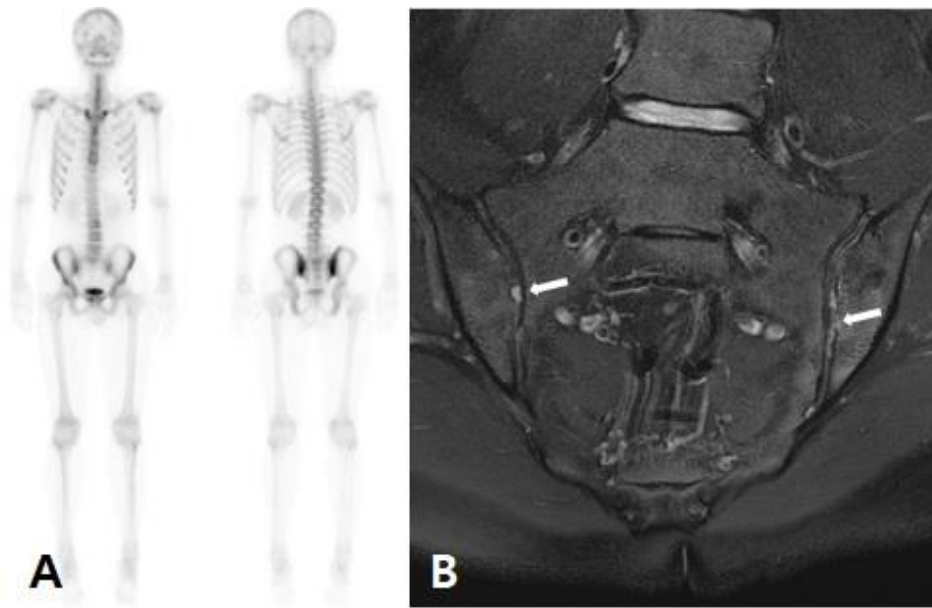


Fig 1. Whole body bone scan and pelvic MRI of a 20-year-old male patient with ankylosing spondylitis. (A) Whole body bone scan exhibiting increased radioisotope uptake at both sacroiliac joints. (B) Coronal T2 fat suppression MRI of pelvis showing mild bone erosion and bone marrow edematous changes at both sacroiliac joints (white arrows)

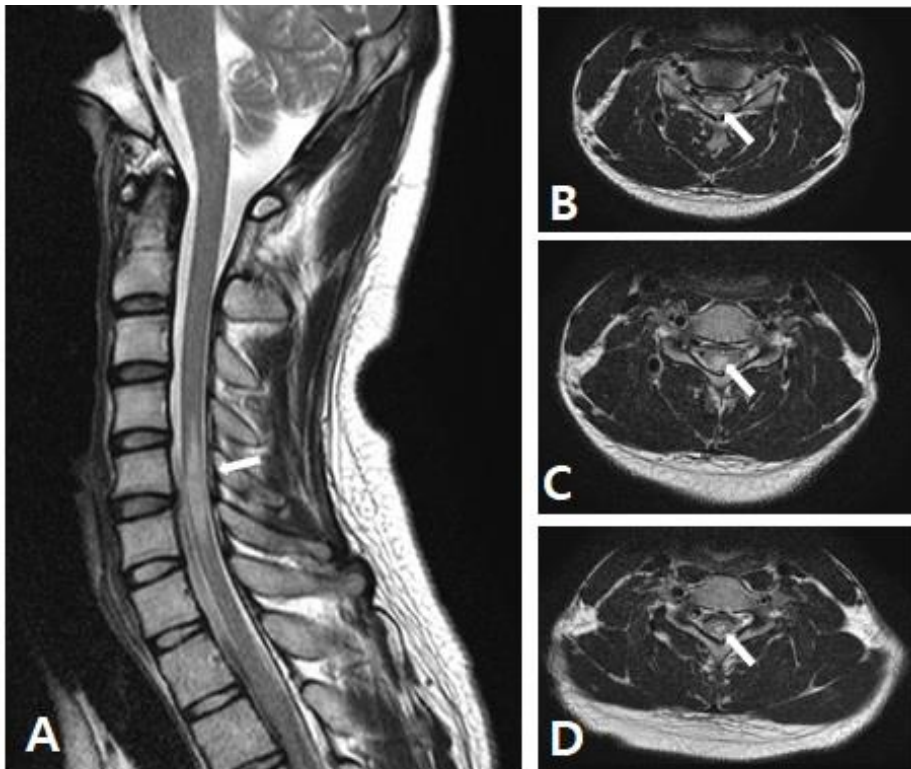


Fig 2. Magnetic resonance image (MRI) of cervical spinal cord. (A) High signal intense area (white arrow) of demyelination is seen at cervical spinal cord on T2-weighted sagittal image. (B-D) High signal intense area (white arrows) of demyelination is seen at fourth (B), fifth (C), and sixth (D) cervical levels of spinal cord on T2-weighted axial images



Fig 3. Magnetic resonance image (MRI) of thoracic spinal cord. High signal intense area (white arrow) of demyelination is seen at third and fourth thoracic levels (T3-T4) of spinal cord on T2-weighted sagittal image.