European Journal of Ophthalmology / Vol. 9 n. 1, 1999 / pp. 71-72

SHORT COMMUNICATION

Case report

Upward extension of an atrophic tract of the retinal pigment epithelium associated with congenital macular toxoplasmosis

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ABSTRACT: Purpose*. To report an unusual case of gravitational atrophic tract of the retinal pigment epithelium in a 20-year old woman.*
Methods. *Case report*
Results. *The patient had macular cicatricial congenital toxoplasmic chorioretinitis in both eyes. In the right eye, an atrophic tract of the retinal pigment epithelium originating from the upper margin of the macular scar extended upwards toward the retinal periphery.*
Conclusion. *The unusual upward direction of the atrophic tract of retinal pigment epithelium may be explained by the in utero head position during the active phase of the chorioretinal disease. (Eur J Ophthalmol 1999; 9: 71-2)*

KEY WORDS: Serous retinal detachment, Retinal pigment epithelium, Ocular toxoplasmosis, Gravitational atrophy

Accepted: October 19, 1998

INTRODUCTION

Atrophic tracts of the retinal pigment epithelium (RPE) extending downwards toward the inferior periphery can be observed in association with several chorioretinal disorders causing long-standing serous retinal detachment, mainly diffuse retinal pigment epitheliopathy (chronic central serous chorioretinopathy) (1-6). Because of the potential role of gravity in determining downward direction and shape of tracts of RPE atrophy, the term «gravitational» has been used in naming such lesions (1, 2).

We recently examined a young patient who had cicatricial congenital toxoplasmic chorioretinitis associated with an atrophic tract of the RPE that extended upwards.

Case report

A 20-year-old woman with previously diagnosed congenital toxoplasmosis was referred to our hospital for ophthalmologic examination. She was born at term by spontaneous vaginal delivery with cephalic presentation. On examination, visual acuity was 20/30 in the right eye, and 20/400 in the left. The anterior segment and intraocular pressure were normal in both eyes. There was no vitreous inflammation. Funduscopic examination and fluorescein angiography revealed bilateral macular atrophic chorioretinal scar. In the right eye (Fig. 1), the scar was located just superotemporal to the fovea. An atrophic tract of the RPE originated from the upper margin of the macular scar and extended upwards toward the retinal periphery. The left chorioretinal scar was centered in the macular area.

DISCUSSION

Atrophic tracts of the RPE have been described in association with various chorioretinal diseases associated with chronic serous retinal detachment. These include diffuse retinal pigment epitheliopathy (chronic central serous chorioretinopathy), age-related disciform macular degeneration, choroidal tumors, and congenital pits of the

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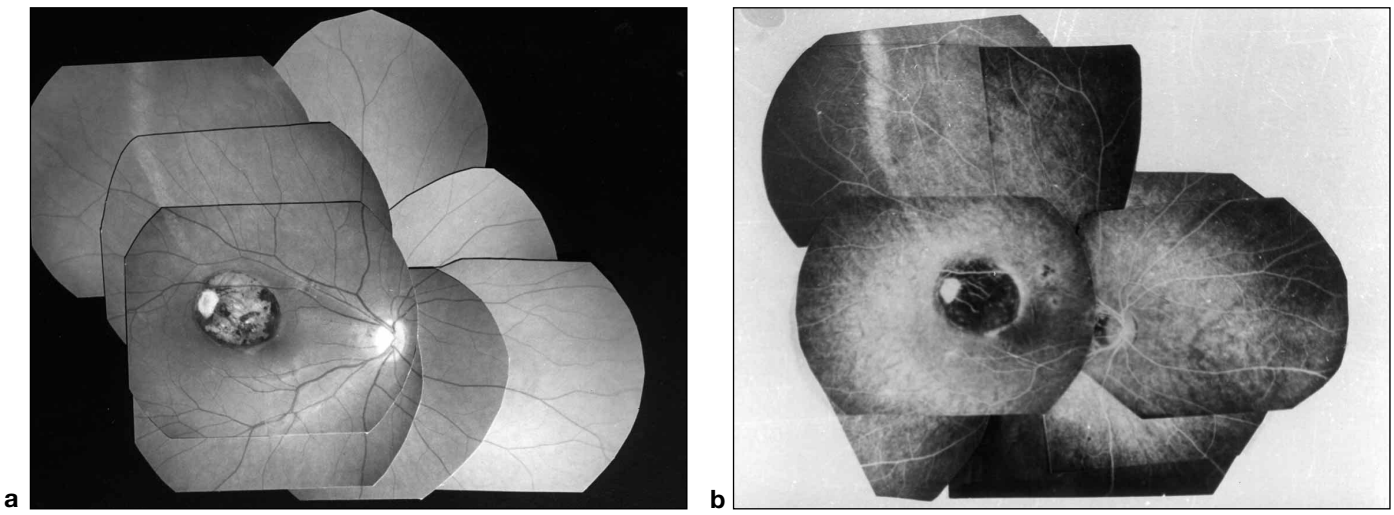

Fig. 1 - *Fundus photograph (**a**) and fluorescein angiography (**b**) of the right eye show macular toxoplasmic chorioretinal scar with an associated atrophic tract of the RPE which extended upwards toward the retinal periphery.*

optic disc (1-6). The tracts were shaped differently, but always extended downwards toward the periphery. Choroidal ischemia with «watershed» syndrome has been postulated as a possible mechanism of atrophic tracts of the RPE (7). Contrary to this hypothesis are vascular choroidal systematisation that does not explain the direction and shape of the atrophic lesions and absence of associated optic disc involvement. The most likely hypothesis is that severity and persistence of the serous retinal detachment, extending downwards as a result of gravity, are the main causes of subsequent atrophic lesions of the RPE (1,2). These gravitational atrophic tracts could result from the hyperfunction of RPE, reabsorbing the subretinal fluid, as well as the loss of its connection with the neuroepithelium.

Our patient affected with cicatricial congenital toxoplasmic chorioretinitis exhibited an associated «gravitational» RPE atrophic tract, which did not have the usual downward direction. This RPE lesion could have resulted from intrauterine chorioretinitis associated with severe serous retinal detachment. The unusual upward direction of the RPE atrophic tract could be explained by the in utero head position during the active phase of chorioretinal disease, resulting in extension of subretinal fluid toward the superior periphery, as a consequence of gravity.

This case illustrates that intrauterine chorioretinal diseases may be associated with atrophic tracts of the RPE. It also seems to confirm the role of gravity in determining the direction and shape of such lesions (1,2).

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