Surf

Surfer's myelopathy is a rare, acute, atraumatic myelopathy that occurs in novice surfers.

Medical literature was queried for all reports of this condition, systematically abstracted, and analyzed. An illustrative case that provides the most definitive support for a vascular cause is presented. Treatment considerations based on prior cases and expert opinions are provided.

Sixty-four cases of surfer's myelopathy have been reported to date. This atraumatic thoracic/conus medullaris myelopathy with only a 42% neurological recovery rate almost uniformly affects young, healthy, novice surfers who have no pre-existent spinal disease.

Clinical features

Symptoms usually start with back pain and rapidly progress to complete or incomplete myelopathy.

Diagnosis

T2 magnetic resonance images show increased signal in the central spinal cord within 24 to 72 hours. Gadolinium enhancement and diffusion-weighted imaging are not helpful. Angiography has been underused. Angiogram in the case reported by Freedman et al showed the absence of a right T12 radicular artery and no artery of Adamkiewicz, which, along with clinical findings, support the vascular origin theory.

Incomplete cases often improve within 24 hours of onset, whereas no improvement has been reported for American Spinal Injury Association class A cases. Several acute interventions have been tried. Steroids are most common, and patients receiving steroids improved 55% of the time with no reported adverse effects.

Surfer's myelopathy is a clinical entity associated with complete deficit in >50% of cases. Its prognosis is almost exclusively dictated by severity at presentation/nadir. Thus, publicizing this rare but serious condition (within and outside the medical literature) may be an effective intervention [1].

1)
Freedman BA, Malone DG, Rasmussen PA, Cage JM, Benzel EC. Surfer's Myelopathy: A Rare Form of Spinal Cord Infarction in Novice Surfers: A Systematic Review. Neurosurgery. 2016 May;78(5):602-11. doi: 10.1227/NEU.0000000000001089. PubMed PMID: 27082966.