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Sir,
Endogenous *Serratia marcescens* endophthalmitis: an atypical presentation

Endogenous endophthalmitis is an uncommon but potentially blinding condition caused by hematogenous microbial spread from an extraocular focus. *Serratia marcescens* is an aerobic, Gram-negative bacillus that is commonly associated with nosocomial infections of the respiratory and urogenital tract in susceptible individuals.[1–3] It is a rare but devastating cause of endogenous endophthalmitis due to its multi-drug resistant nature, resulting in blindness or enucleation in a majority of reported cases.[1–3] Herein, we report a case of endogenous *Serratia marcescens* endophthalmitis with a ciliary body abscess presenting initially as acute angle-closure glaucoma, leading to difficult diagnosis. This is the third reported case of an irido-lenticular abscess in a background of endogenous endophthalmitis.

Case report
A 78-year-old Chinese woman presented with acute right ocular pain, redness and blurred vision for 2 days, associated with nausea and vomiting. Past medical history was notable for diabetes and dengue hemorrhagic fever 8 days prior requiring platelet transfusion.

On examination, she was afebrile, with right wrist swelling from phlebitis following recent venous catheterization. Right ocular examination showed upper eyelid non-erythematous edema with mild proptosis, a mid-dilated pupil with a grade 3 reverse relative afferent pupillary defect, and intra-ocular pressures (IOP) of 38 mm Hg. Visual acuity (VA) was counting fingers at 3 feet. Slit-lamp examination findings are shown in Figure 1a.

Biochemical investigations showed normal blood counts with polymorphornuclear neutrophil predominance (79%). ESR and CRP levels were elevated. Blood and urine cultures were negative. B-scan ultrasonography and magnetic resonance imaging findings are shown in Figures 1b and c. Maximum anti-glaucoma therapy, topical Tobramycin 0.3%, and intravenous Ceftazidime and Vancomycin were initiated, with subsequent addition of topical Moxifloxacin 0.5%, Cefazolin 50 mg/ml, and Natamycin 5%.

The eye deteriorated, with persistently elevated IOP, increasing hypopyon and fibrin in the anterior chamber (AC), and a decrease in VA to no light perception. Antibiotics were switched to Meropenem, Daptomycin, and Doxycycline for phlebitis being a possible focus. Ocular cultures were not obtained due to a flat AC and an uncooperative patient.

The eye developed severe infective signs after 7 days (Figure 2a). Repeat B-scan findings are shown

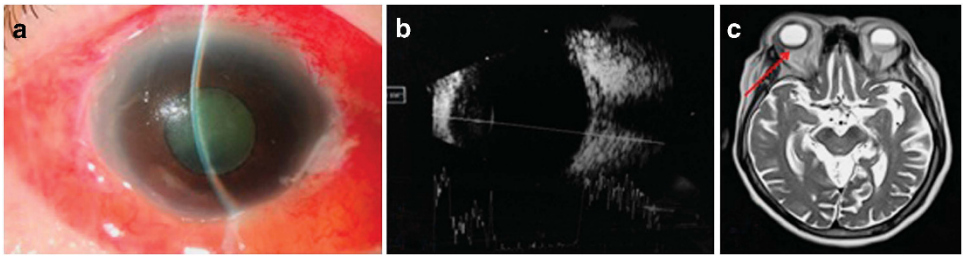

Figure 1 Findings at initial presentation. (a) Slit-lamp photograph of the right eye showing chemosis and conjunctival injection, corneal edema, and flat anterior chamber with fibrin pupillary plaque. (b) B-scan ultrasonography of the right eye showing clear vitreous and 'T-sign' without retinal detachment. (c) MRI of orbits and brain showing orbital inflammation, scleral enhancement, and optic nerve enhancement (red arrow), with no ciliary body, choroidal, or intracranial abscesses.

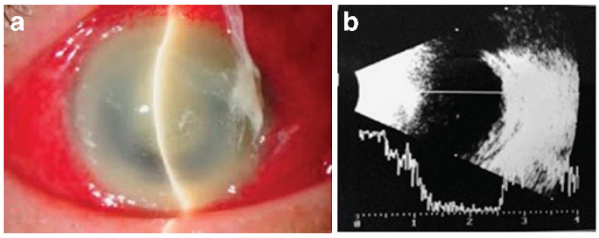

Figure 2 Findings 7 days following presentation. (a) Slit-lamp photograph of right eye showing peripheral corneal melting, a deep stromal ring with thinning, an early central abscess in a flat anterior chamber, and central whitening due to white cataract covered with fibrin and pus. (b) B-scan ultrasonography of right eye showing progressively thickened posterior choroid and sclera, vitreous haze, and a superior retinal detachment despite broad-spectrum intravenous antibiotic therapy.

in Figure 2b. It was eviscerated due to intractable pain. Intraoperatively, a thickened opaque cornea and localized ciliary body pus collection were found, from which *Serratia marcescens* was isolated. Cultures showed resistance to Ampicillin and Cephalothin, with sensitivity to Cefipime, Ertapenem, Gentamicin, Ciprofloxacin, and Levofloxacin.

Comment

This is a case of ciliary body abscess secondary to endogenous endophthalmitis, presenting initially as acute angle-closure glaucoma. Negative blood/urine cultures, lack of ocular cultures, deterioration despite broad-spectrum antimicrobials, and late deep vitreous involvement[4] made diagnosis difficult. An ultrasound biomicroscopy should have been used to detect ciliary body abscesses[5] had the patient not been in severe pain.

Serratia marcescens is a Gram-negative rod-shaped Enterobacteriaceae known to cause nosocomial catheter-related bacteremia in immunocompromised individuals.[1–3] Ophthalmologists should suspect atypical infections in such patients,[1–3] and for *Serratia marcescens* endophthalmitis, initiate aggressive intra-vitreal aminoglycoside therapy.[1–3]

Conflict of interest

The authors declare no conflict of interest.

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Sir,

Spontaneously resolved exudative retinal detachment caused by orbital cellulitis in an immunocompromised adult

Exudative retinal detachment (ERD) may result from the accumulation of fluid in the subretinal space because of hydrostatic factors (eg severe acute hypertension), inflammation, or neoplastic effusions.[1] ERD generally resolves with successful treatment of the underlying disease, and visual recovery may be excellent.[1–3]

Case report

An 89-year-old male with chronic myeloid leukemia (CML) was referred with new onset RE pain and severe reduction of vision 1 week after admission for his CML. He was febrile (39 °C), anemic, and presented generalized malaise. He had bilateral age macular degeneration (AMD) that was worse in the RE.

On examination there was RE proptosis with limited lateral gaze, significant pain with retropulsion, right eyelid erythema and swelling, chemosis, and purulent discharge (Figure 1a). Visual acuity (VA) was light perception in the RE and 6/9 in the LE. The intraocular pressures were 34 mm Hg in the RE and 17 mm Hg in the LE. Fundoscopy revealed a RE ERD with shifting fluid, in the absence of PVD or retinal tears.

On full blood count there was neutrophilic leucocytosis (WBC 22.79 $\times 10^3/\mu$l; 94.2% neutrophils). C-reactive protein was 128 mg/l and ESR 106 mm/h. Culture of nasal aspirates revealed methicillin staph aureus (MRSA) and Warneri-Staph.

The patient was placed on intravenous (vancomycin, cefurixime, and metronidazole) and topical antibiotics. Symptoms improved by the fifth post-treatment day and