

Isolated sixth nerve palsy as the first presentation of multiple sclerosis

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Introduction: Isolated sixth nerve palsy is a rare presenting sign of multiple sclerosis (MS). In one study isolated sixth nerve palsy was the presenting sign of MS in only 0.5% of patients. Herein, we describe the clinical features of a definite MS case who presented with sixth nerve palsy.

Case presentation: a 19 year old girl referred to our clinic due to acute right side esotropia since 3 weeks ago (one week after her wedding). She had history of left visual obscuration 2 weeks ago. On examination, she had right abduction deficit, brisk deep tendon reflexes, impaired tandem gait and bilateral upward plantar reflexes. 5th and 7th cranial nerves were normal. Brain magnetic resonance imaging (MRI) revealed multiple oval shaped lesions in periventricular, left cerebellar peduncle and right sixth nerve nucleus. Cervical MRI also showed multiple T2 hypersignal lesions and asymptomatic enhancing lesions which led to definite diagnosis of MS. Results of vasculitis investigations revealed no abnormality.

Conclusion: Our patient had a 3 weeks delay in diagnosis. Considering that isolated cranial nerve palsy could be the presenting feature of MS might help to early diagnosis and initiation of treatment.

Key words: multiple sclerosis, cranial nerve palsy, sixth nerve palsy