been used in combination with the transpupillary approach to compensate for the lack of solidity. There is also the fact that the quality of the CCD camera is not yet satisfactory. However, if surgeons recognize these weak points and adapt the intraocular endoscopic system appropriately, this instrument could surpass expectations and provide more safe and useful techniques for surgery. Our presenting techniques will also be helpful, especially in RRD and/or PVR patients with anterior segment problems, which are frequently occurring in severe cases.

References

- 1 Eguchi S, Araie M. A new ophthalmic electronic video endoscope system for intraocular surgery. *Arch Ophthalmol* 1990; **108**: 1778–1781.
- 2 Yaguchi S, Kora Y, Takahashi H, Fukado Y, Yamanaka A, Kusakabe M *et al*. A new endoscope for ophthalmic microsurgery. *Ophthalmic Surg* 1992; **23**: 838–841.
- 3 Kreiger AE. Wound complications in pars plana vitrectomy. *Retina* 1993; **13**: 335–344.
- 4 Imamura Y, Minami M, Ueki M, Satoh B, Ikeda T. Use of perfluorocarbon liquid during vitrectomy for severe proliferative diabetic retinopathy. *Br J Ophthalmol* 2003; **87**: 563–566.
- 5 Bourke RD, Cooling RJ. Vascular consequences of retinectomy. *Arch Ophthalmol* 1996; **114**: 155–160.

T Hattori¹, K-H Sonoda² and S Kinoshita¹

¹Department of Ophthalmology, Kyoto Prefectural University, Kyoto, Japan

²Department of Ophthalmology, Graduate School of Medical Science, Kyushu University, Fukuoka, Japan

Correspondence: T Hattori, Department of Ophthalmology, Kyoto Prefectural University of Medicine, Kawaramachi Hirokoji, Kamigyo-ku, Kyoto 602-0841, Japan
Tel: +81 75 251 5578;
Fax: +81 75 251 5663.
E-mail: hattori@qb3.so-net.ne.jp

Eye (2006) **20**, 1466–1468. doi:10.1038/sj.eye.6702349;
published online 7 April 2006

Sir,
Reply to T Sandinha *et al*

I read with interest the article written by T Sandinha *et al*.¹ I would like to make the following comments.

In the case 1 reported, the conjunctival pedicle appears very vascular even though the initial surgery was performed 2 months ago. The peripheral cornea was vascularised in the corresponding quadrant, contrary to what the authors had claimed in their article. This amount of peripheral corneal vascularisation would work against the success of any future corneal transplant surgery. An amniotic membrane graft or a tectonic corneal graft would have been a better choice for such a corneal perforation involving the visual axis. In the event of nonavailability of donor material, temporary glueing of the perforation or even a scleral autograft could have been carried out.

However, I agree that Superior forniceal conjunctival advancement pedicles could be used in peripheral corneal perforations such as the case 2 described in the article.

Reference

- 1 Sandinha T, Zaher SS, Roberts F, Devlin HC, Dhillon B, Ramesh K. Superior forniceal conjunctival advancement pedicles (SFCAP) in the management of acute and impending corneal perforations. *Eye* 2006; **20**: 84–89.

B Ilango

Wolverhampton and Midland Counties Eye Infirmary, Compton Road, Wolverhampton, West Midlands WV3 9QR, UK

Correspondence: B Ilango,
Tel: +44 1902 307999;
Fax: +44 1902 695851.
E-mail: bilango@hotmail.com

Eye (2006) **20**, 1468. doi:10.1038/sj.eye.6702354;
published online 21 April 2006

Sir,
Panophthalmitis secondary to infection with *Citrobacter koseri*

We present a case of visual loss due to *Citrobacter koseri* panophthalmitis.

Case report

An 86-year-old retired taxi-driver was seen in clinic with a right full thickness macular hole. He was noted to have a small right lower lid cyst, the contents of which were digitally expressed. He underwent elective phacoemulsification, vitrectomy, insertion of silicone oil

and peripheral iridotomy. This was complicated by a small posterior capsular tear. He made an uncomplicated postoperative recovery and several months later underwent removal of silicone oil and insertion of anterior chamber intraocular lens (IOL) under local anaesthetic. On the first postoperative day, he was noted to have significant anterior chamber activity and precipitate was noted on the IOL. A provisional diagnosis of endophthalmitis was made. He underwent vitreous and aqueous 'tap' and intravitreal amikacin and vancomycin administration. He was also treated with oral ciprofloxacin, oral prednisolone, intravenous clarithromycin, topical steroid, and topical mydriatic. On the third postoperative day, he became systemically unwell. He had a 6-mm axial proptosis of the right globe associated with complete ophthalmoplegia and periorbital erythema. A diagnosis of right panophthalmitis was made and confirmed on a computed tomography scan of his right orbit (Figure 1). *Citrobacter koseri* was identified from the aqueous sample. Oral antibiotic medication was replaced by intravenous ceftazidime and teicoplanin, to which the organism was later found to be sensitive. The organism was subsequently isolated from his conjunctiva and subtenon's site and from material expressed from the cyst that had re-formed. He improved over several days with resolution of systemic symptoms, periorbital erythema, and ophthalmoplegia. Unfortunately, over several weeks he suffered a complete corneal perforation (see Figure 2) and his eye became phthisical.

Figure 1 Computed tomography scan on the day of presentation of orbital involvement reveals soft tissue swelling around the right orbit (small arrow) as well as proptosis of the right globe (large arrow).

Figure 2 Image of patient's right eye 6 weeks after presentation showing full thickness corneal perforation with intraocular lens visible and phthisical right eye.

Discussion

C. koseri (previously known as *C. diversus*) is a facultative anaerobic Gram-negative bacillus of the family Enterobacteriaceae. *Citrobacter* species are occasional inhabitants of human and animal intestines and of soil, water, sewage, and food.^{1,2} Despite the availability of modern antibiotics, considerable morbidity and mortality (30%) is still associated with *Citrobacter* infection.³ It has previously been reported as a rare cause of endophthalmitis but has never, to our knowledge, previously been reported to cause orbital cellulitis or panophthalmitis. In the case of panophthalmitis reported here, early postoperative diagnosis and aggressive management was insufficient to save the patient's vision but potentially life-threatening sepsis was prevented. In this case, although the contents of the original cyst were not sent for culture, we presume the initial cyst was colonised with *C. koseri* and that infection was introduced to the orbit during subtenons local anaesthesia and to the eye during silicone oil removal. We recommend that clinicians are aware of this organism both as a rare yet devastating cause of orbital and ocular infection, and reminded of the importance of adequately diagnosing and treating lid lesions before intraocular surgery.

References

- 1 Schwartz DA. *Citrobacter* infections. In: Connor DH, Chandler FW, Schwartz DA, Manz HJ, Lack EE (eds). *Pathology of Infectious Diseases*. Stanford, CT: Appleton and Lange, 1997, pp 513–516.
- 2 Holt JG ed. *Bergey's Manual of Determinative Bacteriology*, 9th edn. Williams and Wilkins: Baltimore, 1994, pp 177–178.

- 3 Doran TI. The role of *Citrobacter* in clinical disease of children. *Clin Infect Dis* 1999; **28**(2): 384–394.

A Barsam, CJ Heatley and L Herbert

Department of Ophthalmology, Queen Elizabeth II Hospital, Howlands, Welwyn Garden City, Hertfordshire AL7 4HQ, UK

Correspondence: A Barsam,
Tel.: +44 017 07365 049;
Fax: +44 079 70570 172.
E-mail: abarsam@hotmail.com

Eye (2006) **20**, 1468–1470. doi:10.1038/sj.eye.6702358;
published online 12 May 2006

Sir,
Unusual ultrasound biomicroscopy appearance after non-penetrating trabecular surgery with SK gel implant

Case report

We report a case of an unusual ultrasound biomicroscopy (UBM) appearance in a POAG patient at 15 months after

receiving non-penetrating trabecular surgery (NPTS). A 37-year-old male received NPTS of the right eye for POAG in a local hospital 15 months ago. After the operation, the IOP was controlled under 15 mmHg. At 14 months, he experienced severe pain in the right eye and blurred vision. Upon examination, the IOP was 50 mmHg, the cornea had oedema, and the pupil was slightly displaced superiorly. After treatment with 20% mannitol, the IOP was controlled and corneal transparency recovered. The gonioscopy examination showed that the iris root adhered to the remanent membrane of NPTS areas. Therefore, a laser iridectomy was performed and 0.005% latanoprost was administered daily, reducing the IOP to 20 mmHg.

The patient then arrived at our hospital for further treatment. Our examination results were as follows: IOP 19.5 mmHg, the bleb of right eye was pale and had a thin wall with darkening of the subconjunctival area, and the pupil decentered. The gonioscopy result showed that the iris root had adhered to the surgical area. The UBM picture is shown in Figure 1.

Comment

Based on the case history and examination results, we believe that after NPTS, the sudden break of the residual membrane at the operation area resulted in the pressure difference between the upper and lower surface of iris.

Figure 1 Unusual UBM appearance of bleb and iris after NPTS.