



INTRODUCTION

Acute myelopathy in young adults is a rare presentation that can be attributable to varying causes. The most common reason is trauma, which can result in disc herniation, fracture/high-grade spondylolysis, or even direct cord injury. Non-traumatic causes include multiple sclerosis, ischemia/vascular insult, infection, or cancer. Clinical findings include pain, acute flaccid weakness at the level of the lesion, progressive increase in muscle tone below the level of the lesion, bowel and bladder incontinence, and loss of sensation. The main imaging modality used is magnetic resonance imaging (MRI), which can show the spinal cord in detail as well as soft tissue structures such as discs. Treatment depends on the underlying cause.¹

CASE DESCRIPTION

We present a 13-year-old previously healthy boy with acute mid-back pain after his first-ever surfing lesson, which lasted 3 hours. Pain was 10/10 and radiated into both legs. There was no traumatic event that was observed during the lesson per the patient or bystanders. He had associated progressive lower extremity weakness that he noted immediately after completing his lesson. One hour after the conclusion of the lesson, he was no longer able to walk.

Lower extremity examination revealed 4/5 strength in iliopsoas/quadriceps/hamstrings, 2/5 strength in tibialis anterior and EHL, sensory level at L1, decreased vibration sense, and patellar/Achilles hyperreflexia without clonus. Voluntary sphincter tone was preserved.

CASE DESCRIPTION CONT'D

MRI T/L-spine reportedly showed increased T2-signal involving the central cord with cord expansion distal to the level of T7-T8. Patient was immediately started on high-dose intravenous solumedrol. Levophed was administered due to dysautonomia. Foley catheterization yielded 900mL of urine. 24-hours after steroid initiation, pain began to improve, and the patient resumed voiding spontaneously. Patient was transferred to Inpatient Rehabilitation at a minimal-assist level for intensive PT/OT under Physiatric supervision. Patient was noted to have spastic foot drop bilaterally that was treated with stretching, nighttime AFO, and oral baclofen. After a comprehensive rehabilitation program for 11 days, patient was discharged to home at a supervision to modified-independent functional level with 0/10 pain level walking with Lofstrand crutches.

DISCUSSION

This case presents a rare non-traumatic myelopathy called Surfer's Myelitis, which is classically seen in young novice surfers as well as gymnasts. Surfer's myelopathy is a rare progressive myelopathic syndrome in young, healthy individuals that requires early medical intervention. It is postulated that there is a vascular etiology, such as spinal cord ischemia following hyperextension of the spine, but the exact mechanism is yet to be established. In the literature, approximately 70 total cases have been reported globally. Prognosis appears to be correlated with ASIA classification and symptom severity on initial presentation. Timely administration of steroids and admission to inpatient rehabilitation may portend good functional outcomes, but more investigations are needed.²⁻⁴

IMAGING IN THE LITERATURE

Unfortunately, we were unable to gain access to the patient's MRI images, only the reports. Figure 1 represents a similar case in the literature :



Figure 1: sagittal T2-weighted MRI of a 30-year-old male with back pain and rapid strength loss after his first surfing lesson. Seen are hyperintense signals in the central cord from T7 to the conus along with enlargement of the distal cord. (Taken from Choi et. al., 2018)

REFERENCES

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