

Multiple Sclerosis-Associated Uveitis: Which outcome?

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Editorial

Multiple sclerosis (MS) is an autoimmune disease that causes demyelination of the central nervous system affecting often the vision [1]. The most commonly associated ocular inflammation is optic or retro bulbar neuritis; however, uveitis has rarely been reported. We reported 3 different cases of uveitis in MS patients and we describe outcomes.

The first patient was a 18-year-old man who presented with recurrent neurological disorders. Physical examination showed tetra pyramidal and left Brown sequard syndrome. Cerebro spinal MRI revealed multiple cerebral and medullary demyelinating lesions. Cerebral Spinal Puncture (CSP) showed positive oligoclonal bands. The diagnosis of relapsing remitting (RR) definite MS was established. The patient was treated with Beta1a interferon (Rebif). One year after the beginning of the treatment, the patient was admitted to our department for right lower limb paresthesia and walking abnormalities without visual involvement. Neurological examination, showed a new relapse of MS with Expanded disability status scale (EDSS) at 4.5 points. Ophthalmological examination of routine showed bilateral intermediate uveitis features with retinal vasculitis and periphlebitis. Exhaustive etiological assessment was negative. The patient was treated with systemic corticosteroids with an ophthalmological control showing a considerable improvement.

The second patient was a 29-year-old without medical history presented for diplopia. On physical examination, he had central vestibular syndrome, left ophthalmoplegia with facial nerve motor disorder. MRI showed demyelinating lesions at pontic level. Cytochomic examination of cerebrospinal fluid was normal, with

intrathecal immunoglobuline synthesis. In 2015, he presented with posterior cordonal syndrome and tetrapyramidal syndrome with EDSS at 3 points. MRI showed spatial dissemination with peri-ventricular demyelinating lesions and of the corpus callosum. The diagnosis of relapsing-remittent MS was established after a negative etiological assessment and the patient was treated with Beta1b interferon (Betaferon). In 2016, he presented to the emergency department for unilateral left ocular redness with acute decrease in visual acuity. Ophthalmological examination showed unilateral panuveitis with visual acuity at 2/10, a hyalite, a capillaritis and a macular edema. The etiological assessment was then requested were negatives. Panuveitis was then linked to MS and the patient was treated with corticosteroids followed by oral corticosteroids with a clear subjective and objective improvement.

The third patient was a 27 years old man without medical history presented with recurrent neurological disorders in 2010 and 2012. On physical examination, he had pyramidal syndrome of the left lower limb and facial paresthesia. Cerebral and medullar MRI showed multiple cerebro medullar hyper intense lesions. The diagnosis of MS was then established and the patient was treated with interferon beta 1a (Avonex). In 2016, he had presented recurrent episodes of amaurosis. Ophthalmological examination showed left anterior uveitis treated with topical corticosteroids with initial improvement. Total etiological assessment was negative. The patient presented then recurrent bilateral intermediate uveitis requiring pulse of corticosteroids.

Uveitis has been reported in several MS cohorts with highly varying incidences [2]. It is still debatable whether development of uveitis in MS is a separate autoimmune process or an extension

of the primary central nervous system (CNS) damage. Authors hypothesize a continuing event with the occurrence of uveitis and MS secondary to an inflammatory event in the central nervous system. Although the most common type of uveitis in patients with MS is intermediate uveitis [3]. When studying the therapeutic management of patients followed for MS and uveitis, corticosteroids remain the preferred treatment. there is also growing evidence for the role of immunomodulation therapy in the treatment of a subset of patients with uveitis in MS. A recent study published in 2017 [4] illustrated the beneficial effects of Mycophenolate Mofetil on vision and intraocular inflammation with an acceptable safety profile. Both diseases are potentially severe but it has been described a good visual prognosis for patients with MS associated to uveitis [5].

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