UVEAL EFFUSION SYNDROME AFTER STRABISMUS SURGERY

SÍNDROME DE EFUSIÓN UVEAL SECUNDARIO A CIRUGÍA DE ESTRABISMO

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ABSTRACT

Case report: A woman was operated on for strabismus under topical anesthesia. An exudative conjunctivitis was diagnosed immediately after the surgery, and a uveal effusion syndrome diagnosed 15 days later. Surgery exploration, vycril suture removal and therapy with systemic, sub-tenon, and topical corticosteroid and antibiotics was initiated. Intraoperative culture revealed evidence of Staphylococcus epidermidis. Good resolution occurred in 4 months.

Discussion: Uveal effusion secondary to strabismus surgery has not been reported in the published literature. Implant and suture infection by Staphylococcus epidermidis following scleral buckling surgery may be a possible, but rare, cause of the uveal effusion syndrome (Arch Soc Esp Oftalmol 2006; 81: 409-412).

Key words: Uveal effusion syndrome, strabismus surgery, scleritis, Staphylococcus epidermidis, suture infection.

INTRODUCTION

The uveal effusion syndrome is due to an abnormal exudation of serous fluid from the choriocapillary which accumulates in the choroid and the subretinal space. Descriptions of the origins of this condition include inflammatory, hydrodynamic, osmotic and idiopathic causes (1,2). The inflammatory etiology comprises scleritis, uveitis, intraocular surgery and traumatism, infection of the scler-
ral explant, photocoagulation and cryocoagulation (1).

Scleritis, either primary or secondary to an infection of the scleral explant or suture, causes an inflammation of the choroid with dilatation of vessels and effusion of serous liquid in the choroid and subretinal space. Clinically, a peripheral ring-shaped choroidal detachment (CD) takes place which allows vision of the ora serrata without indentation, as well as a bulbous retina detachment (RD) which moves with cephalic and eye movements. Episceral vessel dilatation has also been observed. IOP is normal, scarce amount of cells in vitreous and multifocal hyperplasia of the EPR which gives rise to «leopard spots». Treatment consists in the withdrawal of the infected sutures and plastic material and the administration of antibiotics and topical and systemic corticoids (1).

CASE REPORT

The case refers to a 76-year old diabetic woman who was operated for strabismus with an adjustable retrotension of the inferior rectum (LE) with topical anesthesia due to exhibiting diplopia the day after cataract surgery. Her initial VA was 0.7, she was emmetropic and the axial length of the eye was within normal limits. The immediate postop revealed exudative conjunctivitis resistant to topical treatment with ciprofloxacin and tobramicine. Fifteen days later the patient went to the urgency ward suffering intense eye pains, exhibiting normal MOE, lower eyelid edema, dilatation of episcleral vessels and 15 mmHg IOP. The eye fundus exhibited a lower CD which, in 24 hours, became annular, revealing ora serrata without indentation. The patient was admitted for study and treatment. After 48 hours she referred loss of vision, VA was at the level of perceiving light, and exhibiting total exudative DR (figs. 1 and 2). Analytical results were normal. The conjunctival exudate was cultured and an ocular echography was made which revealed scleral thickening at the level of the lower rectum, without signs of abscess. The CAT scan confirmed the diagnosis of serous choroidal detachment without signs of hemorrhage, and scleritis (fig. 3). Treatment was established with oral levofloxacin and prednisone. The exudate culture gave sterile results, therefore the topical treatment was continued with norfloxacin, methylprednisolone and cyclopentolate. Due to the negative evolution of the patient, the fifth day a surgical exploration was made of the lower rectum, withdrawing the vbycr 6/0 muscle/scleral sutures.

The muscle exhibited good colors but had a large adhesion to the underlying sclera, which had a cre-
exudative conjunctivitis, the eye pain, the loss of vision, the ophthalmoscopic findings and the imaging tests confirmed the diagnosis of uveal effusion syndrome secondary to posterior scleritis, discarding chorioretinal perforation due to the absence of confirming ophthalmoscopic clinical signs.

The differential diagnosis would have to be performed between the scleritis infectious etiology and the inflammatory reaction to th vycril sutures (1,4). The positive culture of Staphylococcus epidermidis of the intraop tissue samples would tip the balance towards infection (1), although some authors say this is a non-pathogenic germ which does not require antibiotic treatment (4).

Hypothetically, strabismus surgery with topical anesthesia could contribute to a greater contamination of the surgical field because the patient has to sit up to verify ocular deviation. However, at present there are no studies which can provide data supporting this hypothesis.

In our case, the withdrawal of vycril scleral sutures and topical, subtenon and systemic administration of antibiotics and corticoids resolved the chart,
allowing the patient to recieve her initial VA. In our view, this would support the infectious etiology of the scleritis. The exudative nature of the retina detachment, modified with cephalic movements, facilitated the macula remaining detached long enough to irreversibly alter the patient’s vision.

REFERENCES