

L-I Lau<sup>1,2</sup>, H-M Wu<sup>3,4</sup>, A-G Wang<sup>1,4</sup>, M-Y Yen<sup>1,4</sup> and W-M Hsu<sup>1,4</sup>

<sup>1</sup>Department of Ophthalmology, Taipei Veterans General Hospital, Taipei, Taiwan

<sup>2</sup>Institute of Clinical Medicine, School of Medicine, National Yang-Ming University, Taipei, Taiwan

<sup>3</sup>Department of Radiology, Taipei Veterans General Hospital, Taipei, Taiwan

<sup>4</sup>Department of Ophthalmology, School of Medicine, National Yang-Ming University, Taipei, Taiwan

Correspondence: A-G Wang,  
Department of Ophthalmology,  
Taipei Veterans General Hospital,  
National Yang-Ming University,  
No. 201, Section 2,  
Shih-Pai Road, Shih-Pai,  
Taipei 11217, Taiwan  
Tel: +886 2 2875 7325;  
Fax: +886 2 2876 1351.  
E-mail: agwang@vghtpe.gov.tw

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Sir,  
**Pseudophakic bullous keratopathy in a case of corneal birth trauma**

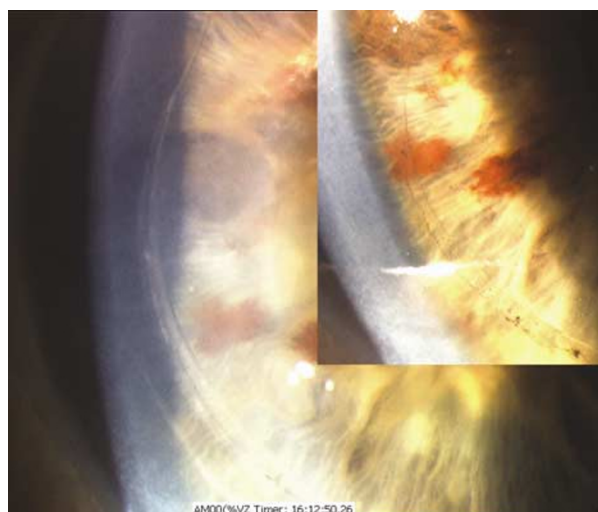
Corneal oedema and bullous keratopathy are known complications of cataract surgery and can occur following an uncomplicated procedure.<sup>1</sup> Various predisposing factors for pseudophakic bullous keratopathy include pre-existing corneal endothelial disease such as Fuchs dystrophy<sup>1</sup> and use of anterior chamber and iris-supported lenses.<sup>2</sup> Birth trauma to the cornea is known to cause a decrease in the density of endothelial cells.<sup>3</sup> This may cause corneal oedema at birth or at any later stage.<sup>3</sup> However, we are not aware of any reported cases of corneal oedema following cataract surgery in such eyes. We recently had a patient with a peripheral Descemet's membrane rupture due to birth trauma who developed pseudophakic bullous keratopathy following uncomplicated phacoemulsification.

### Case report

A 76-year-old male patient presented with diminution of vision in the right eye due to progressive cataract. His best-corrected visual acuity was 6/12 in the right eye and 6/9 in the left eye. Preoperative assessment revealed a right corneal curvilinear opacity, 2 mm from the periphery, at the level of the Descemet's membrane and endothelium (Figure 1). There was no other abnormality in either eye. Retrospectively, birth history revealed a forceps-assisted delivery. There was no depression on the contra lateral occipital region, a sign that may be present in patients having corneal birth trauma.<sup>3</sup> Uncomplicated phacoemulsification through a superiorly placed clear corneal incision with in-the-bag implantation of an acrylic lens was performed. The total ultrasound time was 71.03 s and the average ultrasound power used was 8%. Significant corneal oedema was noted on the first post-operative day and the best-corrected visual acuity was 6/36. A week later the cornea developed some bullae. On the last postoperative visit, 5 months after the surgery, the best-corrected visual acuity was 6/12, with some improvement in the corneal condition. Specular microscopy of the fellow eye revealed normal endothelial cell count and morphology. The corneal oedema made it impossible to perform specular microscopy of the affected eye.

### Comment

Our patient had an unusual corneal pathology, clinically suggestive of the Descemet's membrane rupture. In the absence of any other corneal findings, the history of



**Figure 1** A curvilinear Descemet's membrane split—evidence of corneal birth trauma. (Inset: magnified view under focal illumination.)

forceps-assisted delivery makes birth trauma the most likely cause although it can only be proven by a histological study.<sup>4</sup> It is also not possible to prove that this eye had a low endothelial cell count preoperatively. However, it is known that corneal birth trauma causes endothelial cell loss<sup>3</sup> and can lead to late endothelial decompensation in adult life.<sup>5</sup> This case highlights the risk of cataract surgery in an eye with a cornea compromised by birth trauma, a risk we failed to recognise preoperatively. We suggest that a patient with signs suggestive of corneal birth trauma should have an endothelial cell count before undergoing any intraocular procedure. A low endothelial cell count will be an objective indicator of the increased risk of cataract surgery in such a patient. Intraoperative measures such as the soft shell technique<sup>6</sup> should then be employed to reduce the risk of postoperative bullous keratopathy.

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V Chadha, AH Taguri and HC Devlin

Princess Alexandra Eye Pavilion,  
Edinburgh, UK

Correspondence: V Chadha,  
11 West Holmes Place,  
Broxburn EH52 5NJ, UK  
Tel: +44 786 508 1415;  
Fax: +44 131 536 1574.  
E-mail: vchdh@aol.com

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### Sir, Screening for visual impairment in elderly patients with hip fracture: validating a simple bedside test

Dr Squirrell's study involves a comparison of the visual screening test conducted by ophthalmologists and nursing staff in a group of elderly with history of fall.<sup>1</sup> They reported a high level of consistency of the bedside test by nurse screeners.<sup>1</sup> We have got queries for authors' enlightenment.

First, the sensitivity of the test in picking up the potentially remedial visual impairment was reported to be only 70%, which was attributed to misinterpretation of the red reflex.<sup>1</sup> From the data cited, there was a significant number of patients who suffered from age-related macular degeneration (10 patients). The status of the age-related macular degeneration has not been elucidated fully and the proportion of early against advanced macular degenerative disease was not clear. Using the proposed bedside test, how the nurse screener could confidently detect the presence of age-related macular degeneration, which may or may not be coexisting with the cataracts?

Second, geriatric study has shown that diabetes mellitus is an independent risk factor for fall among elderly, and the prevalence of diabetes is ever rising worldwide.<sup>2</sup> Therefore, in such a selected group of patients with history of fall, detection of diabetes mellitus from either history, physical examination, or investigation is not unusual. Surprisingly, the authors did not report any diabetic retinopathy or maculopathy affecting the vision. We were keen to learn the initial demographics and past health of the enrolled patients.

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DTL Liu, C-L Li and VYW Lee

Department of Ophthalmology and Visual  
Sciences, The Chinese University of Hong Kong,  
Prince of Wales Hospital, Shatin, Hong Kong

Correspondence: DTL Liu,  
Tel: +852 2632 2878;  
Fax: +852 2648 2943.  
E-mail: david\_tliu@yahoo.com