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Short communication

Treatment resistant fungal keratitis caused by *Colletotrichum gloeosporioides*☆

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ABSTRACT

Case report: A 56-year-old woman suffered corneal injury from a branch of an orange tree. Forty days later she suffered a severe ocular infection, positive to *Colletotrichum gloeosporioides* (*C. gloeosporioides*). The patient did not respond to traditional treatment or crosslinking, and had to be treated with keratoplasty, suffering intraoperative and postoperative complications.

Discussion: Ocular infections due to *C. gloeosporioides* can occasionally be refractory to traditional and new treatments, such as crosslinking.

Queratitis fúngica por *Colletotrichum gloeosporioides* resistente a tratamiento

Palabras clave:
Queratitis fúngica
Colletotrichum
Traumatismo ocular vegetal
Cross-linking

RESUMEN

Caso clínico: Mujer de 56 años, que sufrió un traumatismo con rama de naranjo en el ojo izquierdo. Durante 40 días después desarrolla una infección ocular positiva para *Colletotrichum gloeosporioides* (*C. gloeosporioides*). El paciente no respondió al tratamiento clásico ni al cross-linking y tuvo que ser mediante queratoplastia con complicaciones intraoperatorias y postoperatorias.

Discusión: Las infecciones oculares por *Colletotrichum gloeosporioides* pueden ser refractarias al tratamiento tradicional así como a nuevas terapias como el cross-linking.

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Introduction

Colletotrichum gloeosporioides (*C. gloeosporioides*) is an opportunistic fungus that develops in plant material, particularly citrus. It rarely produces infections in humans and very few articles describe ocular involvement and therapeutic results.[1–4] A case is reported below in which this pathogen did not respond to conventional therapy or other therapies such as cross-linking.

Clinic case report

Patient, 56, visited the emergency department complaining of pain and reddening in the left eye (LE). Forty days earlier she suffered a traumatism with an orange tree branch that was treated with occlusion and the following eye drops: moxifloxacine 5 mg/ml every 2 h, atropin 1% every 12 h and medroxyprogesterone acetate 20 mg/1 ml with tetrizoline hydrochloride 0.5 mg/1 ml every 4 h. The patient was administered moxifloxacin orally 400 mg every 24 h.

The visual examination of the affected eye exhibited luminous localization without improvement with correction. Biomicroscopy revealed conjunctival hyperemia without secretions, inferotemporal corneal de-epithelization, deep and whitish stromal plastron in contact with the lens and a size of 5 mm × 5 mm. Hypopion of 1 mm and Tyndall +++. The posterior segment could not be seen due to opacity although anatomically correct according to the ecograph (Fig. 1).

Treatment for filamentous fungus was initiated (demonstrated with culture and Gram staining), including natamycin 50 mg/ml eyedrops and voriconazole 1%, alternating every hour, including oral voriconazole 400 mg every 24 h. De-epithelization was performed daily to facilitate penetration of the treatment.

Due to persistence of the corneal ulcer and 2 mm and hypopion during 11 days, samples were taken in the surgery room for conventional culture and PCR, in addition to administering an intrastromal injection of voriconazole 100 μg/0.1 m in 0.1 ml and anterior chamber cleansing. The results were positive for *C. gloeosporioides*, sensitive to natamycin and voriconazole, for which reason the therapeutic treatment was not modified (Fig. 2).

Due to worsening of the patient condition in the following days, corneal cross-linking[5] was performed, prescribing eyedrops recommended in the literature[3] for this pathogen, i.e., amphotericin B 0.5 mg/ml every 2 h, voriconazole 1% every 2 h and tobramycin 3 mg/ml every 4 h.

Despite the treatment in subsequent days, the condition progressively deteriorated (Fig. 3), including vitritis confirmed by ecograph.

Due to the poor evolution of the condition (Fig. 4) penetrating keratoplasty was performed with lensectomy, anterior vitrectomy and sector iridectomy, after which expansive hemorrhage occurred contained with temporal Landers

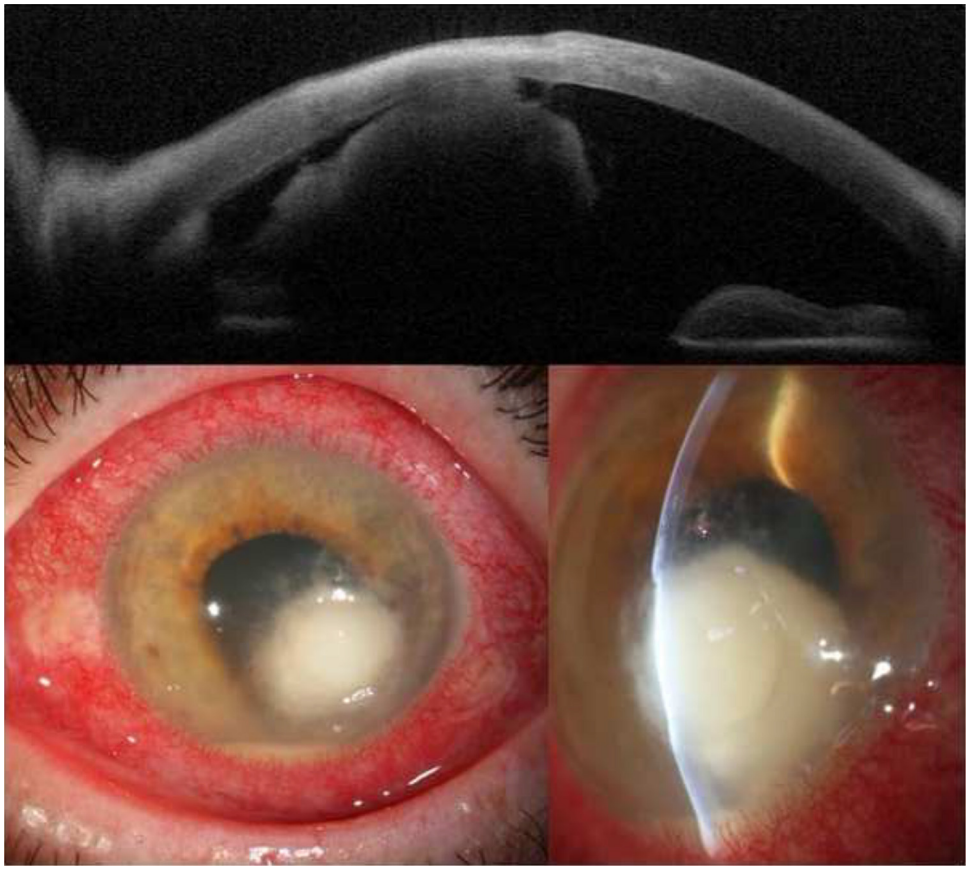

Fig. 1 – corneal ulcer (4 mm), hypopion (1 mm) and plastron in the anterior chamber in contact with the lens.