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Sir,

Rothia genus endophthalmitis following penetrating injury in a child

We present a case of visual loss due to Rothia genus endophthalmitis following penetrating injury in a child.

Case report

An 11-year-old boy sustained a penetrating corneal injury in his right eye after walking into the edge of a door. The ocular perforation was not initially diagnosed at the local A&E department and he was brought to our Eye Casualty a week later with progressive right visual loss.

At presentation, visual acuity was perception of light in the right eye and 6/5 in the left eye. The iris was prolapsed through a paracentral corneal wound. There was hypopyon, posterior synechiae, and cataract. The patient underwent repair of the corneal laceration and lens aspiration the following day (Figure 1a). A vitrectomy with intravitreal injection of vancomycin, amikacin, and triamcinilone was performed a day later due to clinical evidence of endophthalmitis.

Gram-positive rods were present in the vitreous aspirate and identified as Rothia on incubation (API Coyne bacterial identification system). The organism was sensitive to vancomycin. The penicillin MIC was 0.32 mg/l. In the reference laboratory (Centre for Infections, HPA Colindale) the isolate was tested by gas chromatography of cellular fatty acids and partial sequencing of 16S rRNA. The results suggested an unnamed species within the genus Rothia.

The patient was further managed with oral coamoxiclav and topical penicillin. Visual acuity deteriorated to no perception of light 6 weeks postoperatively due to the development of a total retinal detachment with severe proliferative vitreoretinopathy (Figure 1b).

Discussion

Rothia genus was proposed for a group of coccoid to diphtheroid to filamentous Gram-positive organisms

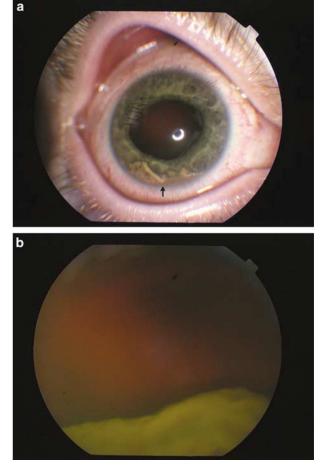


Figure 1 (a) Sutured corneal perforation, organised exudate in the angle (arrow). (b) Fundus photograph of posterior pole showing fibrosed detached retina.

isolated from the human oral cavity.¹ Rothia dentocariosa has been linked with human disease such as endocarditis, mycotic aneurysms, osteomyelitis, septicaemia, pneumonia, and peritonitis.^{2–7} Endophthalmitis has been reported in an adult following multiple surgeries. The visual outcome was poor.⁸ The diagnosis of Rothia genus infection is difficult as the organism can be confused with other bacteria. Penicillin is the antibiotic of choice, however, other agents such as aminoglycosides, vancomycin, cephalosporins may be effective. In our case, possible mode of transmission could be haematogenous spread or eye rubbing with dirty hands.

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Sir,

Central serous chorioretinopathy associated with testosterone therapy

Central serous chorioretinopathy (CSR) is characterised by serous elevation of neurosensory retina at the posterior pole. It typically affects young and middle aged men. Type A personality, male gender, emotional stress, pregnancy, increased levels of endogenous cortisol¹ and treatment with corticosteroids² have been associated with central serous chorioretinopathy. We report a case of CSR in a patient on regular testosterone therapy because of hypogonadotropic hypogonadism.

Case report

A 52-year-old man presented to eye clinic with a 1-week history of grey patch in front of his right eye. He never had any significant ocular problem in the past. He was diagnosed with acromegaly 24 years ago and subsequently had trans-sphenoidal surgery 7 years later, and radiotherapy 13 years later. Four years ago, he developed hypogonadotropic hypogonadism and he was started on testosterone replacement regime of injection testosterone 500 mg every four weekly. At 1 month prior to his presentation, testosterone dose was increased to 500 mg every three weekly as he was losing early morning erection. At 2 weeks before presentation, his serum hormone profile was carried out, which showed peak testosterone levels of more than 69 mmol/l (normal: 10–35 mmol/l). The serum cortisol levels and growth hormone levels were normal. He was not taking any other medication although he had been on bromocriptine in the past.

On examination his visual acuity in right eye was 6/18 and 6/6 in left eye. The anterior segment examination of both eyes was unremarkable. Dilated fundus examination of the right eye with slit-lamp biomicroscopy showed neurosensory serous detachment of about 2-disc diameter centred at fovea. These finding were consistent with central serous chorioretinopathy. The patient underwent fundus fluorescein angiography to rule out choroidal neovascular membrane, which revealed typical CSR (Figure 1). At 4 week follow-up appointment his visual symptoms were slightly better, and dilated fundus examination of right eye showed resolving CSR. At this stage, his blood peak testosterone levels were 34 mmol/l. In 6 weeks time his central serous retinopathy resolved completely with no sequels. The testosterone trough levels at this stage were normal at 14.9 mmol/l and so were the growth hormone and cortisol levels.

After 6 months, his visual acuity remained 6/6 with no ocular symptoms. He was still on 500 mg testosterone injection every third week and his hormone levels were in normal range.

Comments

Central serous chorioretinopathy typically affects males from 20 to 45 years old, however, there are case reports of CSR occurring in patients of 60 years or older.³ The