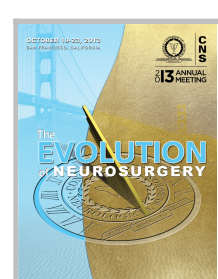


Clinical Significance of Pyramidal Signs in Patients with Cervical Myelopathy

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Introduction

This retrospective case series was performed to study the relationship between prevalence of pyramidal signs and the severity of cervical myelopathy. The study is focusing on patients having increased signal intensity in T2-weighted magnetic resonance imaging.

Methods

Forty six patients complaining of cervical spondylotic myelopathy with increased signal intensity in T2-weighted magnetic resonance imaging were included. The neurological finding of the patients was reviewed for pyramidal signs presence. The prevalence of each pyramidal sign is calculated and correlated to severity of cervical myelopathy. The motor function scores of the upper and lower extremities for cervical myelopathy set by the Japanese orthopaedic association (m-JOA) scores are used to assess severity of myelopathy.

Results

The most prevalent signs were hyperreflexia (89.1%), Hoffmann reflex (80.4%), babiniski sign (56.5%), and ankle clonus (39.1%). Babiniski sign, ankle clonus, and Hoffmann reflex showed significant association with the lower m- JOA score.

Conclusions

In patients with cervical myelopathy, hyperreflexia showed the highest sensitivity and the ankle clonus the lowest sensitivity. The prevalence of the pyramidal signs is correlated with increasing severity of myelopathy.

Learning Objectives

1. To know the importance of detecting pyramidal signs in cervical myelopathy patients.
2. To identify the clinical significance of increased signal intensity in MRI in cervical myelopathic patients.
3. To know the correlation between pyramidal signs and the increased signal in MR images.

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