

tively. Two hundred consecutive patients attending the pre-operative assessment clinic were invited to complete a confidential questionnaire. This was done before the pre-operative education programme for two reasons: first, to establish the understanding patients have of cataract surgery, and second, to identify misconceptions they may have regarding the procedure. This information could be used to enhance the effectiveness of patient education. Patients who had undergone previous intraocular surgery were excluded. To minimise the bias inherent in questionnaires, all questions included a 'Don't know' option.

All 200 patients asked to complete the questionnaire did so. One hundred and thirty-two were female and 68 were male (mean age 69.8 years; range 39–88 years). The perceived anatomical locations of a cataract were: anterior surface of the eye (37.5%), behind the eye (14%) and intraocular (19.5%). Common misconceptions concerning cataract surgery included: it is performed by laser (35%); an intraocular lens is not inserted (22%); the eye is taken out of the orbit (6%); the cataract is scraped off the anterior surface of the eye (31%). Five per cent of patients were expecting the unlisted eye to be operated upon, and 1.5% did not know which side had been scheduled for surgery.

The results raise the issue of informed consent and how much technical information a patient requires pre-operatively. It has been reported that too much technical knowledge can be anxiety-provoking.<sup>1,2</sup> However, problems relating to informed consent are a factor in 25% of medico-legal claims concerning cataract surgery in the United States.<sup>3</sup> This reflects the frequent disparity between the surgeon's and the patient's recollection of the pre-operative discussion. O'Malley *et al.*<sup>1</sup> showed that cataract patients retained only 37% of pre-operative information when tested post-operatively. This further emphasises the need for the ophthalmic surgeon to identify misconceptions patients have regarding cataract extraction in order that they may be clarified prior to surgery.

The provision of a detailed written informed consent form at the time of listing, which is to be signed in the presence of the doctor at the pre-operative assessment clinic, has been shown to greatly enhance patient knowledge of the procedure.<sup>4</sup> Concerns arising from such information could be specifically addressed before surgery, thereby ensuring the patient is indeed providing informed consent.

In conclusion, this survey reveals a poor understanding of the term 'cataract' and basic misconceptions regarding the surgical procedure among patients. Ophthalmologists should be aware of patient perceptions in this area.

S. Beatty  
R. K. Aggarwal  
I. Giannakis  
M. Kulshrestha

Birmingham and Midland Eye Hospital  
Church Street  
Birmingham B3 2NS  
UK

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Sir,

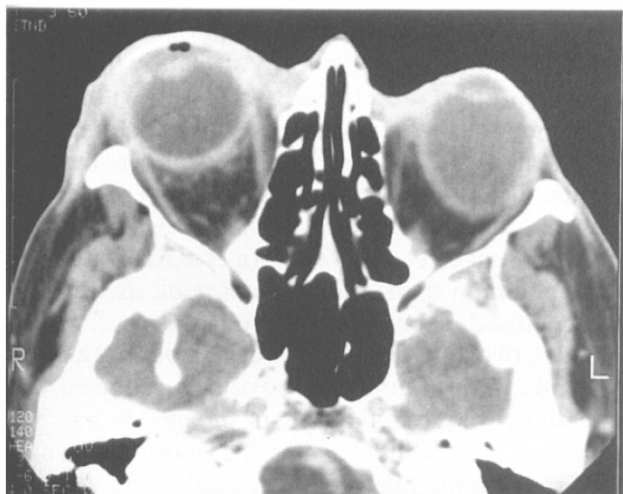
#### ***E. coli* Endophthalmitis**

Endogenous bacterial endophthalmitis is a rare event. The causative bacteria usually reported are gram-positive, i.e. *Staphylococcus aureus* or *Streptococcus* species.<sup>1</sup> Endophthalmitis due to gram-negative organisms such as *E. coli* is being increasingly reported. We report a case of endogenous endophthalmitis due to *E. coli*.

#### Case Report

A 72-year-old insulin-dependent diabetic woman was referred with a 5 day history of rapid and painful loss of vision in the right eye, severe headaches and malaise. The patient was lethargic and dehydrated but afebrile. The right eye had no perception of light, while she could perceive hand movements with her buphthalmic left eye. The right eye was proptosed and immobile with grossly swollen lids. There was corneal oedema, a hypopyon and a very shallow anterior chamber. Intraocular pressure was more than 60 mmHg. There was no fundal reflex and posterior segment evaluation by B-scan ultrasonography revealed low-intensity spikes in the vitreous cavity and choroidal and scleral thickening. CT scanning showed extensive soft-tissue swelling of the orbit, no extraocular muscle enlargement and gas in the anterior chamber. The sellar region and cavernous sinus were normal (Fig. 1). Relevant laboratory findings were a leucocyte count of 16400/mm<sup>3</sup>, a plasma viscosity of 1.98, a blood urea of 12.2 mmol/l and a plasma glucose of 11.0 mmol/l. Urine microscopy showed more than 50 leucocytes/h.p.f. and gram-negative bacilli.

The patient was treated with intravenous penicillin, flucloxacillin and ciprofloxacin and topical fortified



**Fig. 1.** CT scan of head and orbits showing right eye proptosis and an increase in orbital soft tissue on the right side. The left eye is buphthalmic. Also evident is a gas bubble in the anterior chamber of the right eye.

gentamicin, atropine 1% and levobunolol 0.5% drops. Under general anaesthesia, vitreous aspiration and intravitreal injection of gentamicin 0.1 mg and vancomycin 1 mg were performed. At surgery the pars plana was noted to be abnormally pale and the vitreous was turbid. Blood cultures were negative. Urine and vitreous cultures grew *E. coli* sensitive to a range of antibiotics including ceftazolin, ciprofloxacin and ampicillin. The ocular condition improved after the intravitreal injections and systemic ciprofloxacin. The eye became comfortable with normal intraocular pressure, although mild corneal oedema and a 1 mm hypopyon persisted. Over the next few days a purulent discharge continued and the anterior chamber remained shallow. Intravenous ciprofloxacin was recommenced. Despite intensive treatment, a spontaneous perforation in the superotemporal limbus was noted and an evisceration was carried out 20 days after presentation. Histopathological examination showed a diffuse infiltration of all ocular layers with polymorphonuclear leucocytes. No bacteria or fungi were identified.

#### Discussion

Endophthalmitis due to *E. coli* is being increasingly reported.<sup>1</sup> Before 1980 only 6 cases (2 of which were bilateral) were reported. Since then there have been reports of at least 13 cases (2 bilateral), including our case.<sup>1-5</sup> More significantly, in a 10 year retrospective study Okada *et al.*<sup>1</sup> reported that in 5 of 28 cases (17.8%) the aetiological agent was *E. coli*, making it the third commonest organism to be identified in the study.<sup>1</sup>

Patients with endogenous *E. coli* endophthalmitis have certain common features: they are usually diabetic and the urinary tract is the most frequent source of infection. The other reported sources are

conjunctiva and gall bladder.<sup>4</sup> *E. coli* endophthalmitis has a rapid, devastating course, with an almost universally poor prognosis. Of the 4 bilateral and 14 unilateral cases, only 7 eyes were saved, despite intensive therapy. One eye achieved a visual acuity of 20/50, while the other salvaged eyes had visual acuities no better than hand movements or perception of light.<sup>1-5</sup>

*E. coli* endophthalmitis is a serious, sight-threatening condition which needs to be recognised early in its course and treated aggressively. Diabetic patients with urinary tract infections seem to be particularly susceptible. The condition is rapidly progressive and destruction of ocular tissues with spread to the orbit and cavernous sinus can occur.

N. Anand

Bradford Royal Infirmary  
Bradford  
UK

Paul Brogden  
M. J. Menage

Leeds General Infirmary  
Leeds  
UK

Correspondence to:

N. Anand  
c/o Dr R. J. Simmons  
100 Charles River Plaza  
Boston  
MA 02114  
USA

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Sir,

#### A Conjunctival Synthetic Fibre Granuloma in a Child

We report the case of a patient who was found to have an asymptomatic dark conjunctival lesion in the inferior conjunctival fornix. Histopathological exam-