



Snake Eyes Sign in Cervical Magnetic Resonance Imaging in a Patient with Amyotrophic Lateral Sclerosis

Servikal Manyetik Rezonansta Yılan Gözü Belirtisi Olan Amiyotrofik Lateral Skleroz Hastası

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Anahtar Kelimeler: Amiyotrofik lateral skleroz, servikal manyetik rezonans, yılan gözü belirtisi, ön boynuz

Dear Editor,

A 32-year-old man presented with one year of progressive proximal weakness of the upper right limb with fasciculation. In the last three months, he could not handle an object properly with his right hand, not wave his hand, and he said that he could not use his right hand to eat. There were no sensory symptoms, bulbar symptoms or weakness in lower limbs. There was no history of neck injury or pain. The patient's neurologic examination showed paresis in his right shoulder abduction (at MRC grade 3/5), right arm and forearm flexion at 4/5 strength, right upper extremity deep tendon reflexes (DTR) hypoactive, and fasciculation in both shoulder muscles. An electromyography (EMG) examination determined diffuse anterior horn involvement. Sensory nerve action potentials were normal in nerve conduction velocity. Cervical spine magnetic resonance imaging (MRI) showed linear T2 intramedullary hyperintensity (C3 to C6 in sagittal section), and T1 isointense signal in anterior horn cells (Figure 1) with the snake eye sign in the transverse section (Figure 2). There was no evidence of extradural compression and gadolinium had no contrast enhancement. Neural foramina were normal and had no root compression. The patient was diagnosed as having amyotrophic lateral sclerosis (ALS). The snake eye sign shows damage to the anterior horn and has been reported to become apparent in ALS-like disease (1).

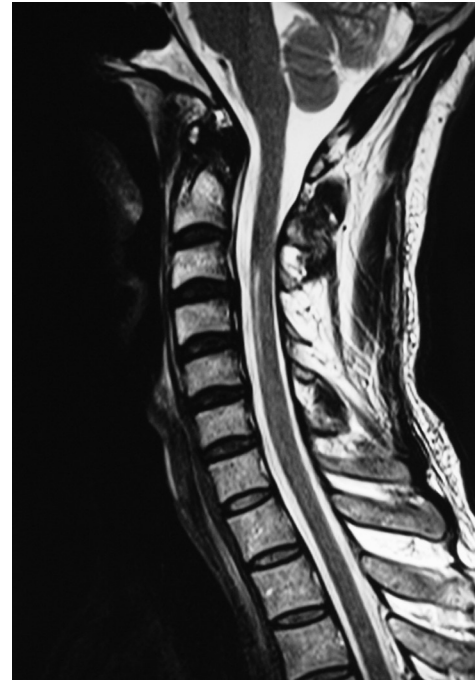


Figure 1. T2-weighted sagittal section shows spinal cord atrophy and a longitudinal lesion from C3 to C6.

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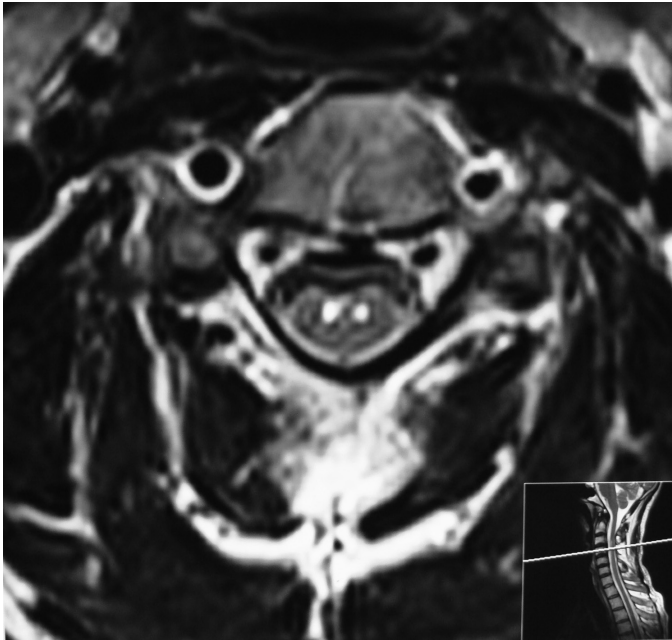


Figure 2. Corresponding snake eyes appearance in transverse section.

Ethics

Informed Consent: A consent form was completed by the participant.

Peer-review: Internally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: M.G.Ş., M.T.K., **Concept:** M.G.Ş., M.T.K., **Design:** M.G.Ş., M.T.K., **Data Collection or Processing:** M.G.Ş., **Analysis or Interpretation:** M.G.Ş., **Literature Search:** M.G.Ş., **Writing:** M.G.Ş.

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Reference

1. Sharma S, Murgai A, Nair PP, Ramesh A. Teaching NeuroImages: snake eyes appearance in MRI in patient with ALS. *Neurology* 2013;81:e29.