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Original Article

Myelitis in patients with systemic lupus erythematosus

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Objective: Myelitis is a rare but severe neurologic presentation of patients with systemic lupus erythematosus (SLE). Few large-scale retrospective cohort studies have been conducted, especially in Taiwan; therefore, we designed a retrospective study to investigate the disease parameters, treatment, and prognosis of myelitis in southern Taiwan.

Methods: We reviewed medical records of patients with SLE who were evaluated at the Chang Gung Memorial Hospital-Kaohsiung Medical Center between January 1998 and January 2009. A total of 10 patients with myelopathy were included in the study. Neurologic variables and serologic features of SLE were assessed. Magnetic resonance images (MRI) of the spine and cerebrospinal fluid profiles were collected. We also analyzed the treatment and outcome of myelitis.

Results: The cohort of 10 patients included 8 females (80%) and 2 males (20%). Three patients (30%) were initially admitted under the tentative impression of urinary tract infection (UTI). In 8 patients diagnosed with myelitis using MRI, 7 patients (88%) had increased T2 MRI signal intensity over the cervical and upper thoracic spinal area. Treatment regimens included conventional high-dose glucocorticoid, pulse methylprednisolone, cyclophosphamide, and plasma exchange. Six patients (60%) had a poor outcome. Additional cyclophosphamide was used in 5 patients and 3 of them (60%) had a good outcome.

Conclusion: SLE patients, who contracted myelitis, presented with possible urinary difficulty and were admitted under the tentative impression of UTI. Besides, the most frequent site of lupus myelitis is the cervical to upper thoracic spinal area. Treatment with high-dose glucocorticoid and cyclophosphamide may be related to a better outcome compared to those without using cyclophosphamide.

Key words: Systemic lupus erythematosus, myelitis, myelopathy

Introduction

Neurologic and psychiatric symptoms occur in 10-80% of patients with systemic lupus erythematosus (SLE) [1-5]. Myelitis, a rare but severe neurologic presentation, is estimated to affect 1-2% of patients with SLE [6]. It is an inflammatory syndrome of the spinal cord, with a high morbidity rate. It initially presents with weakness in the lower extremities, sensory loss, and loss of rectal and urinary bladder sphincter control [7].

Despite its high morbidity rate, only a few large-scale retrospective cohort studies have been conducted.

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