Sir,

Tear-drop sign of posterior capsule dehiscence on Scheimpflug imaging

Posterior polar cataract is associated with deficiency of the posterior capsule in 11–26% cases[1] leading to high incidence of capsule rupture and potential vitreous loss.[2] Identification of the posterior capsule defect (PCD) preoperatively is an obvious advantage that aids in surgical planning.

Case report

A 23-year-old man presented with bilateral progressive diminution of vision for 3 months. On examination his BCVA was 20/200 OU. Slit-lamp examination revealed a posterior polar cataract in both eyes with central conical projection into the vitreous more prominent in the left eye (Figure 1a and b). Scheimpflug imaging (Pentacam 70700: Oculus, Wetzlar, Germany)[3] (Figure 2a and b) in the left eye revealed a posterior lenticonus simulation with dehiscence in the posterior capsule giving a 'tear drop' or 'hanging drop' appearance (Figure 2b). The corresponding lens spike in the left eye is broader and irregular than in the right eye. The patient underwent phacoemulsification in the left eye and a central PCD was noted as highlighted on Scheimpflug photography. The vitreous face was intact. A three-piece Tecnis Z9000 (AMO Inc., Santa Anna, CA, USA) IOL was implanted in the bag. The right eye underwent uncomplicated phacoemulsification and no PCD was noted.

Posterior polar cataracts may be associated with remnants of the hyaloid system or the tunica vasculosa lentis.[4] An important feature of posterior polar cataract is a significant incidence of extreme capsule weakness or perhaps even absence in the area of polar opacity, which is difficult to identify in the presence of dense polar cataracts.[1,4,5] Scheimpflug photography identified the preexistent PCD, in our case evident as protrusion through the PCD producing a broader, irregular spike of

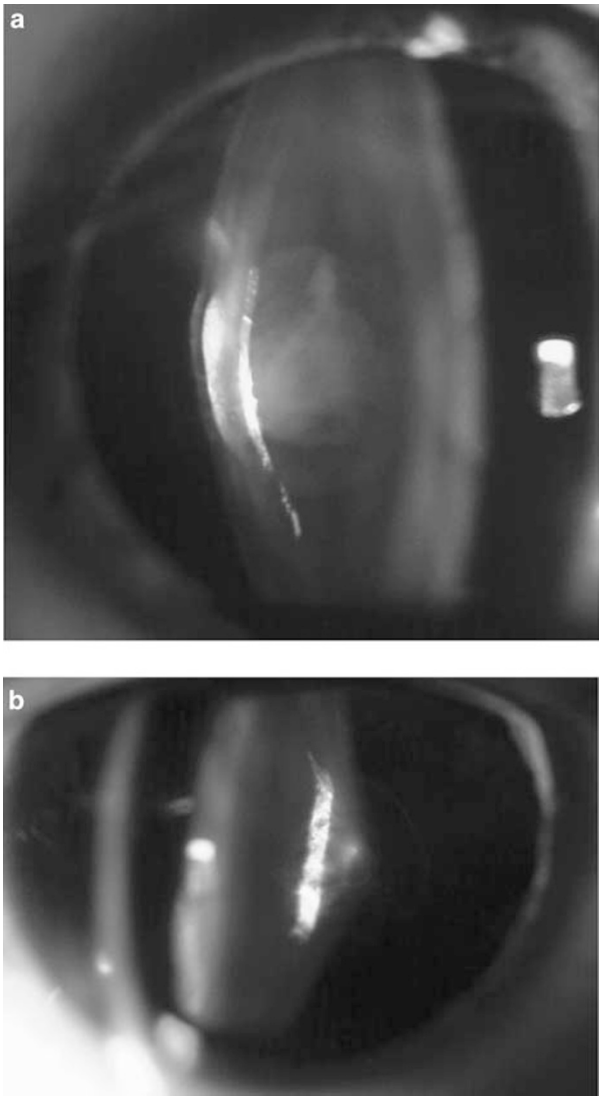

Figure 1 (**a** and **b**) Slit lamp photographs. [Upper panel, right eye] The posterior polar plate can be seen with intact posterior capsule [Lower panel, left eye]. The bulging posterior polar cataract due to deficient posterior capsule producing a posterior lenticonus simulation.

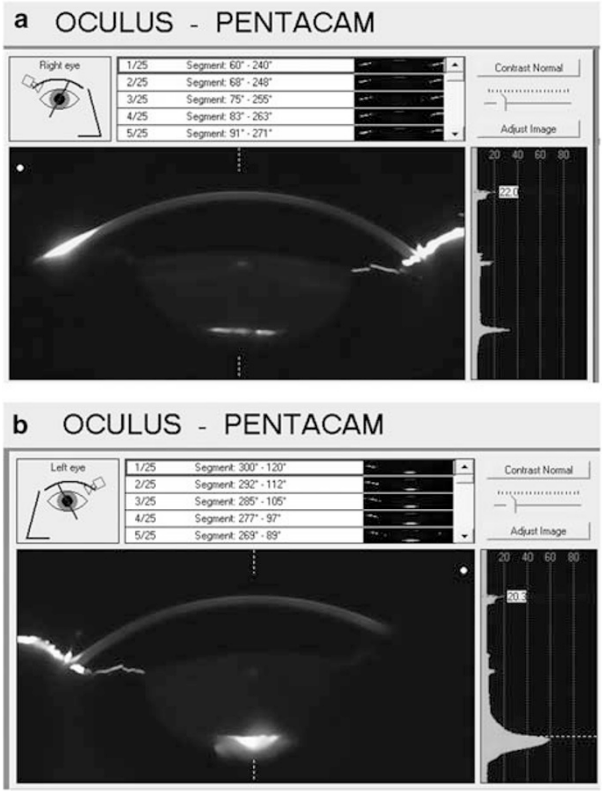

Figure 2 (**a** and **b**) Scheimpflug imaging with densitometry readings of both eyes. [Upper panel, right eye] Single scan image showing a posterior polar plaque with a densitometry reading of approximately 30 units. The posterior capsule beneath is well imaged and is intact. [Lower panel, left eye] Single scan image showing the posterior polar cataract bulging through the deficient posterior capsule appearing as 'Hanging-drop' or 'Tear-drop' sign. Note the corresponding lenticular spike of 60 units is broader and irregular as compared to right eye.

60 U on densitometry scale. This 'hanging drop' or 'tear drop' sign on Scheimpflug photography is probably created by preexisting PCD with herniation of dense posterior plaque through it.

Comment
This simulated posterior lenticonus producing hanging drop/tear drop sign should be taken as diagnostic of PCD in posterior polar cataracts. To our knowledge, this is the first report of PCD with coexistent posterior polar cataract being characterized on Scheimpflug imaging.

Conflict of interest
The authors declare no conflict of interest.

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Sir,

Management of inadvertent peribulbar injection of acetazolamide: a case report

Drug errors can have severe consequences. Here we describe an inadvertent peribulbar injection of acetazolamide instead of local anaesthetic agent, prior to cataract surgery.

Case report
A 63-year-old male with glaucoma was to undergo right cataract surgery under peribulbar anaesthesia. Intravenous (IV) acetazolamide (500 mg in 10 ml) was planned for intra-operative use but had been drawn up pre-operatively. Eight millilitres of this solution were inadvertently given as a peribulbar injection by the anaesthetist (not one of the authors) instead of the anaesthetic agent. The patient complained of disproportionate pain during injection. The mistake was recognized and surgery deferred. On examination vision was maintained, but ocular motility was reduced by 50% in all directions of gaze. There was marked lid oedema with mild conjunctival chemosis. The patient was promptly given 200 ml of IV mannitol 20% to reduce the intraorbital pressure. An orbital opinion was sought and as there was no information in the literature or from the poisons unit regarding further management, the patient was given IV methyl prednisolone (500 mg) stat and prophylactic IV cefuroxime (750 mg) on an empirical basis and admitted for regular monitoring. Subsequently he was started on oral prednisolone (40 mg) for 5 days. His ocular motility recovered to normal and the lid oedema and chemosis settled in 48 h. A month later he underwent right cataract surgery. Eighteen months after the incidence his vision is 6/5 in the right eye with full ocular motility and no lid or orbital problems.

Comment
Some medications can cause severe soft tissue and skin necrosis when accidentally injected or extravasated into soft tissues. Extravasation of acetazolamide (a high-risk vesicant drug, pH 9.1) causing soft-tissue necrosis of the forearm has been reported once.[1] No specific antidote is available to counteract acetazolamide. In this patient, IV methyl prednisolone may have had a role in the prevention of complications. The diluted acetazolamide (500 mg in 10 ml water) could be another factor. As a general rule, prevention is the cornerstone and avoiding similar problems can be achieved by using a clear labelling system[2] and drawing up the required injection immediately before its administration.

Conflict of interest
The authors declare no conflict of interest.

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We report a unique case of inadvertant periorbital injection of acetazolamide and its management.

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Sir,

Histopathology and treatment of corneal disease in keratitis, ichthyosis, and deafness (KID) syndrome

A 34-year-old male with keratitis–ichthyosis–deafness (KID) syndrome and documented mutation in the *GJB2*