

INTERFACE FUNGAL KERATITIS STATUS-POST DSAEK

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The authors have no financial interests to disclose.

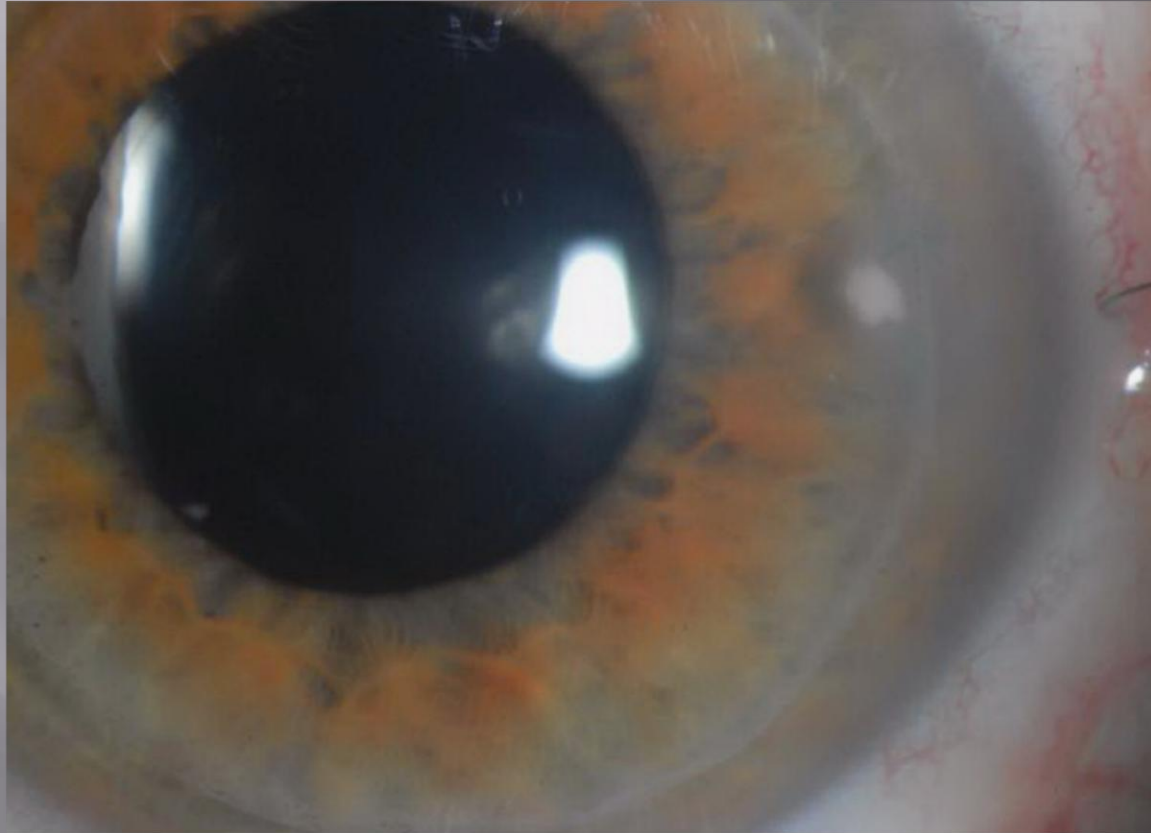
Purpose

- ▣ To report a case of interface fungal keratitis status-post DSEAK surgery.
- ▣ The post-operative findings, medical and surgical treatments as well as the end results will be discussed.
- ▣ Review of the literature on similar cases will be briefly presented.

Methods

- ▣ 59 year old female underwent combined phacoemulsification, insertion of an IOL and DSAEK for Fuch's dystrophy and cataract.
- ▣ Patient did well early on post-op with well-attached lenticule.
- ▣ Culture of the donor rim came back positive for *Candida albicans*.
- ▣ Patient noted to have a new chalky infiltrate on donor lenticule near interface approximately 6 weeks post-op.
 - BCVA 20/40⁻¹
 - Patient was asymptomatic

Methods

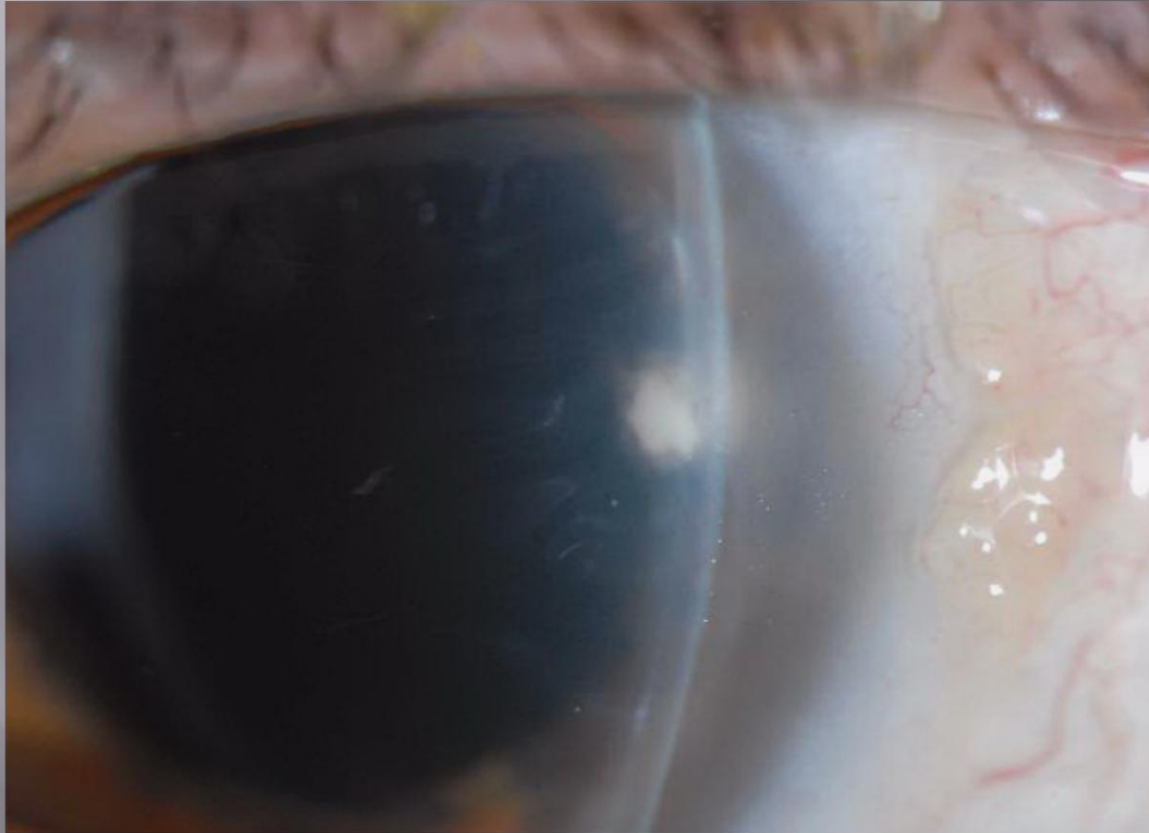


6 weeks post-op

Methods

- ▣ Started on topical amphotericin B (1 mg/mL) every 1 hour while awake.
- ▣ Seen a few days later and dosage reduced to 4 times daily by colleague.
- ▣ 23 days after treatment had been initiated with topical amphotericin B, a definite increase in infiltrate was noted with a new anterior chamber reaction.
 - 1+ cells

Methods

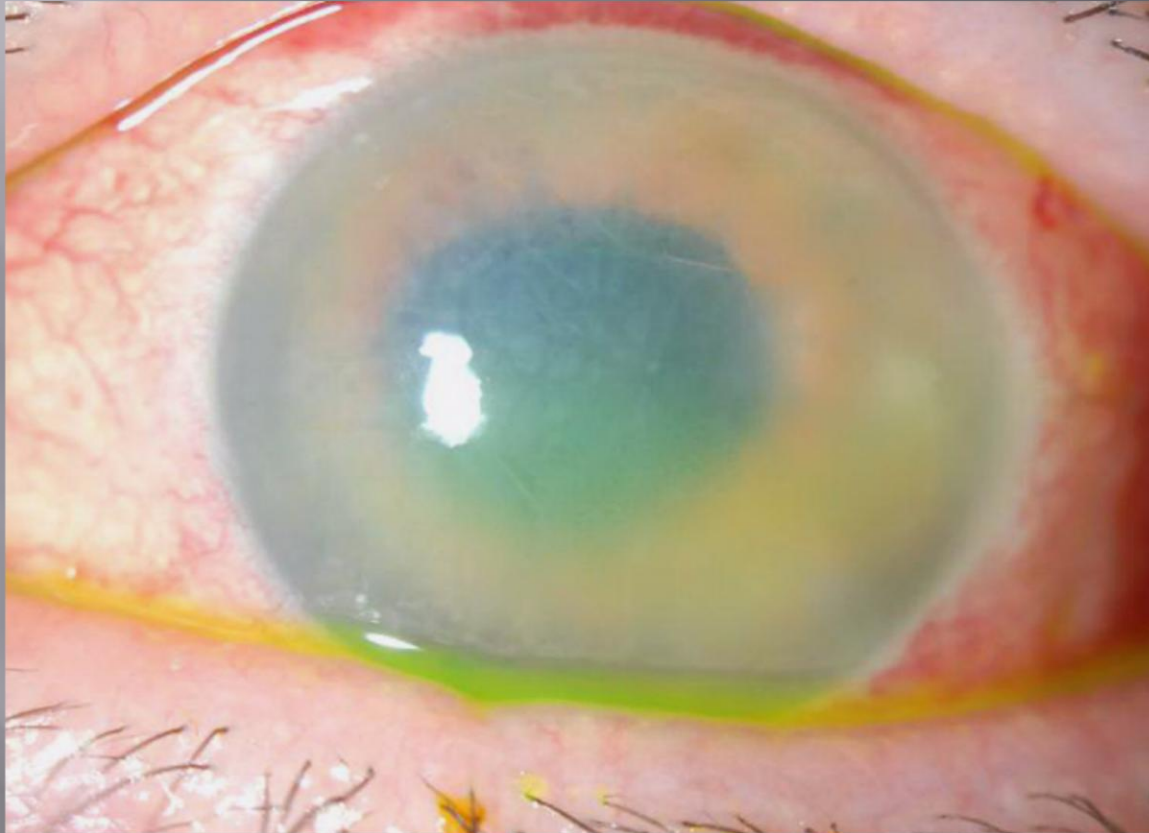


Increase in infiltrate after 3 weeks of topical amphotericin B

Methods

- ▣ Intracameral injection of amphotericin B (0.01 mg) was given and topical treatment switched to topical voriconazole 1% every 1 hour while awake.
 - Oral voriconazole 200 mg twice daily was also started
- ▣ Increase in size of infiltrate noted post-op
 - Patient was taken to the OR 4 days after initial intracameral injection
- ▣ Intrastromal and intracameral voriconazole (0.5 mg total) were given, intravitreal amphotericin B (0.01 mg) and removal of the lenticule performed.

Methods



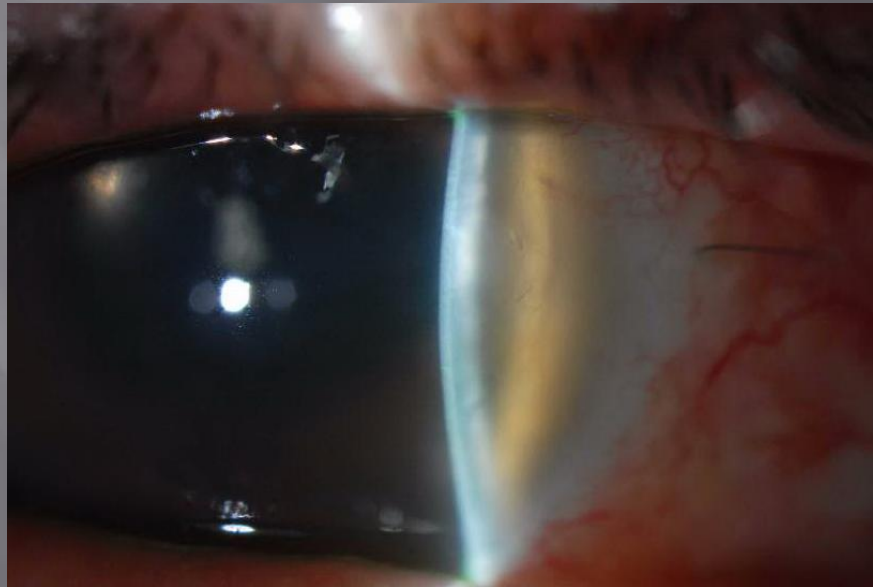
Status-post removal of donor lenticule, intrastromal and intracameral voriconazole and intravitreal amphotericin B

Methods

- ▣ 6 days after removal of the lenticule and repeat injections, a questionable extension of the fungal infiltrate on the host cornea was noted.
- ▣ Repeat intrastromal and intracameral injection of voriconazole and intravitreal amphotericin B performed in the OR the next day.
- ▣ Patient was kept on topical voriconazole hourly and switched to oral fluconazole 200 mg daily.
 - insurance formulary issue

Results

- ▣ Culture of the lenticule was positive for *Candida albicans*.
- ▣ Patient steadily improved, antifungal treatment was gradually tapered and the fungal keratitis resolved 3 weeks after last injections.



Results

- Repeat DSEAK performed 1 ½ years after resolution of the fungal keratitis.



Conclusion

- ▣ This case illustrates the importance of aggressive and early treatment of interface fungal keratitis, including the need to remove the donor lenticule.
- ▣ It also demonstrates the value of donor rim culture.
- ▣ Literature review of patients with interface fungal keratitis status-post DSEAK have shown the difficulty in treating this condition.
 - Reported cases have required therapeutic penetrating keratoplasty.