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Sir,

Orbital cellulitis caused by *Peptostreptococcus*

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We report a case of a 34-year-old diabetic man who developed orbital cellulitis 7 days following facial trauma. *Peptostretococcus* was identified as the causative organism. We are unaware of any previous reports of this condition in a healthy adult caused by this Gram-positive anaerobic coccus which is more commonly associated with peridontal infections.

Case report

A 34-year-old diabetic man presented to the Accident & Emergency Department with a history of increasing orbital pain and swelling over his right eye. He had been kicked on the right cheek while playing rugby 7 days before. On admission, the visual acuity in his right eye had remained unchanged. On examination, his face and lids on the right side were oedematous and erythematous. The globe was proptosed and deviated superiorly, with reduced extra ocular movements and binocular vertical diplopia on downgaze. He had no afferent pupillary defect. His optic discs were not swollen and examination of his left eye was unremarkable. A presumed diagnosis of orbital cellulitis was made and he was started on intravenous benzylpenicillin, ampicillin, and metronidazole.

A computed tomograph (CT) scan of the orbits and sinuses revealed a possible fracture of the medial orbital wall and orbital floor, opacification of the subperiosteal orbital floor, right ethmoid and maxillary sinuses consistent with mucosal thickening or haematoma, and prolapsed orbital tissue giving a'tear drop' sign in the maxillary antrum (Figure 1). An initial ear nose and throat (ENT) specialist opinion advised conservative management with noexploration of the paranasal sinuses. However, 8 h following admission he developed increasing pain and orbital swelling and was taken to the theatre. An orbital floor exploration and periostemy were performed and a subperiosteal orbital floor abscess was washed out.

At 24 h postoperatively, the man's right lids began to swell again and he developed acute pain. He had another CT scan which revealed a fresh subperiosteal collection within the orbital floor. He was taken to the theatre immediately, and the orbital floor was re-explored, purulent material washed out and a lantern subperiosteal drain inserted. At the same time, the ENT team explored the maxillary sinus and found no evidence of a pus collection, but oedematous mucosa was seen in the antrum.

Gram staining of the samples from the orbital floor revealed a Gram-positive coccus. After 5 days of culture, the organism was identified as a *Peptostreptoccus*, sensitive to metronidazole. The orbital floor drain was removed after a further 5 days and the patient was discharged on flucloxacillin and metronidazole for a month. He made a full recovery with no signs of a recurrence more than 2 months following his discharge.

Comment

Periorbital abscesses usually have a medial location, are related to an ethmoid sinusitis, and the most common causal organism is *Streptococcus pneumoniae*.

Peptostreptoccus is a Gram positive anaerobic coccus. It is a commensal of the oral cavities, being present in less than 3% of the subgingival flora.[1–3] It is commonly the causal organism in dental infections including peridontitis[2,4–6] and peritonsillar infections.[2,7] It has also been described in mixed anaerobic infections, infections of the gynaecological tract, abdominal wounds, prosthetic joints, ears, and sinuses.[8–9] In the orbit, *Peptostreptoccus* is an extremely rare causative organism. However, it has been isolated in one series[10] in which aspirates were obtained from paediatric cases with preseptal and postseptal cellulitis.

We believe this is the first described case of orbital cellulitis in a healthy adult in which the anaerobic Gram-positive *Peptostreptoccus* had been implicated. By reporting this case, we hope to highlight the potential for

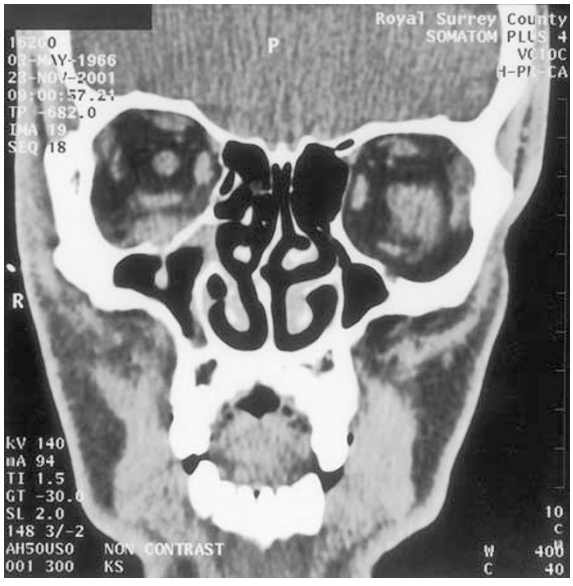

Figure 1 Coronal views of right and left orbits, showing a fracture of the right inferior orbital rim (arrow) with a tear drop sign extending into the right maxillary antrum.

this organism to cause severe orbital disease and to emphasize the need for early aggressive debridement and treatment with a prolonged course of antibiotics which are effective against anaerobic bacteria.

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Sir,

Corneal crystalline deposits as the initial manifestation of IgA-kappa multiple myeloma

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Corneal crystalline deposits of immunoglobulin origin have been reported to occur in a variety of hypergammaglobulinaemic states, including multiple myeloma, benign monoclonal gammopathy, cryoglobulinaemia, Waldenström's macroglobulinaemia, rheumatoid arthritis,[1] other associated neoplasms,[2] and after immunoglobulin therapy.[3] The most frequently reported monoclonal gammopathy associated with corneal crystalline deposits is of the IgG-kappa light chain. We report an unusual case, initially presenting with corneal crystalline deposits, who developed IgA-kappa multiple myeloma 2 years later. To the best of our knowledge, only one case of corneal crystalline deposits associated with IgA-kappa monoclonal gammopathy[2] has been described in the literature. However, bone marrow pathology of that patient was normal.

Case report

A 62-year-old woman was examined in March 1999 because of dry eye symptoms. Her best-corrected visual acuity was 20/25 OU. Slit-lamp examination disclosed tiny, colourless to white, crystalline deposits distributed throughout both corneas and within all layers of the stroma (Figure 1). The Schirmer test result (under topical anaesthesia) was 4 mm OU. Fundoscopic examination was normal. The remainder of the ocular examination was unremarkable. The systemic workup disclosed

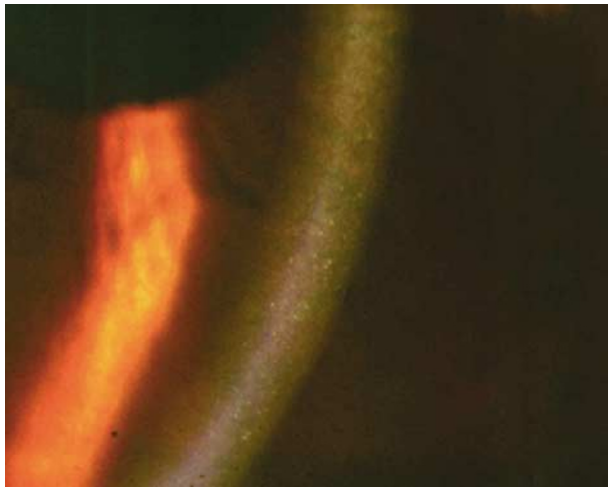

Figure 1 Slit-lamp examination disclosed tiny, colourless to white, crystalline deposits distributed throughout both corneas and within all layers of stroma.