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CASE REPORT

Autofluorescence and optical coherence tomography in torpedo maculopathy: A case report

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KEYWORDS
Torpedo maculopathy;
Congenital nevus of the retinal pigment epithelium;
Paramacular coloboma;
Optical coherence tomography;
Fundus autofluorescence

Abstract Torpedo maculopathy is a rare oval-shaped hypopigmented lesion in the temporal part of the macula. Its main feature is its fusiform appearance. It is not usually associated with any decrease in visual acuity and remains stable over time.

We report the case of a girl aged four years with torpedo maculopathy and hypo-autofluorescence in the right eye. In contrast, autofluorescence was normal in the only previous case reported in which autofluorescence was described in such a young patient.

PALABRAS CLAVE
Maculopatía en torpedo;
Nevus congénito del EPR;
Coloboma paramacular;

Autofluorescencia y tomografía de coherencia óptica en la maculopatía en torpedo: reporte de un caso

Resumen La maculopatía en torpedo es una rara lesión oval hipopigmentada localizada en la zona temporal de la mácula cuya principal característica es su morfología fusiforme. No suele asociar disminución en la agudeza visual y permanece estable en el tiempo.

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OCT;
Autofluorescencia (fundus autofluorescence)

Presentamos el caso de una niña de 4 años con maculopatía en torpedo en su ojo derecho que se mostró hipoautofluorescente en contraste con el único caso en la bibliografía en el que se describe la autofluorescencia de una paciente tan joven, en el que la autofluorescencia fue normal.

Introduction

Torpedo maculopathy (TM) is a rare, benign condition that affects the retinal pigment epithelium (RPE) and has a characteristic shape and location. It is usually diagnosed incidentally in asymptomatic patients[1–4] and is normally unilateral, although bilateral cases have been reported.[5] In 1992 it was described by Roseman and Gass[6] as a hypopigmented nevus of the RPE. These authors considered it a type of nevus in which the RPE cells were flattened and not enlarged. The term TM was first used by Daily in 1993 and it has become generally adopted.[7]

Only isolated case reports or series with few cases have been reported, and so there are no reliable epidemiological data regarding race, gender or other demographic data.[8–10]

We present the OCT and autofluorescence findings for a child with TM.

Case study

Girl aged 4 years, no relevant clinical history, referred for a routine eye examination. Best-corrected visual acuity was 20/20 bilaterally.

Ophthalmic examination showed the anterior segment to be normal in both eyes. The right eye presented an oval-shaped hypopigmented lesion in the lower temporal sector of the macula, pointing to the fovea, and measuring 1.7 mm vertically and 2.3 mm horizontally (Fig. 1).

The lesion was hypo-autofluorescent with a hyper-autofluorescent lower edge (Fig. 2). Optical coherence tomography (OCT) revealed detachment of the neurosensory retina, limited to the proximity of the lesion, and reduced reflectivity of the retinal pigment epithelium (RPE). The outer layers showed no abnormalities except for the presence of scattered micro-verrucae generated by the outer segments of the photoreceptors, suggestive of chronic serous detachment of the macular neuroepithelium. Despite the lack of optimal equipment for OCT of the choroid, the reduced presence of choriocapillaris in the lesion was also observed (Fig. 3). The visual field study (Humphrey 24-2 visual field perimetry) performed two years after diagnosis revealed a relative scotoma consistent with the area of the lesion (Fig. 4). The electrooculogram and Amsler grid findings were normal.

After 36 months of follow up, the patient remained asymptomatic with visual acuity of 1 in both eyes, and no change according to all diagnostic techniques.

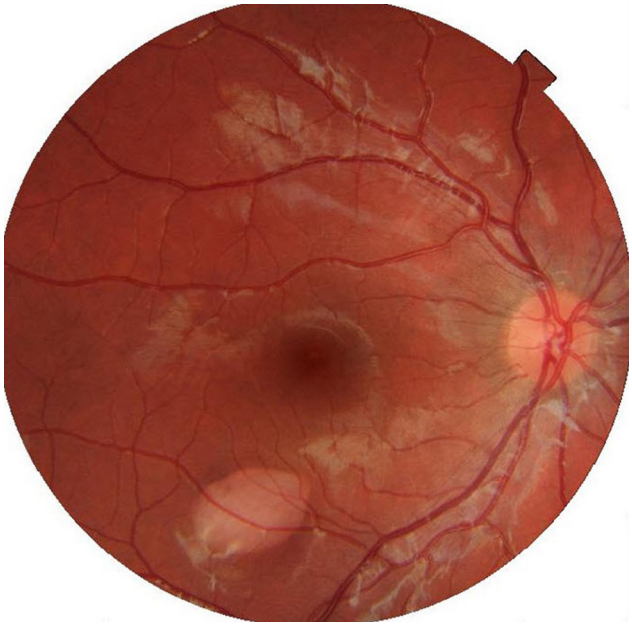

Figure 1 Fundus photograph of the right eye. Torpedo-shape lesion located temporal to the macula.

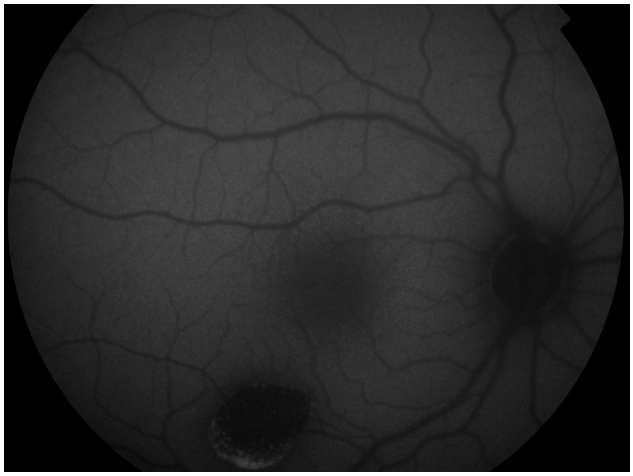

Figure 2 Fundus autofluorescence showing severe loss of autofluorescence signal throughout the lesion except at the lower edge, where it is clearly hyperautoflorescent.

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