

increased resistance to the outflow of aqueous humour from the anterior chamber in anatomically predisposed eyes. Risk factors for the development of angle closure glaucoma include older age, female gender, narrow angles, Asian ethnicity, and shallow anterior chamber depth.⁴ The risk of mydriasis resulting in an episode of AAC is approximately 0.03% after pharmacological dilatation with tropicamide 0.5% and phenylephrine 5%⁵ in a normal Caucasian population. We suggest that the constant mydriasis due to pupillary sphincter paralysis in an at-risk, hyperopic eye, with a shallow anterior chamber, resulted in angle occlusion.

Clinicians should be aware that all patients suffering from an autonomic neuropathy, who complain of deterioration in vision, with or without a red eye, should have an ophthalmologic assessment to exclude AAC.

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Sir, Dematiaceous fungal keratitis presented as a foreign body-like isolated pigmented corneal plaque: a case report

The clinical presentations of Dematiaceous fungal keratitis were not frequently reported.¹⁻⁵ Here we report an unusual case of dematiaceous fungal keratitis caused by *Wangiella dermatitidis* presenting as a foreign body-like corneal pigmented plaque.

Case report

A 75-year-old male received penetrating keratoplasty in his right eye in 2001. At 7 months postoperatively, a dust-like foreign body was found on the graft. The foreign body was removed and topical ciprofloxacin was instilled. Bacterial and fungal cultures from the corneal scrapings showed negative findings. After 2 months, the patient complained of foreign body sensation of his right eye. His visual acuity was 20/400 and IOP was 16 mmHg. Slit-lamp biomicroscopy revealed a brownish, elevated, well-defined, pasty, foreign body-like plaque on the cornea surface with surrounding stromal infiltrates and a 1+ anterior chamber reaction (Figure 1). The elevated corneal plaque was removed by a No. 64 Beaver blade and sent for microbial and pathological examination by laboratories of National Taiwan University Hospital. After 3 days, the microorganism grown on Sabouraud dextrose agar revealed yeast-like fungus. Pathologic examination showed numerous fungal hyphae with spore formation (Figure 2). After 2 weeks mold, which was proved to be *W. dermatitidis* by thermotolerance test and positive tyrosine decomposition test, was isolated. Initially, the patient was treated with topical amphotericin B and oral fluconazole. The medications were shifted to topical

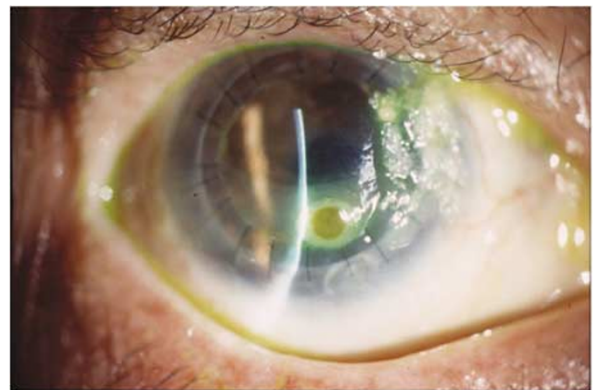


Figure 1 Brownish, elevated plaque with surrounding stromal infiltrates at the lower part of the graft was noted 2 months after a foreign body injury. The plaque was isolated, well defined, evenly coloured mimicking a pigmented foreign body.

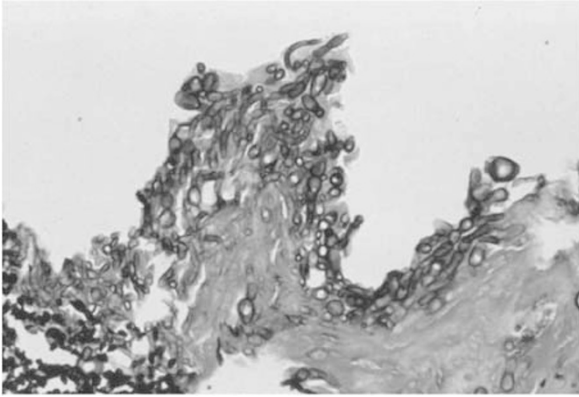


Figure 2 Histopathology examination of the pigmented plaque. Gomori methenamine silver stain (GMS, $\times 400$) showed numerous pigmented septated hyphae with spore formation.

natamycin and oral itraconazole after confirmation of the culture result. However, the stromal infiltrates and corneal melting progressed in spite of the usage of antifungal treatment. The patient received regrant one month later. The graft remained clear without recurrence of infection 2 years after operation.

Comment

W. dermatitidis, a member of genus *Exophiala* and which may cause phaeohyphomycosis, is a ubiquitous saprophytic dematiaceous yeast-like fungus (black yeast) that usually causes infection of skin or subcutaneous tissues in the form of soft tissue abscesses.⁶ Identification of isolates of *W. dermatitidis* is difficult because of its pleomorphism and slow-growing character. In addition to microscopic morphology, thermotolerance at 40°C is a useful diagnostic criterion to differentiate it from other members of the genus *Exophiala*.⁷ Dematiaceous fungal keratitis caused by *W. dermatitidis* has rarely been reported.^{8–10}

Macroscopic pigmentation of corneal infiltrates is characteristic of Dematiaceous fungal keratitis.^{3–5} The pigment is usually scattered on the ulcer bed.^{3–5} However, this case presented with an unusual foreign body-like clinical picture. The brown corneal plaque was solitary, well defined, foreign body-like and could be easily separated from the ulcer base when taking a corneal scraping. The underlying ulcer base was microscopically non-pigmented. No feathery borders around the infiltrate, satellite lesions or endothelial plaques could be found. All these presentations may lead to a misdiagnosis of pigmented foreign body incarceration on the cornea with secondary microbial keratitis. This pigmented lesion consisted of an exuberant growth of pigmented fungal filaments forming a colony on the corneal surface. The sustained topical steroid usage after penetrating keratoplasty in this

patient may contribute to the exuberant growth of fungus. This unusual presentation points out the importance of history taking and microbial examination in patients presented with foreign body-like pigmented corneal plaques or materials on the cornea.

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