Test your knowledge and understanding

This page is designed to help you test your own understanding of the concepts covered in this issue, and to reflect on what you have learnt. We hope that you will also discuss the questions with your colleagues and other members of the eye care team, perhaps in a journal club. To complete the activities online – and get instant feedback – please visit www.cehjournal.org

1. A postoperative cataract patient should be advised to:		Select one
a	Eat a diet low in fibre (roughage)	☐
b	Contact the eye clinic in case of worsening sight, increasing pain, redness, swelling or discharge	☐
c	Sleep on the operated side	☐
d	Resume their regular medication 6 weeks after surgery	☐

2. The following are essential to ensure a good cataract surgical outcome with the minimum of complications:		Select one
a	Independent actions by each staff member in the surgical theatre	☐
b	Estimation of IOL power by using the refraction of the fellow eye as a guide	☐
c	Prophylactic infection control, including the use of povidone iodine	☐
d	A stock of 'standard' 21.0D IOLs (to keep costs down)	☐

3. Which of these statements are true?		Select one
a	A large drainage bleb may cause localised dryness of the peripheral cornea due to abnormal tear spread	☐
b	Before trabeculectomy, a patient should be reassured that their sight is likely to improve	☐
c	The intraocular pressure (IOP) on the first day after a trabeculectomy is likely to be the same during follow-up	☐
d	Hyphaema after trabeculectomy is almost universal and is not a cause for concern	☐

4. Good quality care of the paediatric cataract patient involves:		Select one
a	Telling the parents that they should leave all postoperative care to the professionals	☐
b	Monitoring oxygen saturation and pulse rate postoperatively and observing the child for signs of respiratory distress, nausea or vomiting	☐
c	Discontinuing follow-up visits 6 weeks after surgery as the long-term incidence of complications is low	☐
d	Advising the parents than a child can put in her/his own eye drops after the age of six	☐

ANSWERS

1 b. Patients with these symptoms or signs should contact the eye clinic for advice. Their diet should be high in roughage/fibre to prevent constipation and straining. Patients should not sleep on the operated side and should resume their normal medication immediately.

2 c. Prophylactic infection control is a vital component of preventing complications. The eye team should work together not independently! Estimation of IOL power using biometry will give the best results, rather than using the fellow eye as a guide or keeping just 'standard' IOLs.

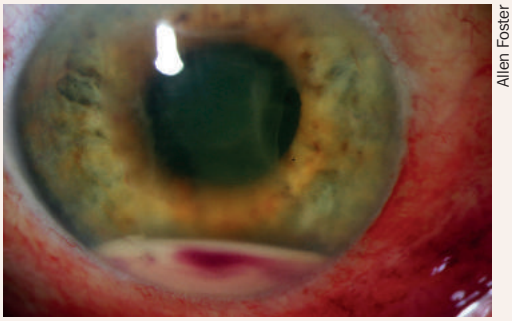
3 a. A large bleb can lift the eyelid off the peripheral cornea causing localised dryness (referred to as 'deller'). Patients should be counselled that their sight is more likely to stay the same or worsen after trabeculectomy. The IOP on the first day is not a good indicator of the final IOP. Hyphaema is always a cause for concern as it may be associated with a rise in IOP that could further damage the optic nerve.

4 b. The child should always be carefully monitored postoperatively. The parents play an important role postoperatively, supporting the eye team, helping to monitor their child's progress and instilling eye drops. Children should have long-term follow-up because of the high risk of complications, both early and late. Children should not put their own drops in!

REFLECTIVE LEARNING

Visit www.cehjournal.org to complete the online 'Time to reflect' section.

Picture quiz



Allen Foster

A 63-year-old patient presents 3 days after a routine cataract operation with pain and loss of vision in the operated eye; the pain has been increasing over the last 48 hours. The visual acuity in the operated eye is hand movements.

Q1. What three main clinical signs can you see?

Q2. What is the likely diagnosis?

Q3. Which of these statements are true?

- **a.** Most postoperative endophthalmitis is caused by fungi
- **b.** The most common bacteria which are isolated are gram positive cocci
- **c.** Pseudomonas should be suspected if gram negative bacilli are seen on microscopy
- **d.** Bacteria from the patient's own skin may be introduced at surgery
- **e.** Fluids introduced into the anterior chamber may be a source of infection

Q4. What treatment would you give the patient?

Q5. Which of the following are useful preventative measures?

- **a.** Instill 5% povidone iodine into the conjunctival sac before surgery
- **b.** Give prophylactic topical antibiotics after surgery
- **c.** Treat any blepharitis or nasolacrimal infection before undertaking surgery
- **d.** Use a non-touch technique when operating
- **e.** Ensure all fluids used in ocular surgery are sterile

ANSWERS

1. What clinical signs can you see?
- Red, inflamed conjunctiva
- Fibrinous exudate in the anterior chamber
- Hypopyon with some blood.

2. What is the likely diagnosis? Postoperative endophthalmitis.

3. b, c, d and e are true. Fungi may cause endophthalmitis but they are not the commonest cause. The commonest causes are gram positive staphylococci or streptococci.

4. What treatment would you give the patient?
- Consider pars plana vitrectomy (culture the aspirated fluid)
- Intra-vitreal antibiotics, if possible based upon identification of the responsible organism, e.g. vancomycin, ceftazidime.
- Systemic antibiotics, if possible based on identification of the responsible organism.
- After ensuring the infection is being treated with a suitable anti-microbial, then topical intensive steroids can be given

5. All the measures listed are useful in preventing endophthalmitis.