A Case of Chronic Relapsing Inflammatory Optic Neuropathy

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Abstract

Chronic relapsing inflammatory optic neuropathy (CRION) is a recently described form of recurrent isolated subacute optic neuropathy, with accumulating evidence that it is a nosological distinct entity. The condition is highly responsive to systemic steroid treatment and prone to relapse on steroid withdrawal. Diagnosis and management of this condition is often challenging. This 33-year-old lady with family history of multiple sclerosis (MS), with uniocular visual loss of her right eye since 2 years old without apparent cause, presented with reduction of vision and loss of colour vision in the left eye, associated with painful eye movement. There was internuclear ophthalmoplegia but slit lamp examination were unremarkable. She had no other related sensory or motor symptoms. Magnetic resonance imaging (MRI) did not reveal any features of MS. Aquaporin-4 antibody, anti-MOG and gene testing for Leber's hereditary optic neuropathy were all negative. Metabolic, infective, and other autoimmune causes were also excluded. Visual evoked potential studies of left eye showed a mild reduction in amplitude with no prolongation of latency. Her multiple optic neuritis recurrences were treated with intravenous steroids followed by tapering regime of oral prednisolone with good effect. Knowledge of this rare condition as part of the differential diagnoses of possible aetiologies of optic neuropathy is important among Ophthalmologists, as prompt diagnosis and steroid treatment helped reduce the associated risk of blindness. Multiple relapses after initial successful treatment of inflammatory optic neuropathy should raise the suspicion of CRION.

Keywords: ophthalmology, optic neuropathy, chronic relapsing inflammatory optic neuropathy, vision loss, steroid-responsiveness

DOI: http://dx.doi.org/10.31344/ijhhs.v5i0-2.337

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