Multiple Sclerosis Revealed by Anterior Uveitis

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ABSTRACT

Multiple sclerosis is an autoimmune inflammatory disease of the central nervous system, leading to the formation of foci of demyelination. Ocular involvement is quite frequent and multiple, dominated by inflammatory optic neuropathies, oculomotor nerve damage, nystagmus and uveitis. We report an atypical case of multiple sclerosis revealed by an anterior unilateral synechiatic hypertensive uveitis in a young patient of 27 years.

Keywords: Uveitis, multiples sclerosis, demyelination.

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I. INTRODUCTION

Multiple sclerosis is an autoimmune inflammatory disease of the central nervous system, leading to the formation of foci of demyelination which manifests as intermittent and recurrent inflammatory episodes, of unpredictable course, and the etiology of which is not yet understood. Ocular involvement is quite frequent and multiple and sometimes inaugural, dominated by inflammatory optic neuropathies, oculomotor damage, nystagmus and uveitis.

II. CASE REPORT

We report the case of a young patient of 27 years, who presented to the ophthalmology consultation for a 2nd painful red eye episode. The ophthalmological examination

found visual acuity with correction to 12/20 Right Eye, 20/20 Left Eye, intraocular pressure at Goldmann Tonometer: 25 mmhg Right Eye, 16 mmhg Left Eye.

With the slit lamp:

OD: Slight edema of the cornea, fluorescein test negative, retro-descemetics precipitated in the lower part, irido-lens synechia over 360°, without visible iris nodule (Fig. 1).

OG: clear cornea, normal anterior chamber with sequelae of irido-lens synechiae (Fig. 2).

At OF: No signs of intermediate uveitis or retinal vasculitis, or retinal focus with a perfectly normal papilla.

The questioning revealed the notion of disturbed thermal sensitivity of the lower limbs, without other extra ocular signs.

A cerebral-medullary MRI was requested objectifying: Lesions in cerebral-medullary hypersignal (Fig. 3) with an inflammatory cerebrospinal fluid at the lumbar puncture,

while favor an active form of multiple sclerosis.

After a normal inflammatory and infectious assessment, the patient was put on symptomatic treatment (local corticosteroid therapy, local hypotonics and dilation with atropine) and was referred to neurology for additional management.

Fig. 1. Right Eye: corneal edema with retro descemetic precipitates and irido-lens synechiae.

Fig. 2. Left Eye: clear cornea with sequelae of irido-lens synechiae.

Fig. 3. Magnetic resonance imaging of the brain axial view showing multiple periventricular demyelinating lesions (white arrows).

III. DISCUSSION

Multiple sclerosis is the most debilitating neurological disorder affecting young patients in full physical activity between 20 and 40 years [1], with a predominance of women [2] and whose main risk factors are smoking, obesity, low exposure to ultraviolet rays, vitamin D deficiency as well as infections including the Epstein Bar Virus [3].

The diagnosis is based on the criteria of Macdonald 2017 [4], which above all clinical, reinforced by radiological examinations including cerebral-medullary MRI with the study of cerebrospinal fluid. Recently, it has been suggested that the levels of complement specific proteins such as C1q, C3d, and C5b-9 in serum and CSF could potentially serve as new biomarkers to diagnose different MS subtypes and determine the activity of disease [5].

However, ocular involvement is sometimes the initiator of the disease, with optic neuritis which ranks first, followed by oculomotor palsies and internuclear ophthalmoplegia, nystagmus and uveitis being the least frequent [6].

IV. CONCLUSION

Multiple sclerosis remains a mysterious pathology despite the progress of research, in particular its pathophysiology and its management, it is often disabling and the visual prognosis depends on the involvement of the optic nerve, hence the interest of an examination systematic ophthalmologic in front of any suspicion of multiple sclerosis.

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