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Ophthalmology

Woman with progressive vision loss

Mohammad Faizan Pathan MD[1] | **Keona V. Childs MD**[2] | **Mohammad Reza Mohebbi MD**[2]

[1] Consulting Ophthalmologist, St Joseph's Medical Center, Stockton, California, USA

[2] Department of Emergency Medicine, St Joseph's Medical Center, Stockton, California, USA

Correspondence
Mohammad Reza Mohebbi, MD, Department of Emergency Medicine, St Joseph's Medical Center, 1800 N. California Street, Stockton, CA 95204 USA
Email: mrmohebbi@gmail.com

1 | CASE PRESENTATION

A 53-year-old woman presented to the emergency department (ED) with pain, redness, and progressive right eye vision loss (Figure 1). She wore contact lenses and denied trauma or chemical exposure. Urgent care evaluation 16 hours previously indicated "normal" visual acuity, and ofloxacin ophthalmic was prescribed. Patient presented with worsening symptoms.

2 | DIAGNOSIS

2.1 | Contact lens-related pseudomonas corneal ulcer with hypopyon

A diagnosis of contact lens–related pseudomonas corneal ulcer with hypopyon was made.

An eye examination showed central corneal ulcer with hypopyon (Figure 1), finger-count visual acuity, and normal intraocular pressure. After ophthalmology consultation, moxifloxacin every 15 minutes and cyclopentolate three times a day were administered. Ocular ultrasound was negative for endophthalmitis. Fortified vancomycin and tobramycin were started by ophthalmology. There was resolution of hypopyon by day 5, corneal ulcer completely resolved by day 19, (Figure 2) and visual acuity normalized.

Bacterial keratitis is a serious complication of contact lens use. This can rapidly progress to corneal ulcer and, if untreated, permanent vision loss.[1]

When suspected, it is imperative to start antibiotic therapy and consult ophthalmology. Literature suggests that fourth-generation fluroquinolones are non-inferior to broad spectrum–fortified antibiotics.[2] ED treatment should include topical fluroquinolone monotherapy and an ophthalmology evaluation. There are no indications for corneal cul-

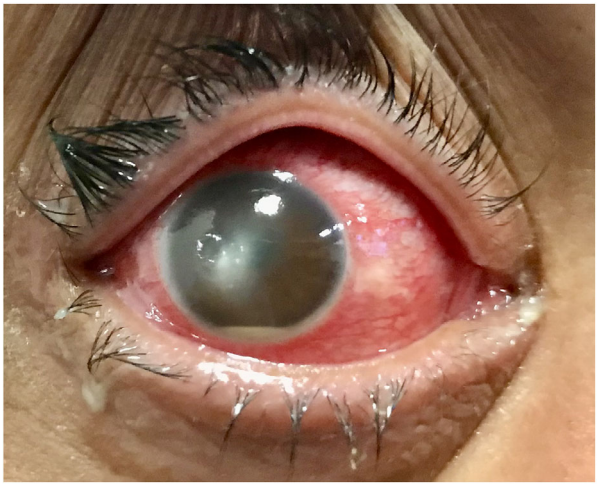

FIGURE 1 Contact lens–related central corneal ulcer with hypopyon

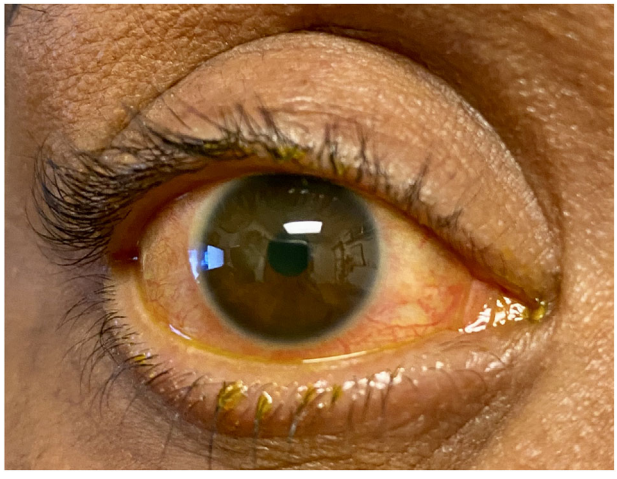

FIGURE 2 Normal eye exam on day 19 of antibiotic therapy

tures or starting fortified antibiotics in the ED as the majority of bacterial keratitis improves with monotherapy.[3]

A take-home message is to obtain immediate ophthalmology referral for painful eye complaints and vision loss, and if unavailable, consider transfer to a tertiary center. With timely and appropriate care, our case demonstrates that visual recovery is achievable.

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