

- 4 Mathur A, Khanna N, Chaturvedi UC. Breakdown of blood–brain barrier by virus-induced cytokine during Japanese encephalitis virus infection. *Int J Exp Pathol* 1992; **73**: 603–611.
- 5 Cunningham Jr ET, Levinson RD, Jampol LM, Engstrom Jr RE, Lewis H, Holland GN. Ischemic maculopathy in patients with acquired immunodeficiency syndrome. *Am J Ophthalmol* 2001; **132**: 727–733.
- 6 Roth DB, McCabe CM, Davis JL. HIV-related occlusive vasculitis. *Arch Ophthalmol* 1999; **117**: 696–698.
- 7 Lim MC, Cumberland WG, Minassian SL, Ransome SS, Cornish MJ, Terry BG *et al*. Decreased macular leukocyte velocity in human immunodeficiency virus-infected individuals. *Am J Ophthalmol* 2001; **132**: 711–719.
- 8 Dejaco-Ruhswurm I, Kiss B, Rainer G, Krepler K, Wedrich A, Dallinger S *et al*. Ocular blood flow in patients infected with human immunodeficiency virus. *Am J Ophthalmol* 2001; **132**: 720–726.

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Sir, Ultrasound biomicroscopy demonstrating etiology of a spontaneous filtering bleb

We report a case of delayed onset spontaneous conjunctival filtering bleb appearing many years after penetrating trauma. The bleb fistula site was identified on ultrasound biomicroscopy (UBM), but was not apparent on clinical examination.

Case report

A 68-year-old man presented after noting a growth on the nasal aspect of his right eye conjunctiva 1 month ago. The growth did not increase in size, and was not associated with ocular or visual symptoms. He reported history of penetrating injury to that eye with glass during adolescence that required surgical repair at the time.

In the right eye, best-corrected visual acuity was 20/25, applanation tonometry was 19 mm Hg. Biomicroscopy revealed a conjunctival cystic bleb nasally (3–4:30 O'clock) in proximity to a corneal-limbal scar (Figure 1). The anterior chamber was shallow nasally with irido-corneal adhesions and a distorted pupil. The lens showed mild nuclear sclerosis. Gonioscopy of the nasal angle revealed a localized 'dimpled' scarring and no cleft (Figure 2). Ultrasound biomicroscopy of the bleb site showed scleral fistulization from the posterior aspect of the bleb to the ciliary body (Figure 3). The rest of his ophthalmic evaluation, including the left eye examination was within normal limits.

Comment

Spontaneous filtering conjunctival blebs are rare and can be observed in patients with systemic or ocular abnormalities like Terrien's marginal degeneration, Axenfeld syndrome, or familial craniofacial

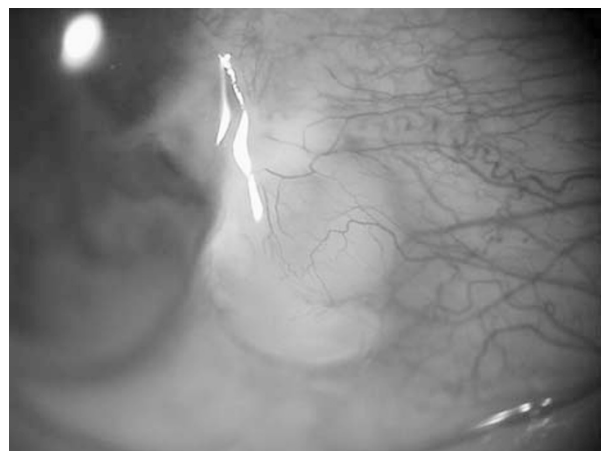


Figure 1 A localized conjunctival filtering bleb nasally in the right eye.

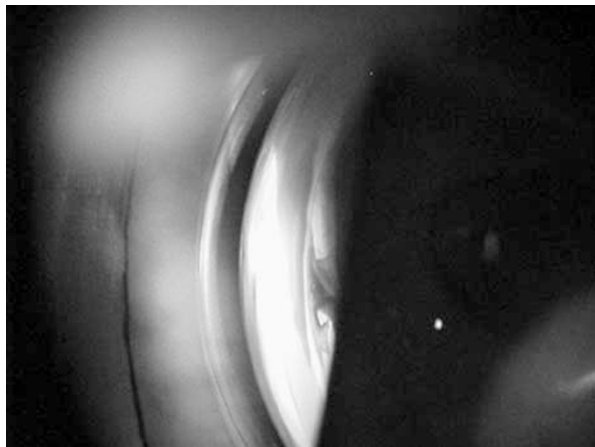


Figure 2 Gonioscopy of the nasal angle reveals peripheral anterior scarring with dimpling of the iris but no cleft.



Figure 3 Ultrasound biomicroscopy of the bleb shows the posterior communicating fistula (arrow).

dysmorphism with spontaneous bleb formation.^{1,2,3} Inadvertent blebs at the surgical site of scleral fixated intraocular lenses have also been reported.⁴

We report an unusual case where spontaneous bleb formation occurred many years after the initial injury. Gonioscopy did not reveal a communication between the bleb and the angle. Rather a posterior channel of communication was apparent on UBM between the bleb and ciliary body. The appearance of blebs on UBM and the association with function have been reported.⁵ Filtering blebs do pose an increased risk of infection especially if they occur inferiorly or nasally.⁶ Intervention is not warranted in the absence of aqueous leak, hypotony, worsening of vision or infections. Ultrasound

biomicroscopic localization of the fistula is helpful in differentiating a filtering bleb from a possible conjunctival traumatic cyst. It is also useful for surgical planning should future repair become necessary.

References

- 1 Wong VA, Beiko G, Pavlin CJ, Rootman DS. Treatment of a spontaneous filtering bleb due to Terrien’s marginal degeneration with injection of autologous blood. *Can J Ophthalmol* 1995; **30**: 377–379.
- 2 Nemet P, Bracha R, Lazar M. Spontaneous filtering blebs in Axenfeld syndrome. *Am J Ophthalmol* 1973; **76**: 590–591.
- 3 Shawaf S, Noureddin B, Khouri AS, Traboulsi EI. A family with a syndrome of ectopia lentis, spontaneous filtering blebs, and craniofacial dysmorphism. *Ophthalmic Genet* 1995; **16**: 163–169.
- 4 Rees A, Herbert L, Sullivan P. Filtering blebs at the site of sutured posterior chamber intraocular lenses. *J Cataract Refract Surg* 2003; **29**: 1443–1444.
- 5 McWhae JA, Crichton AC. The use of ultrasound biomicroscopy following trabeculectomy. *Can J Ophthalmol* 1996; **31**: 187–191.
- 6 Soltau JB, Rothman RF, Budenz DL, Greenfield DS, Feuer W, Liebmann JM *et al*. Risk factors for glaucoma filtering bleb infections. *Arch Ophthalmol* 2000; **118**: 338–342.

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Sir,
Learning phacoemulsification with triamcinolone acetamide

Learning phacoemulsification cataract surgery can prove a difficult step for trainees, despite the advances in technology, which have led to its increased efficacy and safety. Aspiring ophthalmic surgeons should familiarise themselves with phacoemulsification in a wet laboratory before operating on patients, and it is now mandatory that UK ophthalmic trainees attend a basic surgery