

Figure 3 Axial MRI sections (T2 weighted) showing (a) subperiosteal abscess of frontal bone and (b) intracranial extradural abscess.

# References

- 1 Feder Jr HM, Cates KL, Cementina AM. Pott puffy tumor: a serious occult infection. *Pediatrics* 1987; **79**: 625–629.
- 2 Bambakidis N, Cohen A. Intracranial complications of frontal sinusitis in children: Pott's puffy tumor revisited. *Pediatr Neurosurg* 2001; 35: 82–89.
- 3 Gupta M, El-Hakim H, Bhargava R, Mehta V. Pott's puffy tumour in a pre-adolescent child: the youngest reported in the post-antibiotic era. *Int J Pediatr Otorhinolaryngol.* 2004; **68**(3): 373–378.
- 4 Adame N, Hedlund G, Byimgton C. Sinogenic intracranial Empyema in Children. *Pediatrics* 2005; **116**: 461–467.
- 5 Younis RT, Anand VK, Davidson B. The role of computed tomography and magnetic resonance imaging in patients with sinusitis with complications. *Laryngoscope*. 2002; **112**(2): 224–229.

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#### Sir,

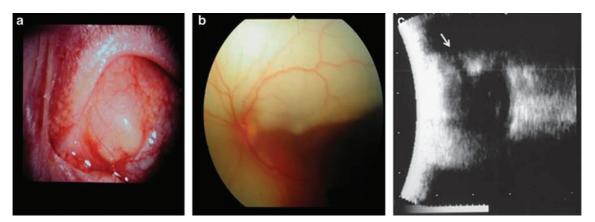
# A clinicopathological report: white retinal detachment with a pseudohypopyon in a subconjunctival inclusion cyst

Our patient presented with a subconjunctival cyst associated with a pseudohypopyon. She was aphakic after cataract extraction 4 years before. One year later, she underwent encirclement, vitrectomy, cryotherapy, and gas tamponade for a retinal detachment. Two years on, she developed an anterior non-necrotizing scleritis.

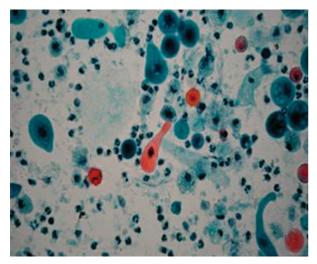
The sclera was injected around the encircling band. There was a subconjunctival inclusion cyst with a white fluid level in the superonasal quadrant (Figure 1a). A white retinal detachment resembling the fluid in the cyst (Figure 1b) was seen. Communication between the cyst and subretinal space was confirmed with a B-scan ultrasound (Figure 1c) with secondary retinal incarceration. LogMar acuity was 0.78 in the affected eye.

Scleritis was considered causal in this fistula formation. Infective, neoplastic, and systemic inflammatory causes were excluded before surgical repair. Transconjunctival cyst aspiration biopsy grew no microorganisms. Papanicoloa staining is shown in Figure 2. She subsequently underwent excision of the conjunctival cyst, removal of the encircling band, scleral patch graft, and vitrectomy. Figure 3 shows histopathology of excised tissue. No suture material was present.

Three months later, the fundus showed a reticulated pattern of subretinal debris and



**Figure 1** Subconjunctival cyst associated with a pseudohypopyon (a), white retinal detachment (b), and a communication tract between conjunctiva and retina as represented by the arrow on B-scan USG (c).

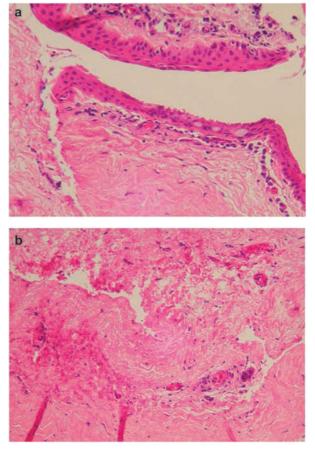


**Figure 2** Cytological examination of aspirated fluid showing the revealed squamous cells with keratinisation seen in orange and atrophic features with background macrophages and neutrophils. Papanicolaou stain (magnification  $\times$  180).

pseudosheathing of retinal vessels (Figure 4). Six years later, LogMar VA improved to 0.48 with no trace of debris.

Most cysts develop postsurgically after enucleation, strabismus surgery, or scleral buckle implantation<sup>1</sup> due to the implantation of conjunctival epithelial cells.<sup>2</sup> 'Simple' conjunctival cysts are usually transparent and lined with non-keratinising epithelium containing goblet cells.<sup>1</sup> Keratinisation is unusual but has been described and associated with a pseudohypopyon.<sup>3</sup>

Surgically-induced necrotising scleritis is a rare complication of ocular surgery<sup>4</sup> and is most commonly associated with vasculitis.<sup>4</sup> Other causes are infection, excessive cautery, or tissue manipulation. Suture materials may cause scleritis or migrate through sclera.<sup>4</sup>



**Figure 3** Cyst wall lined with corneoscleral limbus-type epithelium (a), and scleral stroma showing neovascularisation and focal chronic inflammatory infiltrate (b). Histological examination stained with haematoxylin and eosin (magnification  $\times$  100).

Scleral buckles may migrate through the insertion of extraocular muscles causing ischaemic necrosis. Scleral patch grafts for scleral defects are known to work in the

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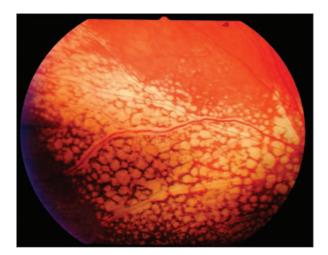


Figure 4 Reticulated pattern of subretinal debris and pseudosheathing of blood veseels.

cases of thinning related to infection or necrosis.<sup>5</sup> The scleral breakdown in our patient presumed to be suture associated as there was focal chronic inflammatory infiltrate at the scleral fragment margin.

## Acknowledgements

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## References

- Srinivasan BD, Jakobiec FA, Iwamoto T, DeVoe AG. Epibulbar mucogenic subconjunctival cysts. *Arch Ophthalmol* 1978; 96: 857–859.
- 2 Goldstein MH, Soparkar CN, Kersten RC, Orcutt JC, Patrinely JR, Holds J. Conjunctival cysts of the orbit. *Ophthalmol* 1998; 105: 2056–2060.
- 3 Williams BJ, Durcan FJ, Mamalis N, Veiga J. Conjunctival epithelial inclusion cyst. *Arch Ophthalmol* 1997; **115**: 816–817.
- 4 Dela Maza MS, Foster CS. Necrotising scleritis after ocular surgery: a clinicopathologic study. *Ophthalmology* 1991; 98: 1720–1726.
- 5 Lin CP, Wu YH, Chen MT, Huang WL. Repair of a giant scleral ulcer, with scleral grafting and tissue glue. *Ophthalmic Surg Lasers* 1996; 27(12): 995–999.

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## Sir,

# Current clinical practice of consultant ophthalmologists in treating herpetic eye disease in the United Kingdom

Herpes simplex virus continues to be a leading cause of chronic corneal opacification and unilateral blindness. No similar studies have been previously conducted in the United Kingdom. A 12-question circular was posted to 903 consultant ophthalmologists. It evaluated treatment pattern of primary and recurrent epithelial and stromal keratitis. Treatment strategies were more uniform than expected, agreeing with Herpetic Eye Disease Study guidelines in the treatment of epithelial and stromal keratitis, but showing deviation in the use of antiviral agents for recurrent disease. The UK clinical practice for treating herpetic eye disease is consistent but deviates from Herpetic Eye Disease Study guidelines in some areas. Increased awareness of HEDS data could address this issue.

The management of Herpetic Eye Disease remains challenging despite progress in understanding its pathogenesis and the recommendations of Herpetic Eye Disease Study (HEDS) group.

We sought to evaluate the current management of this condition by sending an anonymous questionnaire to 903 National Health Service consultant Ophthalmologists, throughout the UK in March 2006.<sup>1</sup>

We enquired about the treatment of primary epithelial/stromal keratitis, and the use of oral antiviral prophylaxis in patients with recurrent keratitis. Replies including those from a subset of self-described cornea specialists were compared to published HEDS guidelines.

Response rate was 44% (399 out of 903) and 20% of respondents (n = 76) had special interest in cornea.

Eighty-nine per cent of consultants use topical antiviral alone for treating epithelial keratitis, whereas a minority also debride the epithelium or use combined oral and topical antiviral. This conforms well to HEDS, which showed that oral aciclovir added to topical trifluridine did not prevent development of stromal disease and iritis in epithelial keratitis.<sup>2</sup>

Ninety-six per cent of respondents use topical steroid for treatment of stromal keratitis. This was strongly supported by HEDS.<sup>3</sup> Topical steroid alone was used by 10 (3%). Ten per cent of all respondents and cornea specialists added oral antiviral to topical steroid and topical antiviral. HEDS guidelines have shown that oral aciclovir gave no additional benefit in treating stromal keratitis, when added to topical steroid and topical trifluridine.<sup>4</sup>

Oral antiviral, for prevention of further episodes, in recurrent epithelial and stromal keratitis was prescribed routinely by only 30% and 48% of all responders, respectively. It was continued for more than 1 year in epithelial and stromal keratitis by 38% and 44% of the consultants in these groups. Unfortunately, this is in contrast to recommendations from HEDS that showed that oral aciclovir 400 mg BD for a year significantly reduces the recurrence and long-term morbidity of both types of keratitis.<sup>5</sup> However, this figure rose to a majority of 71% among the cornea specialists with at least one-half advocating a long-term regime of at least 12 months.