Sir,
Accidental self-induced chemical eye injury in patients with low vision

Legislation introduced by the Medicines and Healthcare Products Regulatory Agency in 1995 requires Braille to appear on medication labels and in patient information leaflets.¹ This legislation empowers blind persons with autonomy in the self-administration of drugs. Unfortunately, for those who have low vision but do not require Braille, the same safety provision does not exist.

Contact lens users are often provided with two bottles of solution: one to clean the lenses, the main ingredient usually being hydrogen peroxide, and the other to rinse the lenses. Those with low vision rely on tactile information to differentiate such solutions; however, manufacturers frequently package them in similar sized and shaped bottles. We describe two low vision contact lens wearers with self-induced chemical eye injuries secondary to confusion with contact lens solutions.

Case report

Patient 1, a 79 years old high myope, presented with a painful red right eye after inserting a contact lens that had accidentally been rinsed with hydrogen peroxide cleaning solution rather than rinsing solution. Visual acuity was counting fingers in the affected eye. Her left eye was blind secondary to macular degeneration. Ocular examination revealed a grossly injected right eye, corneal oedema, and a large 7 × 7 mm epithelial defect with multiple surrounding punctate epithelial erosions (PEEs).

Patient 2, a 67 years old high myope, presented with bilateral painful red eyes again after wearing contact lenses that had been accidentally rinsed with hydrogen peroxide cleaning solution rather than rinsing solution. On examination, visual acuity was 6/18 and 6/12 with glasses in the right and left eye respectively. Both eyes had deeply injected bulbar conjunctiva, multiple scattered corneal PEEs, and evidence of corneal oedema.

Comment

Both patients were unable to differentiate between the two bottles of solution as they are of similar shape, size, and colour (Figure 1). There appears to be a lack of tactile

information for persons with low vision with regard to contact lens solutions. We suggest that it is the responsibility of the pharmaceutical provider to ensure that there is a distinct difference in size and shape of packaging for cleaning solutions compared with rinsing solutions, thus ensuring a safety net for low vision patients using contact lenses.

Conflict of interest

The authors declare no conflict of interest.

Reference

- 1 MHRA Guideline for the naming of medicinal products and Braille requirements for name and label. <http://www.mhra.gov.uk/home/groups/islic/documents/websiteresources/con065759.pdf> (accessed 3 June 2010).

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Sir,
Measurement of intraocular pressure in children in the UK

Measuring the intraocular pressure (IOP) is crucial in the assessment of paediatric glaucoma. Although Goldman tonometry (GT) is the gold standard for measuring IOP in adults, its lack of portability makes it impractical in children.

We aimed to assess the preference of choice of instrument (Tonopen (TT), Perkins (PT), Airpuff (AT), and iCARE tonometers (iT)) for measuring IOP in children among UK paediatric ophthalmologists (POs). To the best of our knowledge, this is the first survey examining the practice of paediatric IOP measurement.

Figure 1 (a, b) Picture illustrating the similarities in shape, size, and design of packaging between the contact lens hydrogen peroxide cleaning solution and the rinsing solution.

Case report

A questionnaire was sent to 939 consultant ophthalmologists in the UK. Of them, 658 (70%) returned the survey and 98 (15%) identified themselves as PO.

All POs had GT available in their units and 99% had a Tonopen or Perkins. Less than 50% had an Airpuff and less than 15% had an iCARE tonometer. POs were subdivided into eight groups (G1–G8) depending on which instruments (TT, PT, AT, iT) they had available in their units. The availability of instrument permutations was divided as follows: G1 (GT, TT, AT, PT, and iT); G2 (GT, TT, AT, and iT), G3 (GT, TT, AT, and PT), G4 (GT, AT, PT, and iT), G5 (GT, TT, PT, and iT), G6 (GT, TT, and AT), G7 (GT, TT, and PT), and G8 (GT, AT, and PT).

For children more than 10 years, the Goldman was the method of choice. For children under 10 years the Tonopen was the instrument of choice; however where an iCARE tonometer was available to PO, it was preferred over the Tonopen.

Comment

The iCARE tonometer does not appear to be widely available in the UK yet of the units that had access to it, it was the instrument of choice in measuring IOP in children. Wider acceptance of this instrument may be of benefit in managing paediatric glaucoma and a study to evaluate any discrepancy in IOP measurement in children with the instrument may also be of benefit.

Conflict of interest

The authors declare no conflict of interest.

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Sir,
An algorithmic approach to enhance communication with the hearing impaired during phacoemulsification surgery

Hearing impairment in the elderly is common.¹ Patients experience greater levels of anxiety with the unknown,² and being able to communicate with their surgeon reduces anxiety.³ It is the authors' opinion that hearing impairment should be addressed, improving patient satisfaction following surgery. The Disability Discrimination Act (DDA), 2005 states that it is unlawful for service providers to treat people less favourably due to their disability, hence the importance of ensuring that patients can hear during their operation. We outline our strategies for supporting patients with hearing impairment during phacoemulsification surgery.

Figure 1 Draping procedure to protect the sole hearing aid that is situated on the same side as the side of phacoemulsification surgery. (a) Side view of face showing the eye to be operated on (marked with an arrow) with the sole hearing aid on the same side. (b) Hair line quite far forward (arrowed) and will affect waterproof draping. Note also wrinkles, which could act as conduits for fluid. (c) Shaving off anterior hair (arrowed) allows effective waterproof draping. Draping is done before Povidone iodine preparation. (d) The extent of draping is shown by the peripheral backing paper. (e) Self-adhesive draping is smoothed down into the wrinkles (arrowed). (f) It is essential to take the drape off carefully so as not to pull away or damage the hearing aid, which is completely dry following the procedure.