COATS DISEASE OF ADULT ONSET
ENFERMEDAD DE COATS DE COMIENZO EN ADULTO

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ABSTRACT

Case report: We report a 66-year-old male who exhibited an exudative retinal vasculopathy, diagnosed as Coats disease of adult onset, treated with laser photocoagulation.

Discussion: Most cases of Coats disease are diagnosed in childhood. When this entity appears in adults it usually exhibits a more benign clinical course. Diagnosis of this condition must be considered in those patients showing a retinal vasculopathy with a marked exudative component. Treatment is indicated if the fovea is threatened by lipid deposition (Arch Soc Esp Oftalmol 2008; 83: 117-120).

Key words: Coats disease, adult onset, retinal exudative vasculopathy.

INTRODUCTION

Coats disease is an idiopathic and unilateral exudative retinal vasculopathy characterized by telangiectasias, aneurisms and irregular dilatations of retinal vessels which lead to intra- and sub-retinal exudation and generalized lipid deposits (1,2). Typically, it appears in childhood and only on rare occasions it has been diagnosed for the first time in adults (3). This article describes a patient affected by Coats disease diagnosed in the seventh decade of life.

CASE REPORT

Male, 66, without relevant history, who attends the practice due to myodesopsiae in the left eye (LE) with onset a few days earlier. His visual acuity was of 0.9 in the right eye (RE) and 0.8 in LE. Intra-

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ocular pressure was of 20mm Hg in RE and 16mm Hg in LE. Anterior pole exploration was normal for both eyes. The right eye fundus was also normal. The left eye fundus exhibited massive sub-retinal exudates involving the nasal and temporal superior retina (figs. 1 and 2). This retina visibly showed irregular blood vessel dilatations which became more obvious in fluorescein angiography (fig. 3). Coats disease was established as diagnostic and the vascular alterations in the superior temporal retina were photoagulated with laser due to the risk posed by exudation in the area, with progression toward the macula. In the nasal retina, the vascular alterations which were ophthalmoscopically identifiable were laser photocoagulated.

Six months after the treatment the patient maintains the same visual acuity and exhibits a small reduction of the hard exudates in the superior temporal arch (fig. 4). Exudation in the nasal area exhibits very small changes (5).

DISCUSSION

Even though Coats disease can appear at any age, the vast majority of cases are diagnosed in the first two decades of life. When this process is detected in adulthood, it usually expresses in one side only and preferably in males. In contrast to the childhood onset, many adult patients have no symptoms or exhibit good visual acuity. In these cases, vascular anomalies generally appear in the equatorial and peripheral retina, and lipid exudation (which appears in a massive but diffuse manner in children) is more localized (3). These patients usually maintain good visual acuity and, as in the case of the instant patient, the disease evolves at a slower pace. Also in contrast to childhood onset, Coats disease in adults is frequently associated to retinal hemorrhages caused by bleeding through retinal aneurisms.

The diagnostic of Coats disease is established mainly due to the ophthalmoscopic appearance of the retina. Fluorescein angiography shows early hyper-fluorescence of telangiectasiae, hypo-fluorescence in exudates and slight late hyper-fluorescence of the sub-retinal liquid. It also frequently shows areas of non-capillary perfusion or macular edema. Echography could be useful for cases with large exudative retinal detachments.

The main entity for establishing the differential diagnostic for Coats disease in children is retinoblastoma (4). In adult patients it must be differentiated from Leber’s miliar aneurisms, with the main differential characteristic being a small amount of retinal exudation exhibited by the latter process. In addition although with less frequency it can be confused with retina detachment, toxochiasis, choroidal melanoma, retinitis due to cytomegalovirus or toxoplasmosis (1).

In what concerns treatment, the main goal in this disease is to obliterate the telangiectasiae to facilitate the reabsorption of exudates and maintain as much visual acuity as possible (2). Possible therapeutical options described in literature include obser-
Coats in adult

Fig. 3: Images of fluorescein angiography showing blood vessel dilatations and irregularities with hard exudates excluding choroidal fluorescein.

Fig. 4: Posterior pole images six months after laser treatment, showing a reduction in hard exudate density in the superior temporal arch.

Fig. 5: Nasal retina images six months after laser treatment, showing very small changes in the density of hard exudates.
vation, laser photocoagulation, cryotherapy, surgical treatment of exudative retina detachment and enucleation. Due to the lower aggressiveness exhibited by Coats disease in adult patients, treatment is recommended in cases evidencing a development of retinal alterations. Even though our patient had good eyesight, it was considered that the risk of progression of exudation towards the macular area was high and therefore it was decided to establish preventive treatment with laser.

In conclusion, even though the majority of Coats disease cases occur in childhood, we must consider its diagnostic in adult patients with retinal vasculopathies with major exudative components. Even when in adults Coats disease courses in a more benign manner and comprises a good prognosis in what concerns visual acuity, we must assess establishing treatment when there is a risk of progression of the exudates towards the macular area.

REFERENCES


