After the surgery, topical levofloxacin, cefmenoxime hemihydrochloride (six times/day) and minocycline hydrochloride (200 mg/day) were prescribed. Microbiological cultures of the conjunctiva identified *Nocardia* species. The symptoms gradually decreased, but, 6 weeks later, they worsened again. Two more similar treatments were necessary to eliminate the symptoms completely. No recurrences were observed in the 10 months thereafter.

Nocardia sp. are aerobic, gram-positive, filamentous bacteria found in soil. They can be contracted by inhaling contaminated dust or by contamination of a wound with soil containing Nocardia. Although Nocardia can cause infection in healthy persons, it mainly affects immunocompromised hosts, such as patients on chronic steroid therapy or those undergoing cancer treatment. Typically, Nocardia infection has a late onset, and is chronic and indolent; its signs and symptoms are similar to those of low-virulence organisms (Haripriya et al. 2005).

Our patient was on chronic systemic and local steroids for Bechet's disease. He also had poorly controlled diabetes mellitus.

Our observations indicate that ophthalmologists should be aware that posterior subtenon TA injections can cause orbital infections, especially in subjects who are immunocompromised.

References

- Engelman CJ, Palmer JD & Egbert P (2004): Orbital abscess following subtenon triamcinolone injection. Arch Ophthalmol 122: 654–655.
- Haripriya A, Lalitha P, Mathen M, Prajna NV, Kim R, Shukla D, Natchiar G & Srinivasan M (2005): Nocardia endophthalmitis after cataract surgery: clinicomicrobiological study. Am J Ophthalmol 139: 837–846.
- Jonas JB (2005): Intravitreal triamcinolone acetonide for treatment of intraocular oedematous and neovascular diseases. Acta Ophthalmol Scand **83**: 645–663.
- Kojima A, Ohno-Matsui K, Futagami S, Shimada N, Tokoro T & Mochizuki M (2006): Trans-Tenon's retrobulbar triamcinolone infusion for myopic choroidal neovascularization. Acta Ophthalmol Scand 84: 749–754.
- Moshfeghi DM, Kaiser PK, Scott IU et al. (2003): Acute endophthalmitis following

intravitreal triamcinolone acetonide injection. Am J Ophthalmol **136**: 791–796.

- Nelson ML, Tennant MT, Sivalingam A, Regillo CD, Belmont JB & Martidis A (2003): Infectious and presumed noninfectious endophthalmitis after intravitreal triamcinolone acetonide injection. Retina 23: 686–691.
- Ohguro N, Yamanaka E, Otori Y, Saishin Y & Tano Y (2006): Repeated intravitreal triamcinolone injections in Behcet disease that is resistant to conventional therapy: 1-year results. Am J Ophthalmol **141**: 218–220.
- Sivaprasad S, McCluskey P & Lightman S (2006): Intravitreal steroids in the management of macular oedema. Acta Ophthalmol Scand 84: 722–733.

Correspondence: Shunji Kusaka MD Department of Ophthalmology Osaka University Medical School E-7, 2–2 Yamadaoka Suita Osaka 565-0871 Japan Tel: + 81 6 6879 3456 Fax: + 81 6 6879 3458 Email: skusaka@ophthal.med.osaka-u.ac.jp

Corneal oedema and acute anterior uveitis after two doses of travoprost

Sayime Aydın and Fatih Özcura

Department of Ophthalmology, Dumlupinar University Hospital, Kutahya, Turkey

doi: 10.1111/j.1600-0420.2007.00922.x

Editor,

laucoma is a chronic disease **J** and requires longterm treatment. The ideal medication should be effective and should have minimal side-effects in order to increase patient compliance and allow the patient to continue the therapy. Recently, prostoglandin analogues have revolutionized the medical treatment of glaucoma. Their advantages include potent effect and once-a-day dosing. Frequent side-effects of travoprost conjunctiva include hyperaemia, increases in iris pigmentation and eyelash changes (Hollo 2007). Periocular pigmentation, damage to the blood–aqueous barrier and cystoid macular oedema are rare adverse reactions (Del Hierro Zarzuelo et al. 2004). This report describes a patient who experienced acute iritis and corneal oedema after using only two doses of travoprost.

A 70-year-old caucasian woman was admitted to the ophthalmology clinic suffering from redness, discomfort and blurriness in her left eye of 3 days' duration. She had been diagnosed with primary open-angle glaucoma in both eyes in 2005. After timolol/dorzolamide combination therapy for 1 year, travoprost was added to the left eye as a second antiglaucoma medication on November 3rd, 2006. Her symptoms began after only two doses of travoprost, on November 5th, 2006.

Ophthalmic examination showed the subject's best corrected visual acuity (VA) to be 20/25 in the right eye and 20/80 in the left. Slit-lamp findings included grade 2 conjunctival hyperaemia, diffuse corneal folds, minimal central corneal oedema, 2 + cell and flare in the anterior chamber in the left eye, and nuclear sclerosis in both eyes. Fundus examination showed the cup : disc ratio to be 0.4 in both eyes. Intraocular pressure (IOP) was 27 mmHg RE and 21 mmHg LE. Central corneal thickness was 561 μ m RE and 629 μ m LE. We suspected travoprost of causing these clinical manifestations. Therefore, the patient was advised to cease using travoprost in the left eye and to continue the bilateral timolol/dorzolamide combination therapy. Ten days later the patient's discomfort resolved and VA improved to 20/25 LE. The diffuse corneal folds and corneal oedema completely resolved and the anterior chamber flare resolved substantially. The subject's IOP measured 26 mmHg in both eyes. Pachymetry measurement of the central cornea dropped to 550 μ m LE. As the patient's IOP was still high, latanoprost was added to the timolol/dorzolamide combination therapy and the glaucoma was well controlled medically.

Uveitis and iritis are rare adverse effects of travoprost and are most common with latanoprost (Kumarasamy & Desai 2004; Suominen & Valimaki 2006). Faulkner & Burk (2003) published a case of acute anterior uveitis and corneal oedema after five doses of travoprost. We are unaware of previous reports of these findings after only two doses of travoprost. This is probably a rare adverse effect. However, given the increase in the number of patients treated with travoprost in the past few years, it is more likely that the incidence of this effect is higher than has been reported. We aim to raise awareness among clinicians and patients of possible adverse effects of topical travoprost therapy that have previously not been well known. Physicians should consider this issue when prescribing these medications.

References

- Del Hierro Zarzuelo A, Martinez de la Casa JM, Garcia Feijoo J et al. (2004): Cystoid macular oedema induced by travoprost. Arch Soc Esp Oftalmol **79**: 295–297.
- Faulkner WJ & Burk SE (2003): Acute anterior uveitis and corneal oedema associated with travoprost. Arch Ophthalmol **121**: 1054–1055.
- Hollo G (2007): The side-effects of the prostaglandin analogues. Expert Opin Drug Saf **6**: 45–52.
- Kumarasamy M & Desai SP (2004): Anterior uveitis is associated with travoprost. BMJ 24: 205.

Suominen S & Valimaki J (2006): Bilateral anterior uveitis associated with travoprost. Acta Ophthalmol Scand **84**: 275–276.

Correspondence: Sayime Aydın MD Dumlupinar University Hospital DPU Central Campus Tavsanlı Road 43270 Kutahya Turkey Tel: + 90 274 265 2031/1718 Fax: + 90 274 265 2014 Email: sayimeaydin@gmail.com