

barrier. The other equally or even more important factor, namely the amount of any subretinal fluid (SRF) associated with the tears during initial presentation, had not been properly addressed in the article. It has been shown that amount of SRF carries significant bearing over the tissue reaction to laser and the overall completeness of the laser barriers.<sup>2</sup> Hence, the treatment success of laser indirect ophthalmoscope photocoagulation over slit-lamp-delivered laser system in complicated retinal tears relies on not only wider optical localization advantage but also the usual scleral indentation manoeuvre performed during laser delivery, through which the SRF can be displaced to facilitate laser absorption.<sup>2</sup> A proposed causality between surgeons' inexperience with laser technique and the proportion of retreatment without consideration of the patients factor (nature of the retinal breaks) at the same time is sheer.

Unless further information about the characteristics of the retinal tears treated by trainee ophthalmologists can be rendered, it may be difficult to reach authors' conclusion.

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DTL Liu, VYW Lee and DSC Lam

Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, 147 Argyle Street, Hong Kong SAR, China

Correspondence: DTL Liu,  
Tel: +44 852 2632 2878;  
Fax: +44 852 2648 2943.  
E-mail: david\_tlliu@yahoo.com

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Sir,  
**Reply to Liu *et al***

Thank you for giving me the opportunity to reply to the letter by Liu *et al*. It raises a few questions, which I will clarify keeping in mind that it was a retrospective study:

- (1) The trainees are taught to treat flat retinal tears and tears with a cuff of subretinal fluid (shallow SRF at the edges of tears only) with laser retinopexy.
- (2) Review of our data has shown that of the 24 patients requiring retreatment, only three patients may have been outside the above criteria,
- (3) In our conclusion, we had already pointed out that to improve treatment standards, patient selection and seeking vitreoretinal opinion in difficult cases is important.
- (4) Although the failure of primary treatment for retinal tears is multifactorial, in our paper we have documented that inability to adequately treat/surround the retinal tears with laser retinopexy was the single most important factor in most of the patients requiring retreatment. This inadequacy was mainly due to the inability of the trainees in using indirect laser delivery system. An audit conducted of our trainees did confirm our belief that more supervised training of indirect laser treatment of trainees was essential.

AK Tyagi, Y Ghosh and S Banerjee

Birmingham & Midland Eye Centre, Sandwell & West Birmingham Hospitals NHS Trust, Dudley Road, Birmingham B18 7QU, UK

Correspondence: AK Tyagi,  
Tel: +44 121 507 6806;  
Fax: +44 121 507 6791.  
E-mail: ajaityagi@yahoo.com

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Sir,  
**Moraxella as a cause of necrotizing fasciitis of the eyelid**

Necrotizing fasciitis has received much interest in the media in recent years, due to its rapid progression, gruesome characteristics, and high mortality rate, estimated at 28% in a recent retrospective study.<sup>1</sup> Haemolytic streptococci, *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas*, *Enterobacter*, *Klebsiella*,

*Proteus*, *Bacteroides*, *Clostridium*, and *peptostreptococcus* are among those species isolated from wound cultures and identified as causative, with streptococcus being the commonest at 62%.<sup>1</sup> While necrotizing fasciitis classically involves the trunk, groin, and lower limbs, primary involvement of the eyelids is a well-known entity.<sup>2,3</sup> We describe the first report of *Moraxella* species being the causative organism in a case of necrotizing fasciitis.

### Case report

A 50-year-old male presented with a 4-day history of left periorbital swelling, treated with oral flucloxacillin by his general practitioner. On examination, the left eye was swollen closed, erythematous, exquisitely tender, and hot to touch, but without a drainable or pointing abscess. Cervical lymphadenopathy, a pyrexia of 38.2°C, and tachycardia were noted. Blood tests revealed a raised C-reactive protein of 417, an ESR of 61, and a neutrophilia of  $15.8 \times 10^9/l$ . CT scan did not demonstrate any orbital involvement and excluded sinus disease as a cause. Preseptal cellulitis was diagnosed and intravenous benzylpenicillin and flucloxacillin were commenced; after 2 days without clinical improvement, oral metronidazole was added to the regime. At 4 days after his admission, after initial wound swabs were negative for microscopy and culture, the left eyelid began to develop areas of necrosis (Figure 1). At the same time, the eye was prised open enough to obtain a visual acuity of 6/9 and to establish that the conjunctiva was white and the cornea clear, thus reducing the likelihood of posterior spread of the infection. Surgical debridement took place immediately, down to healthy, bleeding tissue. Histology confirmed the diagnosis of necrotizing fasciitis, with the presence of inflammatory debris, necrotic tissue, and



**Figure 1** Preoperative preseptal cellulitis with tissue necrosis.

purulent exudates consistent with acute inflammation and necrosis. Culture of the debrided tissue grew *Moraxella catarrhalis*, and the antibiotic regime was altered to intravenous co-amoxycylav alone on discussion with the microbiologist. On day 11, 1 week after debridement, the patient was discharged home on oral co-amoxycylav, with a healthy, granulating wound. At 3 weeks post-operation, he has the upper lid hung up in down gaze, but no lagophthalmos on gentle eyelid closure, and no corneal staining (Figure 2).

### Comment

*Moraxella* species, a gram-negative, aerobic, oxidase-positive diplococcus, is a known commensal in the nasopharynx, and a common causative organism of otitis media, sinusitis, and laryngitis. While it has been linked in two cases to pre-septal cellulites,<sup>4,5</sup> no cases of necrotizing fasciitis as a result of infection by *Moraxella* have been reported in the literature. This may indicate an increase in the pathogenicity of the organism or, as is not uncommon in head and neck fasciitis, the presence of more than one infective agent, the other agent having been successfully treated with flucloxacillin and benzylpenicillin. Diagnosis of necrotizing fasciitis is based on the clinical presentation of pain, erythema, skin necrosis, and oedema, with subsequent histological findings of extensive fascial and subcutaneous tissue necrosis,<sup>1</sup> which the above case clearly demonstrated. Due to the increasing prevalence of B-lactamase producing *Moraxella* strains, explaining the poor response to initial antibiotic treatment, the recommended antibiotic regime is now co-amoxycylav or a cephalosporin (first, second or third generation) on recognition of, or when there is a suspicion of, *Moraxella* infection.



**Figure 2** 3 weeks postoperatively, showing the upper lid hung up in down gaze.

Emphasis on early surgical debridement of tissue at the first sign of necrosis, and regular dialogue with infectious diseases clinicians and microbiologists, particularly in those patients not responding to intravenous antibiotics, should ensure optimal management of this rare, but potentially life-threatening, condition.

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CJ Brittain, A Penwarden, A Mearza and D Verity

CJ Brittain, Moorfields Eye Clinic, St George's Hospital, Blackshaw Road, Tooting, London, SW17 0QT, UK

Correspondence: CJ Brittain,  
Moorfields Eye Clinic, St George's Hospital,  
Blackshaw Road, Tooting,  
London SW17 0QT, UK  
Tel: +44 208 725 3026;  
Fax: +44 208 725 3026.  
E-mail: chrisjbrittain@doctors.net.uk

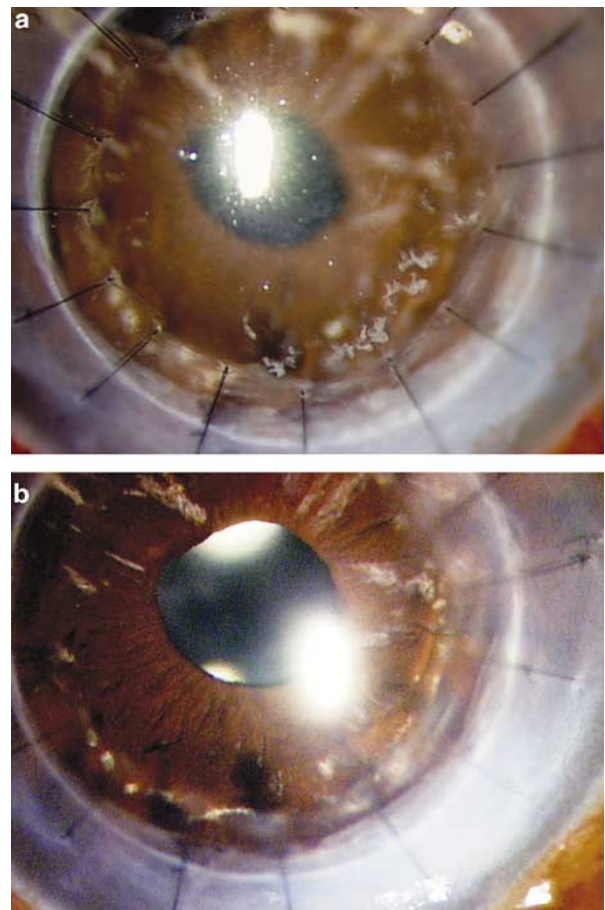
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## Sir, Microsporidia keratoconjunctivitis in a corneal graft

Ocular microsporidial infection has been reported to occur in two forms, a deep stromal keratitis in immunocompetent individuals or a bilateral superficial punctate epithelial keratitis in immunocompromised individuals.<sup>1,2</sup> We report a unique case of microsporidial epithelial keratoconjunctivitis occurring in the corneal graft of an individual who was locally immunocompromised.

## Case report

A 60-year-old male, who had undergone a repeat penetrating keratoplasty 6 months prior for a failed graft, following a transplantation for pseudophakic corneal oedema, presented with complaints of pain, redness, discharge, watering, and blurred vision of the left eye of 14 days duration. He was using prednisolone acetate eye drops twice daily. Visual acuity in the right and left eye was 20/20 and 20/100, respectively. The left eye had mild discharge with diffuse conjunctival congestion with multiple raised whitish confluent epithelial lesions on the temporal half of the graft (Figure 1a) and the underlying corneal stroma was clear. The anterior chamber was quiet. The iris had multiple areas of atrophy and the intraocular lens was in place. Clinically, microsporidial epithelial keratitis was suspected with a differential diagnosis of Thygeson's superficial punctate keratopathy and filamentary keratopathy. Both 10% potassium hydroxide-calcofluor white preparation (Figure 2a) and Gram stain of corneal scrapings showed plenty of



**Figure 1** (a) Left eye of patient at presentation showing multiple, whitish, confluent, elevated epithelial lesions. (b) Left eye of patient after 10 days of treatment showing complete resolution of epithelial lesions.