ARCHIVOS DE LA SOCIEDAD ESPAÑOLA DE OFTALMOLOGÍA

www.elsevier.es/oftalmologia

Short communication

Eplerenone, a new treatment for an old problem: Retinitis pigmentosa with recalcitrant macular edema☆

R. Campos Polo, C. Rubio Sánchez, D.M. García Guisado, M.J. Díaz Luque*

Servicio de Oftalmología, Hospital Virgen del Puerto, Plasencia (Cáceres), Spain

ARTICLE INFO

Article history:
Received 2 February 2017
Accepted 2 May 2017
Available online 20 November 2017

Keywords:
Cystoid macular edema
Retinitis pigmentosa
Eplerenone
Macular thickness
Epiretinal membrane

ABSTRACT

Case report: The case involves a 35-year-old man, with a history of retinitis pigmentosa, who presented with a bilateral cystoid macular edema associated with bilateral epiretinal membrane, which was resistant to treatment with oral acetazolamide and intravitreal bevacizumab. The treatment with oral eplerenone was able to improve the visual acuity and macular thickness of this patient.

Discussion: A variety of treatments have been proposed for the management of cystoid macular edema, associated with retinitis pigmentosa, with variable results. The treatment with oral eplerenone might be a good option for the control of this condition.

Eplerenona, un nuevo tratamiento para un viejo problema: retinosis pigmentaria asociada a edema macular recalcitrante

Palabras clave:
Edema macular quístico
Retinosis pigmetaria
Eplerenona
Grosor macular
Membrana epirretiniana

RESUMEN

Caso clínico: Varón de 35 años, con antecedentes personales de retinosis pigmentaria, que presentó un edema macular quístico bilateral asociado a membrana epirretiniana bilateral resistente a tratamiento con acetazolamida oral y bevacizumab intravítreo. El tratamiento con eplerenona oral fue capaz de mejorar la agudeza visual y el grosor macular de este paciente.

Discusión: Se han propuesto numerosos tratamientos para el manejo del edema macular quístico asociado a retinosis pigmentaria, con resultados variables. El tratamiento con eplerenona oral podría ser una buena opción para el control de esta entidad.

☆ Please cite this article as: Campos Polo R, Rubio Sánchez C, García Guisado DM, Díaz Luque MJ. Eplerenona, un nuevo tratamiento para un viejo problema: retinosis pigmentaria asociada a edema macular recalcitrante. Arch Soc Esp Oftalmol. 2018;93:38–41.

* *Corresponding author.*
E-mail address: rafacampospolo@hotmail.com (R. Campos Polo).

Clinic case report

Male, 35, diagnosed with pigment retinosis (PR) and secondary cystic macular edema (CME) with 2 years evolution, resistant to treatment with oral acetazolmide (250 mg every 8 hours during one year) and intravitreal bevacizumab (1.25 mg, 3 injections at 1-month intervals). Examination produced the following results: corrected visual acuity (CVA), decimal Snellen scale, 0.4 in the right eye (RE) and 0.3 in the left eye (LE), posterior polar cataract in both eyes (BE), intraocular pressure of 14 mmHg in BE. Ocular fundus revealed, in addition to typical PR signs, radial folds in both maculas. Fluorescein angiography showed window defect areas arranged in petal fashion around the macula, being more numerous in the LE (Fig. 1). Optical coherence tomography (OCT) showed CME in BE, more marked in LE, associated to bilateral epiretinal membrane (Figs. 2 and 3).

Due to the inefficiency of prescribed treatment, it was decided to prescribe oral treatment of eplerenone (Inspra; Pfizer AG; Zürich, Switzerland or Surrey, United Kingdom), 25 mg every 12 hours. The patient was checked 2 months later and exhibited total resolution of edema in the RE and nearly complete resolution in the LE (Figs. 2 and 3). CVA improved to 0.7 in the RE and 0.6 in the LE. The patient remains stable to date, with the same CVA during the 11 months follow-up during which he has continued treatment without exhibiting any derived systemic complications.

Discussion

The existence of an independent renin-angiotensin-aldosterone system at the ocular level has been demonstrated. This system has greater expression in retinal and uveal tissue and acts on the ocular vasculature, aqueous humor and intraocular pressure control,[1] as well as in the pathogenesis of vasoproliferative and inflammatory processes, inducing increased vascular permeability.[2] Aldosterone links to mineral-corticoid receptors that are present in several neuroretinal cell types.[3] Eplerenone is an aldosterone receptor antagonist with the ability to act at this level, modifying the above-mentioned physiopathological processes.[4] The authors are not aware of any publication describing the use of

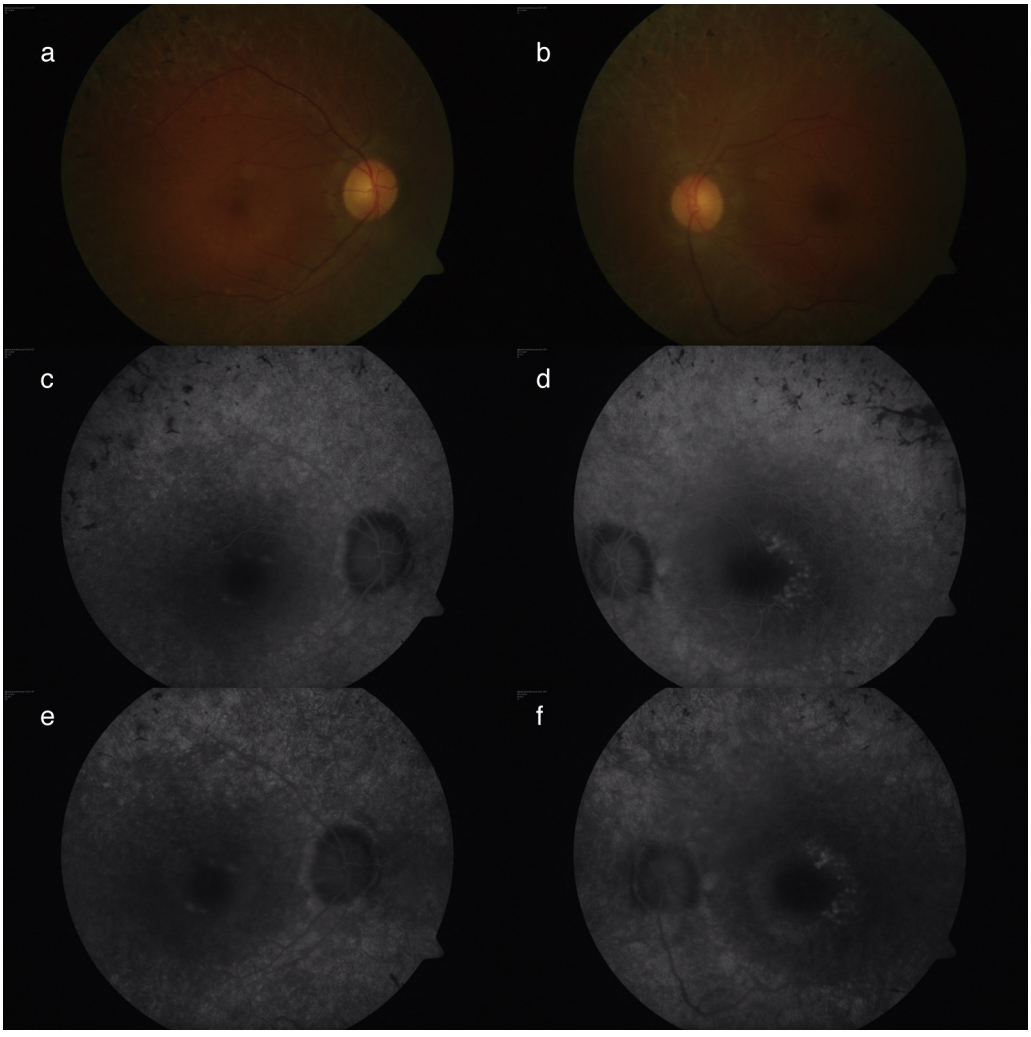

Fig. 1 – 5-line OCT images (a) and fluorescein angiography, early times (c) and late times (e) for RE and LE (b, d and f). In addition to typical PR signs, the images show progressive leak of contrast.