

Figure 1 Fluorescein angiogram at presentation. (A) Patient's right eye at 3:02 post-injection demonstrates perivascular leakage in a petaloid pattern and hyperfluorescence of the optic disc, both strongly associated with the Irvine-Gass syndrome. (B) Patient's left eye at 3:09 post-injection, shown for comparison. Note the absence of any perivascular staining and absence of disc hyperfluorescence.

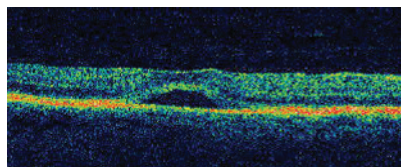


Figure 2 Optical coherence tomography of the right eye at presentation. Note the serous neurosensory detachment and the loss of the foveolar depression. There is no visible intraretinal edema or cystic change in the perifoveolar area.

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Two cases of *Burkholderia cepacia* endophthalmitis

Although *Staphylococcus epidermidis* is responsible for the majority of cases after cataract surgery, any bacteria may cause postoperative endophthalmitis. *Burkholderia cepacia* (previously known as *Pseudomonas cepacia*) is a Gram negative, oxidase positive, non-fermentative bacilli. *Burkholderia cepacia* does cause significant infection not only in cystic fibrosis, chronic granulomatous disease, and immunocompromised patients, but also in healthy individuals.¹ It has been shown to be resistant to some antiseptics such as benzalkonium chloride, chlorhexidine at standard or high concentrations, and even be alive in those antiseptics.²

Case 1

A 63 year old diabetic patient was diagnosed with endophthalmitis after an uneventful phacoemulsification and foldable intraocular lens (IOL) implantation. A vitreous tap was performed. Intravitreal vancomycin (1 mg/0.1 ml) and ceftazidime (2.25 mg/0.1 ml) were administered. Intravenous vancomycin (500 mg twice daily) and ceftazidime (500 mg twice daily) in addition to hourly topical fortified tobramycin and hourly cefazolin were added to the therapy. The vitreous culture grew *Burkholderia cepacia* on the third day. The identification of the organism was performed by standard biochemical tests and also with Analytical Profile Index for Gram Negative Identification (API 32 GN, Bio Merieux, France). It was sensitive to ceftazidime, ciprofloxacin, ofloxacin, and was resistant to ceftriaxone, cefoxitin and tobramycin, amikacin, and gentamicin.

Best corrected visual acuity (BCVA) was hand movements (HM) on the fourth day of the therapy. Pars plana vitrectomy (PPV) and injection of ceftazidime (1.12 mg/0.1 ml) were performed. Repeated vitreous sampling grew the same organism and antimicrobial susceptibility test was also the same as the previous culture. The patient was discharged from the hospital with a quiet anterior chamber and clear vitreous cavity. Two years later, the BCVA remains at 20/63.

Case 2

A 72 year old man presented with decreased vision and pain in the left eye 15 days after an uneventful phacoemulsification with foldable IOL implantation. BCVA was HM. Slit lamp examination findings were the same with patient 1. Treatment consisted of tap and injection of same dose of intravitreal vancomycin and ceftazidime. Three days later, BCVA was still HM and the hypopyon had not resolved. PPV and intravitreal reinjection of vancomycin and ceftazidime was performed. Hourly topical fortified tobramycin and cefazolin were added to the therapy. Vitreous culture grew *Burkholderia cepacia* on the fourth day. Antimicrobial susceptibility test was the same as the other patient. During the following days the anterior chamber and vitreous cavity cleared. At the 6 month follow up, his BCVA was 20/50.

Comment

To our knowledge, there are only two previously documented postoperative endophthalmitis cases following cataract surgery that were caused by *Burkholderia cepacia* (Medline search).^{3,4} One of the cases was a recurrent endophthalmitis.⁴ The organism has an unusually large genetic make up that accounts for its microbiological versatility. It also produces lipopolysaccharide and β lactamase that renders some antibiotics ineffective against it.⁵ Resistance to aminoglycosides noticed in the previously reported cases^{3,4} was also noted in our both patients. Close follow up for possible early PPV might be considered as our cases were not cured after the first intravitreal injections even though appropriate antibiotics were used.

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doi: 10.1136/bjo.2006.097972

Accepted for publication 15 May 2006

The first case was presented as a poster presentation at the XIIIth. Congress of the Afro-Asian of Ophthalmology, Istanbul, Turkey, in June 2004.

None of the authors has a financial interest in any product mentioned.

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MAILBOX

Dietary lutein and zeaxanthin: authors' response

We were interested to see the letter by Mitchell,¹ written in response to our earlier publication.²