Short communication

Serpiginous choroiditis in a patient with uterine cervix carcinoma

J.J. Jordano Pérez*, M. Córdoba Lorenzo, C. Ruiz Lomas, F.J. Márquez Báez, A. Ortega Ortiz

Servicio de Oftalmología, Hospital de Montilla, Córdoba, Spain

ARTICLE INFO

Article history:
Received 26 October 2010
Accepted 29 June 2011
Available online 23 June 2012

Keywords:
Serpiginous choroiditis
Uterine cervix carcinoma
Inflammatory choroiditis

ABSTRACT

Case report: We report the case of a 70-year-old patient with serpiginous choroiditis and uterine cervix carcinoma.

Discussion: The etiology of serpiginous choroiditis is unknown, but similar lesions have been described in association with systemic lupus erythematosus, non-Hodgkin lymphoma, Crohn’s disease, sarcoidosis, tuberculosis, herpes virus infection, autoimmune hepatitis and lung carcinoma.

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Coroiditis serpiginosa en paciente con carcinoma de cérvix uterino

R E S U M E N

Caso clínico: Se presenta el caso clínico de una paciente de 70 años con coroiditis serpiginosa y carcinoma de cérvix uterino.

Discusión: La etiología de la coroiditis serpiginosa es desconocida pero lesiones similares han sido descritas en asociación con lupus eritematoso sistémico, linfoma no Hodgkin, enfermedad de Crohn, sarcoidosis, tuberculosis, infección por virus del herpes, hepatitis autoinmune y carcinoma pulmonar.

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Introduction

Serpiginous choroiditis, also known as peripapillary helicoidal geographic choroidopathy, is an infrequent, chronic, progressive, recurring and idiopathic inflammatory disease which affects the pigment epithelium, choriocapillary and choroids. With greater frequency it affects men between 40 and 60 years of age, and in 90% of cases it is bilateral but asymmetric. The visual prognosis depends on the macular...
involvement.\textsuperscript{1,2} The anterior pole is usually normal even though vitreitis may appear together with slight anterior uveitis in up to 30% of cases.

In the acute forms of serpiginous choroiditis, the ocular fundus assessment reveals peripapillary whitish-yellowish lesions that usually extend progressively towards the posterior pole in a helicoidal shape. The chronic forms exhibit atrophic lesions of the pigment epithelium and the choroids, as well as of areas with hyper- or hypopigmentation and fibrosis. The clinical diagnosis is confirmed with fluorescein angiography (FA). Acute lesions are characterized by marked hyper-autofluorescence in early times with late hyperfluorescence due to diffusion from the edges of the lesion towards the center. Cicatricial lesions exhibit a variable angiographic pattern: they can be hyper-autofluorescent in the early stages due to choriocapillary atrophy and, as the angiography proceeds, begin to exhibit hyper-fluorescence in the edges of the cicatricial area. On other occasions, in the presence of a fibrovascular scar, early hyper-fluorescence can be observed with areas exhibiting destruction of the pigment epithelium and choriocapillary, showing the choroidal vessels at that level.\textsuperscript{1}

The treatment consists in the administration of oral corticoids which can be associated to immuno-suppressants such as cyclosporine A and azathioprine. In severe cases resistant to conventional treatments, or if the central involvement is possible, revisions have been described with alkylating agents such as cyclophosphamide.\textsuperscript{3–5}

**Clinic case**

A male, aged 70, visited our service due to diminished visual acuity in the left eye. Personal history included diabetes mellitus type 2, dyslipidemia, hypertension and allergy to pirazolones.

The assessment revealed a corrected visual acuity of 0.5 in the right eye at 0.1 in the left eye. The anterior pole assessment revealed an incipient lens opacity in both eyes. The intraocular pressure was of 16 mm Hg in both eyes. The ocular fundus assessment revealed whitish-yellowish peripapillary chorioretinal atrophy involving the nasal retina and the temporal vascular arches in both eyes, involving the macula in the left eye. No vitritis was apparent (Figs. 1 and 2).

FA showed early hypofluorescence and variable late hyperfluorescence of the lesions in both eyes with macular involvement in the left eye (Figs. 3–6).

The patient was diagnosed as serpiginous choroiditis and treatment was established with oral corticoids in the form of oral prednisone at a dose of 1 mg/kg/day up to 2 weeks after obtaining therapeutic response, at which time the dose was reduced to 0.5 mg/kg/day. At week 4, the dose was reduced to alternate days and after 8 weeks to 0.1 mg/kg/day, with visual acuity remaining stable. The patient was referred to the internal medicine service for adjusting the insulin dose due to the corticoids treatment.

Six months later, the patient visited the Gynecology Service due to metrorrhagia. An assessment revealed an evolved uterine cervix carcinoma involving the lower 3rd of the vagina (Fig. 7).

**Fig. 1 – Retinograph of right eye. Peripapillary chorioretinal atrophy involving the nasal retina and temporal vascular arches of the right eye.**

**Fig. 2 – Retinograph of left eye. Peripapillary chorioretinal atrophy involving the nasal retina temporal vascular arches and macular area of the left eye.**

The patient was referred to the Oncology Service which established treatment with 40 mg of intramuscular methylprednisolone during three days a week associated to chemotherapy and radiotherapy for five weeks.

Two months later and due to the imminent macular involvement of the second eye, azathioprine was added in a dose of 1.5 mg/kg/day, which was reduced to 1 mg/kg/day after two months, reducing oral prednisone as per the protocol.\textsuperscript{4}

The patient died one year later due to multi-organ failure.

**Discussion**

The etiology of serpiginous choroiditis is unknown. A possible immune mechanism has been proposed due to the higher frequency of presentation of HLA-B7 and the retinal antigen S. Similar lesions have been described in association with
eritematous lupus, non-Hodgkin lymphoma, Crohn’s disease, sarcoidosis, tuberculosis, herpes virus infection, autoimmune hepatitis and pulmonary carcinoma. Twenty-five percent of patients exhibited loss of central vision due to foveal destruction and choroidal neovascularization.

The most frequent symptom of the acute stage onset is the perception of a unilateral central or paracentral scotoma, sometimes accompanied by visual acuity reduction.

The case presented here was a patient diagnosed as serpiginous choroiditis who six months later exhibited an evolved uterine cervix carcinoma.

We have not found any publication associating serpiginous choroiditis with uterine cervix carcinoma although several publications describe it in association with lymphoid neoplasia and pulmonary carcinoma. Accordingly, it could be said that serpiginous choroiditis could be a paraneoplastic syndrome expressing certain tumors.

The clinic diagnosis is confirmed with FA.

Fig. 3 – Angiograph of right eye. Arteriovenous phase of the angiograph with early hyperfluorescein of the peripapillary active lesions.

Fig. 4 – Angiograph of left eye. Active macular lesion with early hypofluorescence.

Fig. 5 – Angiograph of right eye. Late hyperfluorescence of the peripapillary lesions.

Fig. 6 – Angiograph of the left eye. Late hyperfluorescence of the peripapillary lesions with active macular lesion.

Fig. 7 – Uterine cervix biopsy. Tumoral cells arranged in groups separated by thin fibrous tracts.
Oral corticoids are recommended for treating the active lesions but their effectiveness has not been proven for changing the course of the disease or preventing recurrences. For this reason, according to several publications treating with immunosuppressants in low dosages seems to reduce relapses when compared with the exclusive use of corticoids.2,4

Hooper recommends triple immuno-suppressant therapy with prednisone, cyclosporine and azathioprine if the patients exhibit imminent macular involvement of the second eye.4

Conflict of interests

No conflict of interest has been declared by the authors.

REFERENCES