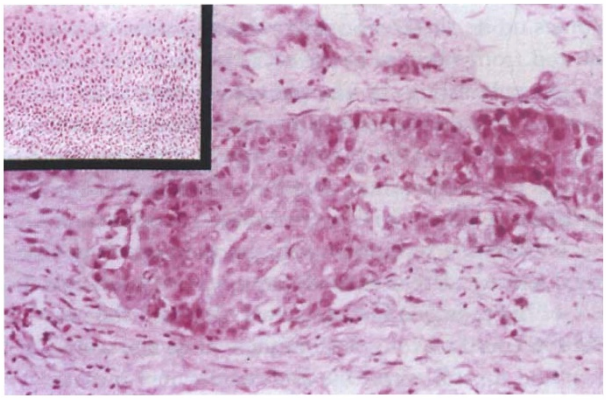

Fig. 2. *Photomicrograph of the biopsy of the mass lesion on the temporal side of the bulbar conjunctiva, showing a portion of sclera with epithelial cells surrounded by sparse infiltration of lymphocytes (H&E; 200). Inset shows acanthotic conjunctival epithelium with loss of polarity of epithelial cells and intact basement membrane indicating dysplasia of the conjunctival epithelium (H&E; 200).*

Due to the extensive involvement of the conjunctiva with extension into the orbit, the patient was advised to undergo exenteration in the right eye with additional radiotherapy. As the patient was unwilling for exenteration, he underwent radiotherapy treatment. He reported to us in January 1999 after the radiotherapy. His visual acuity was hand movements close to face. There was gross lid oedema, and symblepharon formation with extensive scarring in the region of the tumour secondary to the radiotherapy treatment. On ultrasonography the mass had increased to 18 mm 14 mm 6.7 mm. There was no enlargement of cervical lymph nodes. In view of the clinical picture the patient was strongly advised to undergo exenteration of the right eye, but refused despite an explanation of the risks involved.

Comment

Conjunctival dysplasia and neoplasia are most commonly seen in the elderly population. The unusual features in our case were a healthy young patient with leukoplakia and a mass in the conjunctiva. Clinically we suspected lymphoid malignancy, but a biopsy showed a squamous cell carcinoma. Due to the advanced stage of the disease with involvement of the orbit, exenteration was the recommended procedure. As the visual acuity was normal the patient was unwilling to undergo the disfiguring surgical procedure. However, radiotherapy alone did not prove to be effective.

The majority of the AIDS patients reported in India have HIV-1 infection, HIV-2 infection being more common in the African population.[5] HIV-2 infection has been reported in some parts of India, but the seroprevalence is low even in high-risk groups. In a study by Solomon and co-workers,[6] of 150 patients who were HIV positive, 139 (92.7%) were HIV-1, 9 (6%) HIV-1 and -2 and only 2 (1.3%) HIV-2 positive. Conjunctival squamous cell carcinoma has rarely been reported in HIV-2 patients.[7] Our case is the first report of conjunctival squamous cell carcinoma in an HIV-2 positive patient in India.

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Rajesh Fogla[1]
Jyotirmay Biswas[1]
S. Krishna Kumar[1]
H.N. Madhavan[1]
N. Kumarasamy[2]
Suniti Solomon[2]
[1]Medical & Vision Research Foundation
Chennai 600 006, India
[2]YRG Care Centre
Chennai 600 017, India

Dr Jyotirmay Biswas ✉
Medical & Vision Research Foundation
18, College Road
Chennai 600 006, India
Tel: +91 044 8271616, 8271036
Fax: +91 044 8254180/8210117
e-mail: MDSAAA35@giasmd01.vsnl.net.in

Sir,

Scedosporium (_Pseudallescheria_) fungal infection of a sponge explant

Scedosporium is a fungus with low inherent virulence and is considered an opportunistic pathogen. It is found in soil, rotting organic matter and polluted water, existing in two states: an asexual (imperfect) form (*Scedosporium*) and a sexual (perfect) form (*Pseudallescheria*).[1]

We report an unusual case of scedosporial scleritis with fungal colonisation and apparent decomposition of an inert surgical plomb.

Case report

A 70-year-old diabetic male professional gardener presented to the local casualty department with an injected, painful right eye. Five years prior to presentation he had sustained right ocular trauma from a plant twig resulting in retinal detachment followed by unsuccessful surgical repair. The eye had remained uncomfortable since the operation and became symptomatic only 3 weeks prior to presentation.

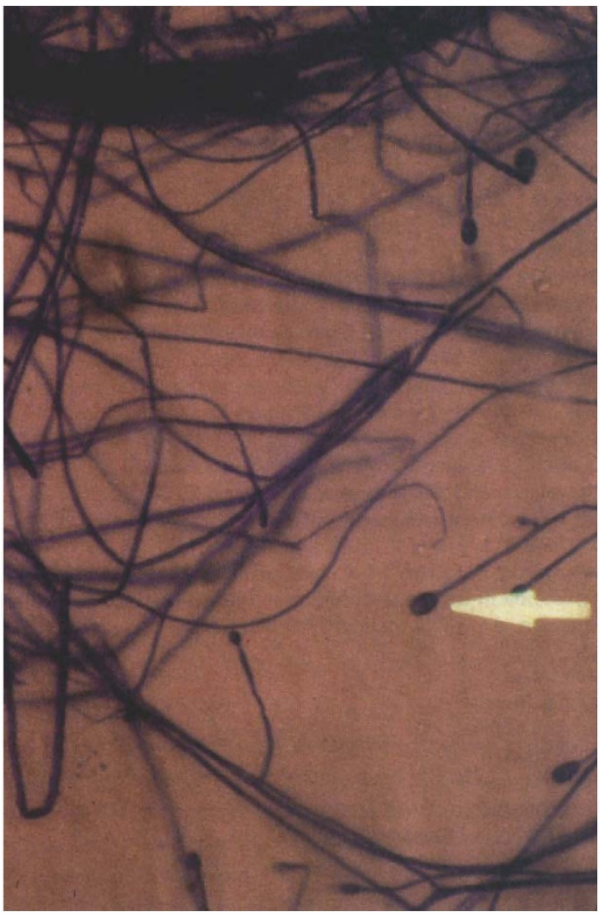

Fig. 1. Scedosporium apiospermum *stained with lactophenol cotton blue.*

Topical dexamethasone and atropine were prescribed for symptomatic relief of his painful blind eye. Two weeks later, his symptoms were unchanged. A conjunctival swab was taken for microbiological examination, and topical fusidic acid added to the above treatment.

One week later the patient presented to us with no change in symptoms. The measured visual acuity was no perception of light in the affected eye and 6/6 in the healthy contralateral eye. On the affected side the conjunctiva was mildly injected, the cornea clear, and there was no anterior chamber activity. Rubeosis iridis was noted, the intraocular pressure measured normal and a dense white cataract prevented fundoscopy. Eyelid eversion revealed a surgical sponge explant beginning to extrude through superotemporal conjunctiva. Microbiology results from the conjunctival swab showed infection with *Scedosporium apiospermum*. All prior treatment was stopped and 2-hourly topical econazole 2% initiated. The next day, the sponge explant was removed under sterile conditions. At operation multiple discrete white lesions were noted on the scleral surface underneath and around the explant site. These were presumed to represent fungal colonies and were cleared carefully, taking care not to further disseminate the infection, and the area washed with 5% povidone iodine. One extremity of the removed explant was notably blackened, frayed, and contained white fungal colonies on its surface. *Scedosporium apiospermum* was cultured from samples of the sceral white lesions and sponge explant (Fig. 1). The patient continued on 2-hourly topical econazole with marked symptomatic relief. Two weeks after plomb removal, the eye showed no signs of inflammation, and the patient was discharged without further treatment. He presented 1 year later with a red, painful discharging right eye. No fungal lesions were seen in the anterior segment, but in view of his previous history it was assumed that the infection could be fungal. Conjunctival swabs were taken and topical econazole and fusidic acid initiated. The swabs did not grow any significant organisms, but the eye remained painfully inflamed and was therefore eviscerated. Topical antifungal and antimicrobial treatment was continued until all inflammation subsided, and regular conjunctival swabs remained negative 2 months after evisceration.

Comment

Ocular infection with *Pseudallescheria* (*Scedosporium*) has been considered rare, but since it was first described in 1955, an additional 27 cases have been reported,[2–5] making *Pseudallescheria* a notable ocular pathogen. Most infections occurred in immunocompromised patients or where local ocular morphology was disturbed. Presentation varied in timing from early after trauma to several years after injury. In many of these cases fungal infection was not initially suspected, and treated with topical steroids and antibiotics. In the current report, the patient was a diabetic, had undergone previous ocular surgery and also received a short course of topical steroids with an exacerbation of symptoms. Although it is unlikely, the eye could have been inoculated with the fungus during the original twig injury, manifesting itself 5 years later. More probably, the patient's occupation as a gardener contributed towards the fungus entering the conjunctival sac and establishing itself around the extruding explant. An unusual finding was the apparent partial decomposition of an inert surgical plomb. Resolution of the fungal infection was expedited by explant removal, debridement and washout with povidone iodine.

In the past miconazole and amphotericin B have been used to treat scedosporial ocular infections. However, amphotericin B is irritant to ocular tissue,[6] penetrates the anterior chamber and vitreous poorly achieving levels below minimal inhibitory concentrations when administered via the subconjunctival or intravenous route,[7–9] and *in vitro* studies have shown *Pseudallescheria* resistance.[10] Nevertheless, when used with other azole antifungals, amphotericin B can have an additive effect against certain strains of *Pseudallescheria*,[11] and so may have a role in topical treatment of *Pseudallescheria* corneoscleritis, or as an intraocular adjunct in endophthalmitis. Miconazole shows good penetration of ocular tissue,[12] is effective against *Pseudallescheria* at much lower drug concentrations,[10] and has shown clinical benefit in previous reports. In the reported case,

laboratory analysis showed that econazole and miconazole had identical minimal inhibitory concentrations (0.25 mg/ml), and as econazole is less toxic to corneal epithelium when used long-term,[13] it was our agent of choice.

If possible, pharmacological treatment should be combined with debridement and removal of necrotic tissue as this speeds recovery and improves final outcome.[3] Antifungal treatment needs to be continued in the long term after the infection has clinically resolved as fungal hyphae can persist in tissue several months after obtaining negative microbiology swabs.[14]

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Gurpreet Bhermi ✉
Ian Gillespie
Bruce Mathalone
Moorfields Eye Hospital
City Road
London EC1V 2PD, UK
GSBhermi@Hotmail.com

Sir,

Conservative management of double penetrating ocular injuries

Penetrating eye injuries can result in severe visual loss.[1] Double penetrating (perforating) injuries represent a separate group which generally have a poorer prognosis.[2–4] Various surgical options are available to deal with perforating eye injuries. Beneficial effects of vitrectomy in the management of perforating eye injuries have been reported,[4] and scleral buckling[5,6] procedures with or without intravitreal gas injection also have a role in the management of perforating eye injuries. We present two cases of double penetrating eye injuries caused by slender sharp-tipped objects which were successfully managed conservatively.

Case reports

Case 1. A 15-year-old girl presented with a 1 day history of being struck in the left eye by a dart. Immediately after the injury the dart was pulled out. On presentation visual acuity was 6/9 unaided in the left eye. A 2 mm corneal puncture wound approximately 2 mm from the limbus was noted. The anterior chamber was shallow with a wick of vitreous incarcerated in the corneal wound. A laceration of the iris sphincter at the 8 o'clock position was present. The lens was clear. There was vitreous and retinal haemorrhage nasal to the optic disc and a sector of retinal oedema nasal to the retinal haemorrhage (Fig. 1a). The haemorrhage and oedema were caused by direct transection of a retinal arteriole at the retinal impact site; the posterior exit wound was approximately 1 disc diameter in size. She underwent primary repair of the corneal wound with interrupted 10/0 nylon sutures. The anterior chamber was deepened with viscoelastic and the vitreous wick abscised. She was treated with oral cefuroxime for 1 week. No vitreoretinal surgery was undertaken. On review a week later, the eye was quiet and the lens remained clear.

As the intravitreal blood cleared vitreous incarceration into the posterior exit wound became obvious. The retinal oedema secondary to arteriolar occlusion resolved after 2 months and pigmentary scarring around the posterior exit site gradually developed without any retinal elevation. On review 6 months following the initial injury her unaided visual acuity was 6/5. The lens was clear and the posterior hyaloid and retina remained attached with a mature pigmented scar tissue around the posterior exit wound. There was no evidence of retinal neovascularisation (Fig. 1b). The vitreous incarceration remained unchanged. Visual fields as tested on computerised visual field analyser were normal.