

A CASE OF CORNEAL ABCESS OF MIXED BACTERIAL AND FUNGAL ORIGIN TREATED WITH AMNIOTIC MEMBRANE GRAFT

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ABSTRACT

We treated with a combination of topical antibacterial and antifungal combined with an amniotic membrane graft a severe corneal abscess of mixed origin, in the pre-perforation phase, complicating a keratitis of the reapers of the right eye of a 38-years-old female patient. After 10 days postoperative corneal thickness restoration was observed, with corneal reepithelialization, and reformation of the anterior chamber. The eyeball was saved.

KEY WORDS: Corneal abscess, topical fortified eye drop, membrane amniotic.

Purpose : To report an observation of a patient suffering from a mixed origin corneal abscess treated with topical antifungal and antibacterial combined with amniotic membrane graft.

A 38 years-old female patient came to consultation at ophtalmology emergencies service of Universitary Hospital Centre Joseph Ravoahangy Andrianavalona (CHUJRA) Antananarivo

Madagascar, on september 2019. She complained of having a painful and red right eye associated with blurred vision following a projection of paddy during the harvest period.

She had already been taken in charge by a general practitioner at the countryside during 2 weeks period before her consultation in our service. She had been treated with unknown eye drops. We decided to hospitalize her.

At her admission, during the examination with a slit lamp, we observed an important purulent secretions on the right eye, a total corneal abcess with ulceration and a huge corneal stroma loss. The cornea was thinning and at being pre-perforation phase. The Descemet's membrane was the remaining layer of the cornea. The corneal sensation was conserved. However, the Seidel's test was negative. There was no sign evoking an endophthalmitis either (Figure 1).

The microbiological culture after corneal scrape confirmed the diagnosis of mixed bacterial and fungal origin of the corneal abcess. The responsible microorganisms constituted by rare coccis gram positive and rare yeast form elements.

We introduced a hourly fortified antibacterial eye drops in bitherapy (Vancomycin fortified 50mg/ml eye drop and Gentamicin fortified eye drop) combined with hourly fortified antifungal instillation (Amphotericin B 15mg/ mL and Econazole of pharmacy eye drop).^[1] The initial poor condition of the cornea led us to propose straightaway an epithelial amniotic membrane graft into the downside of the same eye.^{[2][3]} We reassessed the eye 10 days later.

The amniotic membrane was totally absorbed at about 80%. The cornea was regenerated and restored its anter thickness. The corneal ulcer was reduced considerably, the corneal preperforation disappeared even though an abnormal corneal vascular appeal was found. The anterior chamber of the eye was reformed. Anatomically, the eye was saved from evisceration (Figure 2).

In conclusion, the combination of fortified topical antibacterial and antifungal with amniotic membrane were effective to treat a total and mixed origin corneal abcess.

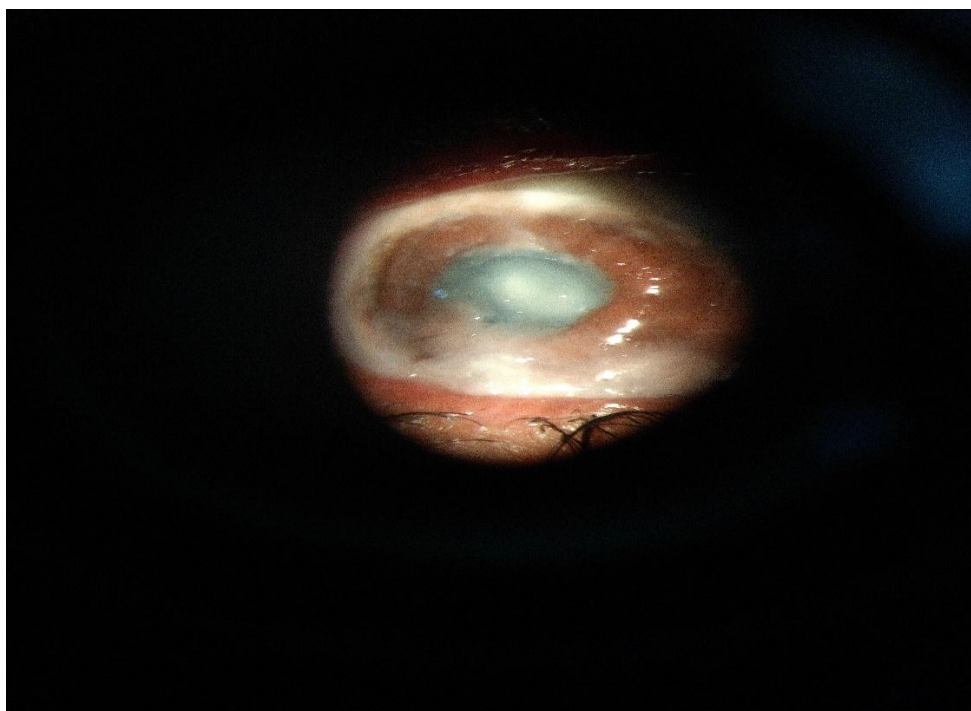


Figure 1: Mixed origin total corneal abcess of the right eye before the treatment.

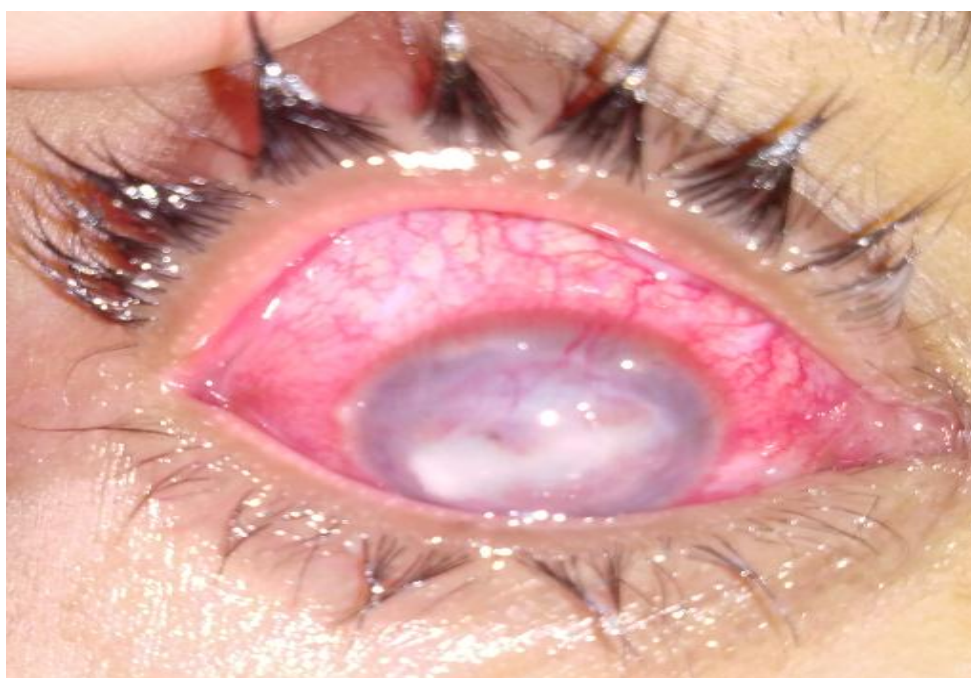


Figure 2: Mixed origin total corneal abcess of the right eye outcome after fortified topical antibacterial and antifungal combined with amniotic membrane graft.

REFERENCES

1. R. Limaïem, F. Mghaieth, A. Merdassi et AL. Les abcès graves de la cornée : à propos de 100 cas. *Journal Français d'Ophtalmologie*, 2007; 30(4): 374-9.

2. Kim JS, Kim JC, Hahn TW, et Al. Amniotic membrane transplantation in infectious corneal ulcer. *Cornea*, 2001; 20: 720-6.
3. Gicquel JJ, Bejjani RA, Ellies P, et Al. Amniotic membrane transplantation in severe bacterial keratitis. *Cornea*, 2007; 6: 27-33.