Clinical picture

QJM

Surfer's myelopathy

A 19-year-old man without previous history of systemic disease had engaged in surfing for the first time. Following this, he experienced low back pain and progressive weakness with decreased sensation of his lower limbs. Physical examination in the emergency room revealed paraplegia with sensory loss below umbilical region. Urine retention was also noted. Laboratory data was within normal range except for a creatine kinase (CK) level of 598 U per liter. Emergent T-spine magnetic resonance imaging (MRI) showed diffuse subtle high signal intensity within the anterior-central spinal cord on T2WI noted from T9 through conus medullaris, and diffusion weighted imaging (DWI) showed obvious bright signal intensity, consistent with acute spinal cord infarction with diffuse cord edema (Figure 1). After steroid treatment and rehabilitation, this patient was transferred to his own country. Surfer's myelopathy, which may occur in novice surfers, is due to non-traumatic spinal cord injury resulting from prolonged spine hyperextension while lying prone on the surfboard.¹ Symptoms consist of back pain, urine retention or incontinence and paraplegia with sensory loss. Arterial insufficiency related to spine hyperextension is the most likely etiology.^{1–3} MRI with DWI study is extremely sensitive and useful for early diagnosis. DWI can be positive within the first few hours, and the initial signal change on T2WI appears in 8–24 h.⁴ Being aware of this condition and early diagnosis with aggressive management is believed to improve the neurological outcomes.

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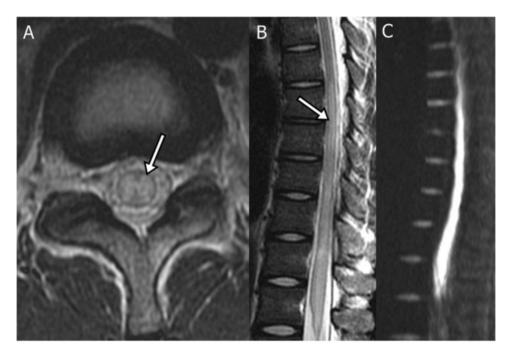


Figure 1. T2WI (**A** and **B**) showed diffuse subtle high signal intensity noted within the anterior-central spinal cord on T2WI noted from T9 through conus medullaris (arrows), implying spinal cord edema. (**C**) DWI showed obvious bright signal intensity within the spinal cord, consistent with acute spinal cord infarction.

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