DIFFUSE LARGE B CELL LYMPHOMA PRESENTING WITH A BILATERAL SEROUS MACULAR DETACHMENT

DESPRENDIMIENTO SEROSO MACULAR BILATERAL COMO FORMA DE PRESENTACIÓN DE LINFOMA B DIFUSO DE CÉLULA GRANDE

RECHE-SAINZ JA¹, PERAL-ORTIZ DE LA TORRE MJ¹, CARPIO-BAILÉN R¹, TOLEDANO-FERNÁNDEZ N¹

ABSTRACT

Clinical case: A 42 year-old male was assessed for a subacute, bilateral and progressive visual loss. His medical history included chronic hepatitis C infection and Evans syndrome. On fundal examination, multiple areas of neurosensorial and retinal pigmented epithelium detachment were observed in the region of both macula. A few days later, his general health deteriorated and he was noted to have a high fever and adenopathy. Biopsy of an enlarged lateral cervical lymph node demonstrated the existence of a diffuse large B cell lymphoma. After several cycles of chemotherapy, he experienced a progressive and bilateral improvement of his vision, which was accompanied by a reattachment of the previously detached areas.

Discussion: A bilateral and serous macular detachment may be the initial manifestation of a diffuse large B cell lymphoma. The prognosis of these retinal lesions may be favourable if lymphoma remission is achieved (Arch Soc Esp Oftalmol 2007; 82: 559-562).

Key words: Retina, macula, serous detachment, lymphoma, diffuse large B cell lymphoma.

RESUMEN

Caso clínico: Un varón de 42 años fue atendido por pérdida visual bilateral subaguda. Como antecedentes presentaba una hepatitis C crónica activa y un síndrome de Evans. Mediante funduscopia se observaron múltiples focos de desprendimiento neurosensorial y de EPR en ambas polos posteriores. A los pocos días empeoró su estado general (fiebre alta y múltiples adenopatías). La biopsia de las adenopatías laterocervicales objetivó un linfoma B difuso de células grandes. Se le trató con quimioterapia y experimentó una paulatina reaplicación de los focos de desprendimiento seroso con mejoría visual progresiva.

Discusión: El desprendimiento seroso macular bilateral puede ser una manifestación precoz de un linfoma B difuso de célula grande. El curso de estas lesiones intraoculares puede ser favorable con la remisión del linfoma.

Palabras clave: Retina, mácula, desprendimiento seroso, linfoma, linfoma B difuso de célula grande.
INTRODUCTION

Intraocular tumors may progress with severe retinal detachments. Choroidal metastasis of breast and lung carcinomas is most frequently associated with this type of detachment. However, uveal involvement in the case of systemic lymphomas is very infrequent (1). On the other hand, macular retinal detachments tend to be the result of non-neoplastic etiologies such as central serous chorioretinopathy in young adults and age-related macular degeneration in older patients.

The case described herein is that of a young adult suffering from a type B lymphoma whose onset included bilateral loss of vision caused by bilateral macular detachment.

CASE REPORT

A 42-year-old male arrived in the emergency room reporting bilateral and increasing loss of vision with several weeks long progression.

His personal history included a chronic hepatopathy caused by the C virus and Evans autoimmune syndrome (autoimmune thrombocytopenic purpura with anemia) with long-term evolution, which required a splenectomy twenty years earlier. Maintenance treatment consisted of 30 mg of oral prednisone on alternate days.

During ophthalmologic exploration, the best corrected visual acuity was 0.3 in the RE and 0.2 in the LE. Biomicroscopically, the patient presented posterior subcapsular cataract 1+ in the RE and 2+ in the LE. The funduscopy revealed several areas with neurosensory and retinal pigment epithelium (EPR) detachment in the posterior pole of both eyes, as well as a few rounded, discreet, small whitish injuries in the equatorial retina in both eyes (fig. 1). Furthermore, the LE exhibited other pigmented peripheral scarring injuries. The optical coherence tomography (OCT) revealed that detachments involved the macula in both eyes (fig. 2).

A fluorescein angiography was advised but never performed since two days later the patient was admitted with high fever, laterocervical adenopathies and persistent diarrhea. He was empirically treated with cefothaxime and corticoid therapy, but evolved poorly, with respiratory distress and progressive deterioration of his general condition. The CAT scan performed checked the presence of a large mediastinal broadening, while the biopsy of cervical adenopathies revealed a diffuse large B cell lymphoma with CD20 + marker. After diagnosing the patient with non-Hodgkin diffuse large B cell lymphoma in stage II E, he was administered 6 cycles of CHOP chemotherapy and rituximab. During chemotherapy (and particularly from the third cycle on), the patient already experienced real visual improvement, with a gradual re-attachment of all sources of sensory and RPE detachment, leaving behind retinochoroidal scars with pigment redistribution. Six months after chemotherapy was completed, the CAT scan and gammagraphy confir-

Fig. 1: Initial funduscopic appearance. Several sources of RPE detachment in the RE and diffuse neurosensory detachment in LE.
med full remission of the lymphoma, the retinas had reattached and the old exudative injuries looked scarred and inactive (fig. 3). The OCT also confirmed resolution of detachments (fig. 4). VA was 0.7 in the RE and 0.6 in LE, and the patient is awaiting a cataract procedure.

**DISCUSSION**

Among all lymphoproliferative disorders, ocular involvement is much more frequent in leukemia (28%) than in systemic lymphomas (7%) (2). Choroidal and iris infiltration, and more rarely anterior uveitis and pseudohypopyon, have been described as the ocular manifestations of systemic lymphomas (2). In a more unspecified fashion, hemorrhages and cotton-like exudates due to anemia or thrombocytopenia may also derive from lymphoproliferative disorders.

This patient was immunodepressed due to autoimmune thrombocytopenic purpura and an active viral infection caused by hepatitis C, a condition that may promote lymphomatous infiltration of the uveal tract. Additionally, the above visual symptoms were predominantly associated with the presence of multiple focal serous detachments in both maculae. Peripheral retinas showed small, deep, whitish injuries with choroidal infiltration caused by lymphoma. These findings preceded the onset and diagnosis of the systemic diffuse large B-cell lymphoma. The gradual disappearance of serous detachments ran parallel to the lymphoma’s remission.

There are very few references in literature to cases where macular serous detachments were lin-

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**Fig. 2:** Initial tomographic appearance of both maculae. OCT results were consistent with ophthalmoscopic findings.

**Fig. 3:** Eye fundus appearance after chemotherapy cycles: flattening of the retina in both posterior poles with residual scarring injuries.
Isolated cases have been described for Hodgkin’s lymphoma, T-lymphoma associated with the Epstein-Barr (3), Waldenström’s macroglobulinemia (4) and one case of non-Hodgkin lymphoma after treatment with gallium nitrate (5), where ocular manifestations included predominantly macular serous detachments.

Therefore, bilateral macular serous detachments may be the ocular manifestation of a diffuse large B cell lymphoma. This alteration may appear very prematurely and even precede the onset of the systemic condition. The evolution of such retinal alterations is favorable if the lymphoma’s remission is achieved via chemotherapy.

**REFERENCES**


