

Figure 3 Postoperative appearance of the left eye at 3 years after keratolimbus allograft and penetrating keratoplasty. There is mild recurrence of the surface disease with superficial neovascularization in some areas.

Conflict of interest

The authors declare no conflict of interest.

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Sir, Infectious scleritis and surgical induced necrotizing scleritis

We read with great interest the article ‘Microbial scleritis—experience from a developing country’ by Jain *et al*¹ from India. Infectious scleritis, although rarely discussed in western literature, is not so unusual in Asia. We are very glad to see this study, which reveals completely different pathogens of the infectious scleritis as we have known in Taiwan.

We thank the authors who have cited our article many times in their article, but in the discussion section they cited our early hypothesis that surgical induced necrotizing scleritis (SINS) may be a prodromal factor to induce the infectious scleritis, and they concluded that not a single collagen vascular disease can be identified in their own series and others. We would like to point out that to inspect our hypothesis, we have performed a prospective study and published the results in *Cornea*, 2006, titled ‘Immunological and clinical manifestations of infectious scleritis after pterygium excision’.² In that study we have referred our cases of infectious scleritis to a rheumatologist, who performed a thorough examination of these cases and reached the conclusion that no underline autoimmune disease associated with these 18 eyes of 18 patients (16 bacteria, 2 fungi) can be identified. We would like to confirm that ‘the infectious scleritis is different from the post-surgical necrotizing scleritis both in clinical and immunological aspects except for the similar long latent period.’ With this article, we reject our earlier hypothesis and maintain that the mystery of long latent period on infectious scleritis after surgery is still unresolved.

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Sir, Histopathological findings in an epimacular membrane after intraoperative use of perfluorocarbon liquid

We describe the histopathology of an epiretinal membrane (ERM) that developed after intraoperative use of perfluorocarbon liquids (PFCL: fully fluorinated compounds with high specific gravities¹).

Case report

A 94-year-old man was referred to our unit with vision loss, right eye. Past ocular history included vitreous loss and 'dropped nucleus' during right eye cataract surgery. Examination revealed a visual acuity of 20/80 and rhegmatogenous retinal detachment. The fellow eye was unremarkable. He underwent three-port pars plana vitrectomy with vitreous base trimming, internal subretinal fluid drainage and endolaser. The PFCL perfluorooctane was used to assist surgery and was carefully removed afterwards. After fluid–air exchange, the eye was filled with perfluoropropane gas. Three months later, the patient represented with metamorphopsia and vision of 20/200 due to macular ERM. The ERM was microsurgically excised (residual PFCL was not noticed during this procedure) and was fixed in 10% neutral buffered formalin. After dehydration in graded concentrations of ethanol, it was embedded in paraffin wax.

Tangential sections through the specimen (stained with haematoxylin and eosin, periodic acid Schiff or an immunohistochemical technique to delineate various cellular elements) revealed epithelial and a few fibroblastic cells with little extracellular matrix. There was focal pigmentation. The epithelial cells contained slightly refringent material in variable-sized vacuoles, along with periodic acid Schiff-positive material that

distends the cells. These vacuolated cells and the fibroblastic (metaplastic) cells exhibited the immunophenotypes of retinal pigment epithelial (RPE) cells, being positive for cytokeratin 7 and pan-cytokeratin (which recognises several different cytokeratins including 8/18), and negative for glial and macrophage markers (Figure 1).

Comment

ERMs that occur following retinal detachment, that is, in proliferative vitreoretinopathy, are fibrocellular in nature with a mix of glial and RPE cells. To this 'proliferative vitreoretinopathy reaction' may be added a macrophagic foreign body response if a liquid tamponade agent is present.² In our patient, the ERM had a markedly different microscopic appearance, with little extracellular matrix formation and grossly swollen RPE cells that appeared to contain tamponade agent (it was not possible to directly identify the intracellular material as PFCL). No glia were present and the typical foreign body response was also absent. Although a similar response has been reported following silicone oil use,³ it has not been reported after PFCL use. Indeed, because of their toxicity, these agents are not usually left in the eye following their use as intraoperative tools. Nevertheless, despite careful removal of residual PFCL droplets, some may occasionally be retained in the vitreous cavity, and

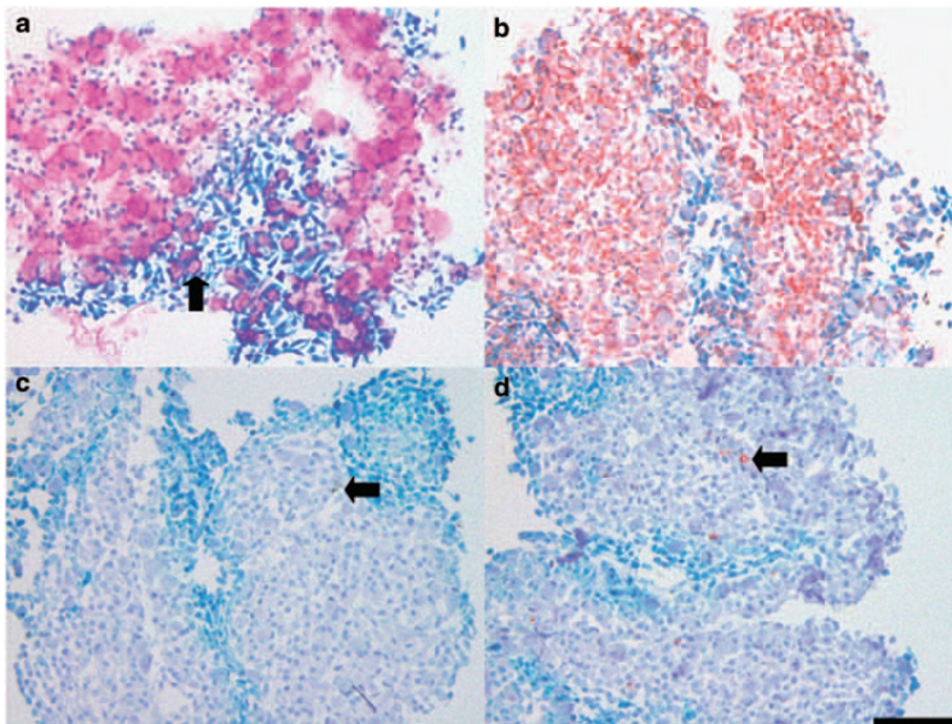


Figure 1 Sections through the excised ERM. (a) Section stained with the PAS method and counterstained with haematoxylin. The cells have a mixed epithelial and fibroblastic (metaplastic) phenotype, with many of the epithelial cells distended by vacuoles within PAS-positive cytoplasm (*arrow*). (b) Immunohistochemistry for cytokeratin 7 (red chromogen haematoxylin counterstain) demonstrate that the vast majority of the cells are of retinal pigment epithelial origin. (c) As in b but the section has been labelled for glial cells (using the glial marker glial fibrillary acidic protein: red chromogen haematoxylin counterstain). Glial cells are not seen but a focus of pigment is present (*arrow*). (d) Immunohistochemistry for the macrophage marker CD68pg (red chromogen haematoxylin counterstain) reveals only a few cells that express this marker in the membrane (*arrow*). All figures are at the same magnification: scale bar = 100 μ m.

the unusual ERM appearance in our patient presumably reflects this situation. Interestingly, experimental subretinal injection of PFCLs results in phagocytosis of PFCL by RPE within 3 h of injection,⁴ which may help explain the appearances of the epiretinal RPE in our patient.

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Sir,
Reducing the rate of cataract surgery cancellation due to blepharitis

On-the-day cancellation of cataract surgery causes much distress for the patient and increases the burden on already stretched services, in addition to significant financial implications. A primary risk factor for endophthalmitis is thought to be local eyelid disease, with the majority of cases attributable to the patients' own flora.^{1,2} Current guidelines therefore suggest that surgery is postponed pending disease control, usually with a lid hygiene regimen.³ We recently assessed the efficacy of applying a blanket policy of lid hygiene advice to all pre-operative cataract patients with a view to reducing the number of cancellations due to blepharitis.

In audit cycle 1 ($n = 960$), case notes were reviewed retrospectively over a 5-month period and the reasons for on-the-day cancellation were recorded. Subsequently, all patients received both verbal and written advice about how to clean their eyelids and why it was necessary. Cancellation data were then collected prospectively over a 4-month period ($n = 677$). A significant reduction in the incidence of cancellations due to blepharitis was noted ($P = 0.03$, odds ratio 0.45) Figure 1.

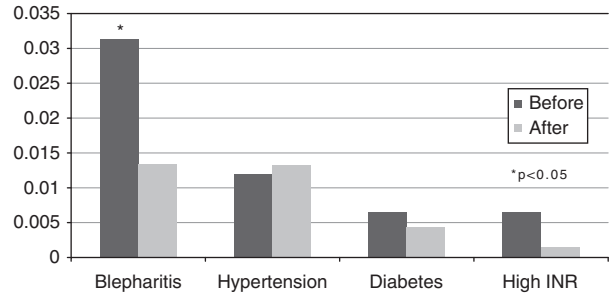


Figure 1 Proportion of operations cancelled before and after instituting lid hygiene measures.

Unfortunately, diagnosis of significant blepharitis is based on a subjective assessment that makes generating any strict audit criteria difficult and introduces a potential confounding factor. However, on an intention-to-treat basis we believe that providing all preoperative cataract patients with lid hygiene advice can help reduce cancellation rates. Although it is difficult to prove this would reduce endophthalmitis rates (there were no cases in either audit period) one would intuitively believe so. Assuming a constant cancellation rate from the first audit cycle (3%), this simple, non-invasive policy is estimated to have saved our trust £11 000 over a 4-month period.

Conflict of interest

The authors declare no conflict of interest.

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Sir,
Ocular hypertension and glaucoma in Graves' orbitopathy

I read with interest the article by Silva *et al.*¹ The authors are not aware of corticosteroids usage in the study. Although corticosteroids may be used to treat Graves'