Acute cervical myelitis

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Introduction

Acute myelitis represents a major subset of acute non-compressive myelopathies. Acute non-compressive myelopathies include vascular, infectious, autoimmune, inflammatory, neoplastic and metastatic disorders. Acute myelitis can occur as an isolated inflammatory disorder, or as part of a multifocal CNS demyelinating disease such as acute disseminated encephalomyelitis, multiple sclerosis, neuromyelitis optica, or systemic rheumatological disorders. After such recognizable associations are excluded, a group of patients remains in whom no causes can be identified. In this study, we reported on patients with idiopathic acute cervical myelitis.

Case report

A 68-year-old man felt weakness in both lower extremities when he worked with a face for the top from the end of November, 2012. This symptom increased from December 1, at which time he was received at Tokushima National Hospital. He was hospitalized on December 7. His height was 154cm and his weight, 62 kg. The laboratory findings were normal except for γ-GTP, 56 IU/L (10-47) and positiveRheumatoid Factor. The peripheral nerve conduction study was normal in the median nerves, ulnar nerves and tibial nerves. A cervical MRI revealed a high intensity lesion in the 5th to 6th cercical segment in a T2-weighted image (Figure 1). In study of SEP, N20 was 21.5msec.
P40 delayed to 43.6msec. The results of a cerebral fluid study were as follows: increased pressure (245 mmH_2O); cell counts, 5/3 (mononuclear cells); protein, 70 mg/dl (<40); IgG-Albumin index, 0.65; Myelin basic protein, 48.8pg/ml(<102); Oligoclonal band (-). Pulse therapy of methyl predonine 1g/day for three days was started from December 7. The patient was aware of an improvement in the leg strength on the third day. Pulse therapy was repeated on December 18, and more improvement was found.

Discussion

It is well known that acute myelitis may occur as part of a multifocal CNS demyelination, ADEM [1]; however ADEM is characterized by multifocal involvement (cerebral, cerebellar, optic nerve and spinal cord), therefore isolated spinal cord syndrome is not consistent with ADEM by definition [2]. NMO, as one of the relapsing CNS diseases, may present with isolated transverse myelitis and characteristically involves long segments. NMO, both clinically and radiologically, may not be distinguishable from idiopathic acute myelitis at onset. Therefore, obtaining NMO-IgG antibodies is crucial for distinguishing the two entities. Among patients with a final diagnosis of MS, 2 out of 29 were considered to have a focal episode of transverse myelitis at the first event [3]. The

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presence of oligoclonal bands in ATM has been associated with a higher risk of an MS diagnosis [4]. Despite the absence of ologoclonal; IgG bands, there is a possibility that acute meylitis was the initial symptom of the present patient.

References

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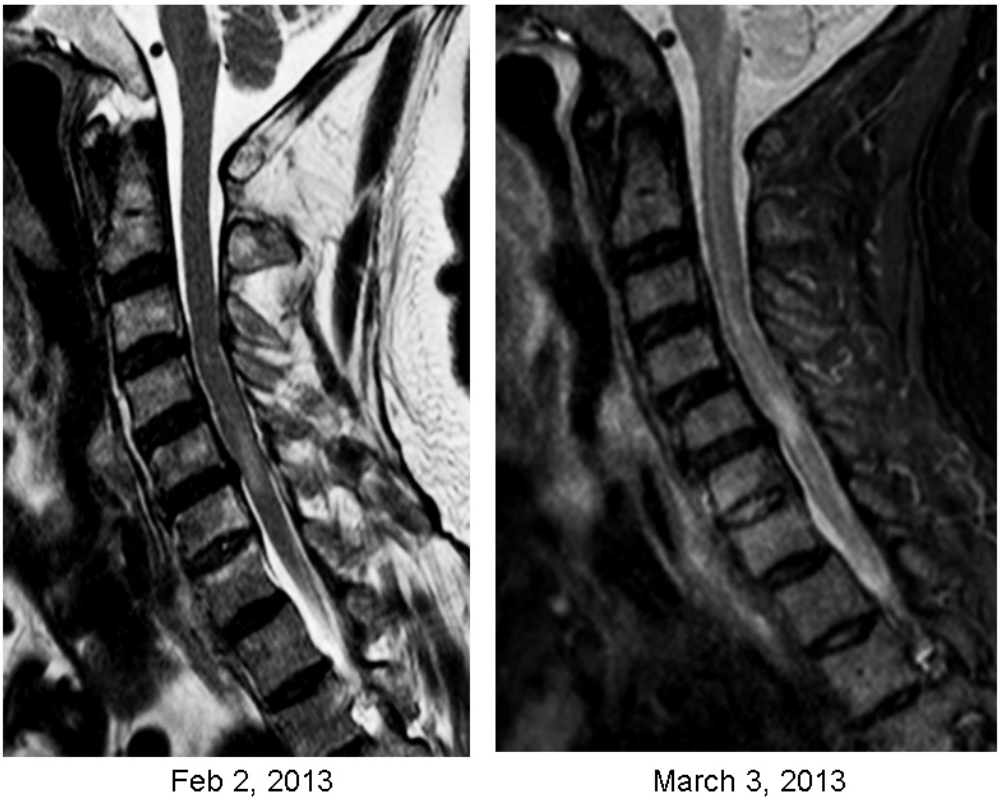

Figure 1. Cervical MRI showing high intensity lesion in 5th to 6th cercical segment in a T2-weighted image