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**SHORT COMMUNICATION**


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**Case report**

# Cystoid macular edema associated with latanoprost therapy in a pseudophakic vitrectomized patient after removal of silicone oil endotamponade

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**PURPOSE.** *To describe the occurrence of cystoid macular edema in a pseudophakic vitrectomized patient following use of latanoprost (0.005%).*

**METHODS.** *A 58-year-old patient underwent routine cataract surgery with posterior chamber lens implantation complicated by rhegmatogenous retinal detachment three months later. A pars plana vitrectomy was performed with silicone oil endotamponade which was removed six months later. Five months after oil removal, the patient presented with secondary open-angle glaucoma treated with latanoprost 0.005% eye drops once daily.*

**RESULTS.** *Two weeks after initiation of latanoprost treatment, visual acuity dropped from 0.8 to 0.3 due to cystoid macular edema confirmed by fluorescein angiography. After discontinuing latanoprost therapy and with topical corticosteroid treatment, cystoid macular edema slowly resolved, and within 6 months, visual acuity improved to 0.8.*

**CONCLUSIONS.** *Despite its marked ocular hypotensive effect, latanoprost should be carefully used in patients after uncomplicated cataract surgery if the vitreous body was removed by pars plana vitrectomy. (Eur J Ophthalmol 2003; 13: 221-2)*

**KEY WORDS.** *Cystoid macular edema, Latanoprost, Open-angle glaucoma*

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*Accepted: August 19, 2002*

**INTRODUCTION**

Since its approval by the United States Food and Drug Administration in 1996, latanoprost has become one of the most widely prescribed antiglaucomatous medications. Latanoprost is a prostaglandin  $F_{2\alpha}$  analogue that reduces the intraocular pressure by enhancing the uveoscleral outflow. Its reported side-effects include hypertrichosis and increased eyelash pigmentation, iritis or anterior uveitis, change in iris pigmentation, and cystoid macular edema in aphakic or pseudophakic eyes, especially when the posterior lens capsule was ruptured during cataract surgery (1-5). The purpose of the present report is to describe the deve-

lopment of cystoid macular edema after use of latanoprost in an eye in which uncomplicated cataract surgery had been performed with the posterior lens capsule left intact, in which, however, the loss of vitreous body due to a pars plana vitrectomy might have facilitated the development of cystoid macular edema.

**Case report**

A 58-year-old female patient underwent routine uncomplicated cataract surgery with posterior chamber lens implantation. Three months later, she developed a rhegmatogenous retinal detachment which was pri-

marily treated by a scleral buckling procedure including retinal cryotherapy and exodrainage of the subretinal fluid. Due to persisting retinal detachment, pars plana vitrectomy was eventually performed with silicone oil endotamponade. The silicone oil was removed six months after pars plana vitrectomy. The retina remained attached. Five months later, the patient presented with secondary unilateral open-angle glaucoma for the therapy of which she received latanoprost 0.005% eye drops once daily. The anterior chamber was without flare or inflammatory cells. Two weeks after initiation of latanoprost treatment, visual acuity dropped from 0.8 to 0.3 due to the development of cystoid macular edema which was confirmed by fluorescein angiography. Additionally, the anterior chamber showed increased flare as assessed by slit lamp biomicroscopy. Latanoprost therapy was stopped, and topical corticosteroid treatment was initiated to reduce the anterior chamber inflammation. Ophthalmoscopically as well as on fluorescein angiograms, cystoid macular edema slowly resolved. Visual acuity improved to 0.6 within six months after cessation of the latanoprost treatment.

## CONCLUSIONS

The eye presented in this report had undergone phacoemulsification and posterior chamber lens implantation complicated by retinal detachment repairs including scleral buckling, cryotherapy, and pars plana

vitrectomy. There was an interval of five months between the last intraocular intervention before latanoprost was prescribed. Each of the surgical procedures may have led to the development of cystoid macular edema. All surgeries, however, were performed more than five months prior to the development of cystoid macular edema, with a visual acuity of 0.80 in the interval between the last surgical intervention and the development of cystoid macular edema after initiation of a topical treatment with latanoprost. While a pre-existing subclinical cystoid macular edema cannot be excluded, the almost simultaneous onset of clinical symptoms and the application of latanoprost was remarkable. In agreement with previous studies published in the literature (1-4), and although according to clinical experience it may be a rare observation, the present report suggests that, despite its marked ocular hypotensive effect, latanoprost may be carefully used in patients after uncomplicated cataract surgery if the vitreous body was removed by pars plana vitrectomy.

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