

sis, the haematology department should use the Feinberg technique. In our patient, we achieved good seizure control with phenytoin, but we were unable to control movement and behaviour disorders. This patient displayed 2 previously undescribed mutations, one on each allele, which resulted in a wide array of symptoms.

## Conflicts of interest

The authors have no conflicts of interest to declare.

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- M.T. Temprano-Fernández<sup>a,\*</sup>, J.M. Asensi-Álvarez<sup>a</sup>,  
M.V. Álvarez-Martínez<sup>b</sup>, C. Buesa-García<sup>c</sup>
- <sup>a</sup> Servicio de Neurología, Hospital de Cabueñas, Gijón, Asturias, Spain  
<sup>b</sup> Servicio de Genética Molecular, Hospital Universitario Central de Asturias, Oviedo, Asturias, Spain  
<sup>c</sup> Servicio de Hematología, Hospital Universitario Central de Asturias, Oviedo, Asturias, Spain
- \* Corresponding author.  
E-mail address: teresatemp@hotmail.com  
(M.T. Temprano-Fernández).  
2173-5808/  
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## Unilateral retrobulbar optic neuropathy as the initial manifestation of human immunodeficiency virus infection<sup>☆,☆☆</sup>

Neuropatía óptica retrobulbar unilateral como primera manifestación de la infección por el virus de la inmunodeficiencia humana

Dear Editor:

Infection with human immunodeficiency virus (HIV) is associated with a wide range of neuro-ophthalmological manifestations, from ocular motility disorders to impairment



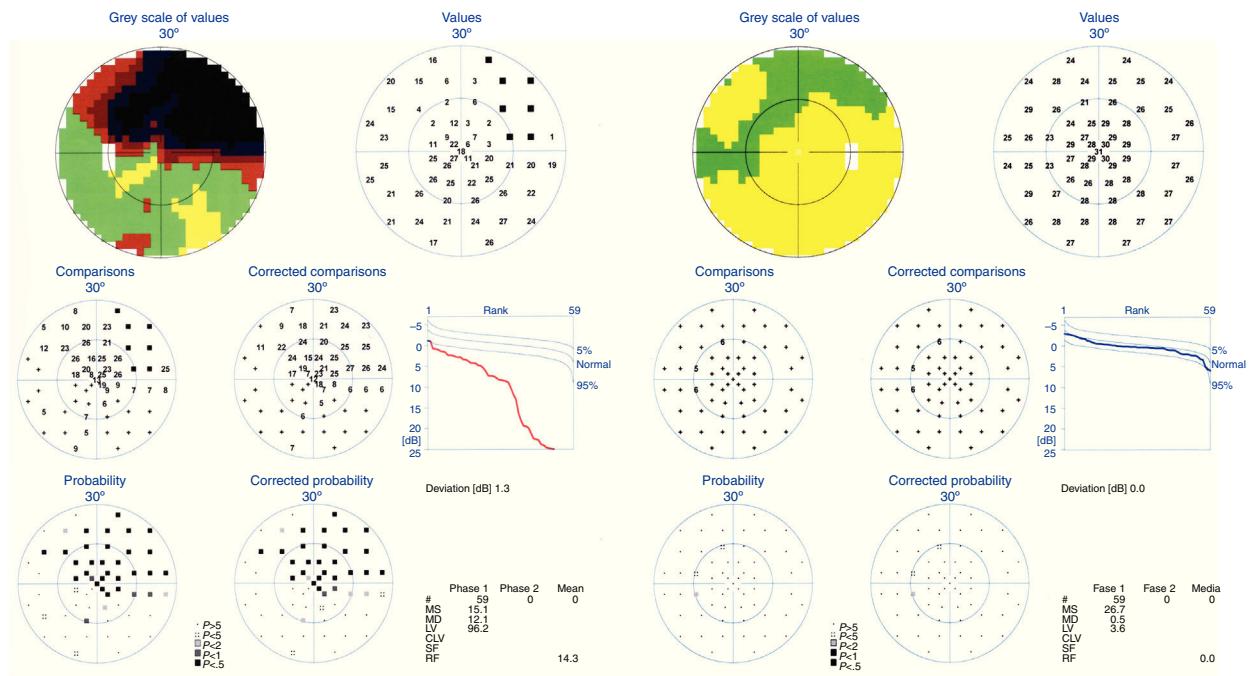
☆ Please cite this article as: Pérez-Bartolomé F, Santos-Bueso E, Ávalos-Franco N, Porta-Etessam J. Neuropatía óptica retrobulbar unilateral como primera manifestación de la infección por el virus de la inmunodeficiencia humana. *Neurología.* 2017;32:199–201.

☆☆ This study was presented at the ninth Research Awards for Ophthalmology Residents (Ramón Castroviejo Institute of Ophthalmology Research, Faculty of Medicine, Universidad Complutense de Madrid, Spain) on 19 February 2015.

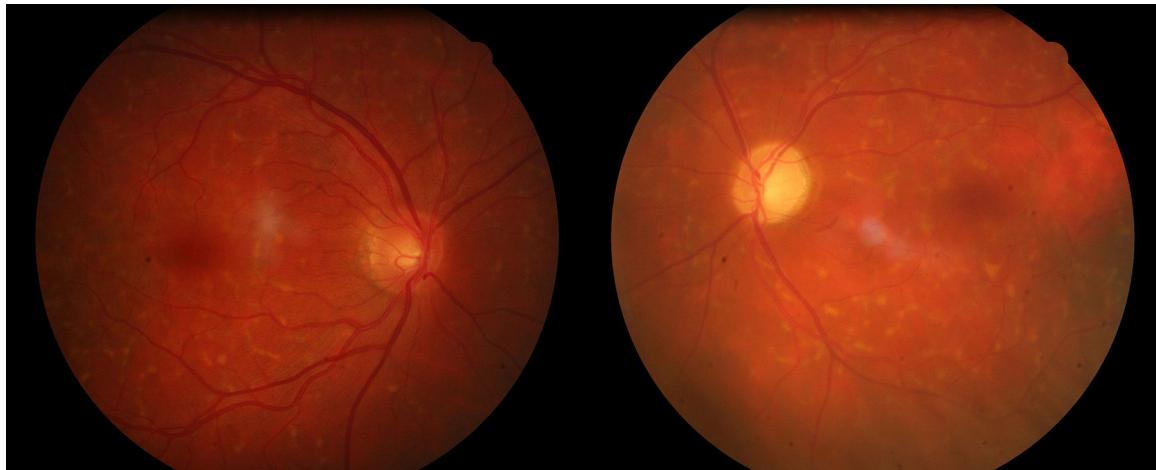
of the afferent visual pathway.<sup>1</sup> Most of these symptoms present in patients already diagnosed with HIV infection. However, some neuro-ophthalmological disorders, such as acute retinitis or optic neuropathy, may appear as initial manifestations of the disease. Vision loss in HIV-positive patients may indicate presence of a pathological process affecting structures ranging from the cornea to the visual cortex.<sup>2</sup> Most cases of optic nerve involvement are due to opportunistic infections (herpes zoster, cytomegalovirus, syphilis, toxoplasmosis, cryptococcosis, histoplasmosis), CNS tumours, or drug toxicity (ethambutol and didanosine).<sup>3–6</sup> HIV has also been described as one of the causes of optic neuropathy.<sup>1</sup> In these cases, the typical pattern of affection consists of anterior ischaemic optic neuropathy or neuroretinitis secondary to severe autoimmune microangiopathy. Retrobulbar optic nerve involvement secondary to HIV infection usually manifests with long-term binocular asymmetrical vision loss.<sup>7</sup> We present the exceptional case of a patient with unilateral retrobulbar optic neuropathy which we attributed to the action of the HIV virus, and appearing as the initial manifestation of HIV infection.

## Clinical case

Our patient was a 59-year-old patient who visited our hospital due to a 3-month history of vision loss affecting the



**Figure 1** Visual field tests. Left: superior altitudinal scotoma in the left eye. Right: normal visual field in the right eye.



**Figure 2** Eye fundus. Left: normal eye fundus in the right eye. Right: papillary atrophy in the left optic nerve and neuroretinal rim pallor.

upper part of his left eye. He reported no personal or family history of interest, had no known drug allergies, and was not taking any medication. Visual acuity was 0.9 in the right eye and 0.3 in the left. He displayed severe relative afferent pupillary defect in the left eye. Extrinsic ocular motility was normal. Biomicroscopy results and intraocular pressure were also within normal limits. Eye fundus examination revealed drusen located outside the vascular arcades in both eyes, and no papilloedema. Visual field assessment (Octopus TOP G1) revealed a superior altitudinal scotoma in the left eye (Fig. 1). Acute-phase reactants, a biochemical study, a complete blood count, an MRI study, and a biochemical, cytological, and microbiological analysis of CSF

all yielded normal results. Our patient tested positive for HIV. CD4 lymphocyte count revealed 721 cells/mm<sup>3</sup>. Viral load was 10 020 copies/mL. A subsequent CSF analysis ruled out any opportunistic infections. We started antiretroviral treatment (emtricitabine, tenofovir, and efavirenz); visual acuity in the left eye had increased to 0.6 at 2 months, but superior altitudinal scotoma persisted. However, 3 months later visual acuity decreased to finger count in the left eye and examination of the eye fundus revealed optic atrophy (Fig. 2).

Together, optic nerve atrophy and the altitudinal defects revealed by the visual field test suggest an ischaemic mechanism which may be caused by HIV, given the lack

of cardiovascular risk factors.<sup>8</sup> Results from the screening tests for opportunistic infections and tumours, and the improvement in visual acuity after antiretroviral treatment support this hypothesis.<sup>9</sup> HIV infection has also been associated with relapsing-remitting neuritis with inflammation (MS-like neuritis), which responds well to corticosteroid treatment. Some researchers suggest administering penicillin even when serology tests for syphilis are negative due to the high frequency of co-occurrence of these 2 infections.<sup>1</sup>

Closely monitoring HIV-positive patients with posterior ischaemic optic neuropathy is essential due to the likelihood of subsequent acute retinal necrosis secondary to herpes zoster or CNS lymphoma. The likelihood of experiencing this complication increases in patients diagnosed with acquired immune deficiency syndrome. Optic neuropathy secondary to HIV infection does not seem to be correlated with either the CD4 lymphocyte level or the presence of opportunistic infections.<sup>1</sup>

## Conclusion

Unilateral retrobulbar optic neuropathy is an infrequent manifestation of HIV infection. However, it should be included in the differential diagnosis of seropositive patients with atypical symptoms, since it may also constitute the initial manifestation of HIV infection. Diagnosis is made by exclusion, after ruling out presence of opportunistic infections, CNS neoplasm, or drug allergies.

## Funding

This study has received no public or private funding.

## Conflicts of interest

The authors have no conflicts of interest to declare.

## The effect of manual therapy on tension headache<sup>☆</sup>



## Efecto de la terapia manual en la cefalea tensional

*Dear Editor:*

It was with great interest that we read the article published by Lozano López et al.,<sup>1</sup> which presents a systematic

<sup>☆</sup> Please cite this article as: Caballero-Calixto L, Antón-Puertas P, Reyna-Ormeño J. Efecto de la terapia manual en la cefalea tensional. Neurología. 2017;32:201–202.

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F. Pérez-Bartolomé \* , E. Santos-Bueso, N. Ávalos-Franco, J. Porta-Etessam

*Unidad de Neurooftalmología, Servicio de Oftalmología, Instituto de Investigación Sanitaria, Hospital Clínico San Carlos (IdISSC), Madrid, Spain*

\* Corresponding author.

*E-mail address:* Franciscoperezbartolome@gmail.com (F. Pérez-Bartolomé).

2173-5808/

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review of the literature supporting manual therapy as an effective alternative pain relief technique in patients with tension-type headache (TTH). The most frequently used manual therapy techniques in the analysed studies were joint treatment, soft tissue mobilisation techniques, and muscle exercises.<sup>2</sup> Although these techniques have been shown to have a positive effect on TTH, the heterogeneity of patients' symptoms has not permitted the adoption of a standard protocol with a specific technique. In fact, many of these studies report better results when combining 2 or more manual techniques.<sup>3</sup> We agree that the diversity of interventions does not allow us to determine which technique was the most effective for TTH. In our view, however, results are significant in that applying these techniques decreased not only pain intensity but also headache frequency.<sup>4</sup>

Although the true cause of TTH is still to be determined, the frequent co-presence of such symptoms as trigger points