

Bilateral Dematiaceous Mold Endophthalmitis After Cataract Surgery: Case Series

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Purpose

- To report the clinical outcomes after medical and surgical management of bilateral dematiaceous mold endophthalmitis in two patients.



Methods

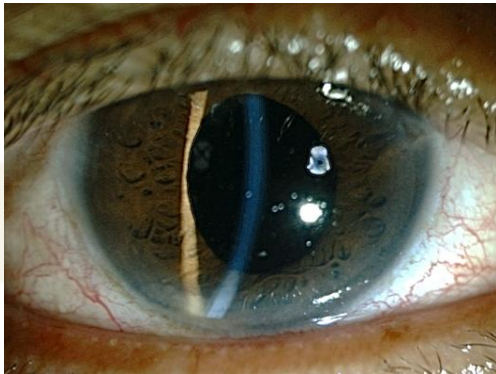
- Retrospective case series examining four eyes of two patients with acute onset endophthalmitis following cataract extraction (CE) in India by the same surgeon, on the same day, at the same facility.
- Medical records were reviewed and cultures obtained from three eyes.



Methods: Patient A, OD



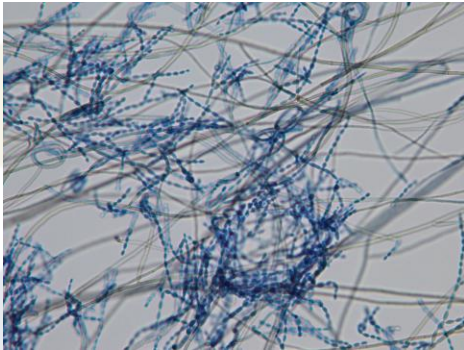
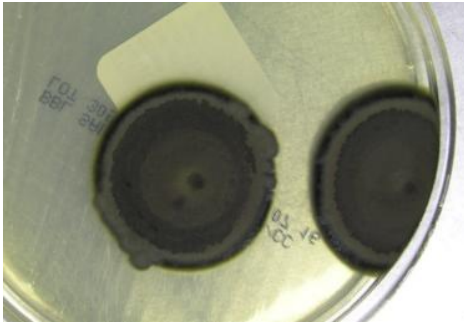
- LP vision on presentation
- Presumed bacterial endophthalmitis 3 wks s/p CE



- POD 1 s/p AC wash out
 - Remarkably clear vitreous, therefore no PPV performed
- VA 20/50
- Pt begins fortified antibiotic gtts, 1% prednisolone acetate QID



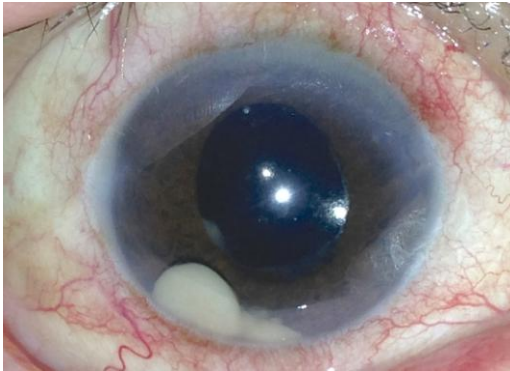
Methods: Patient A, OD



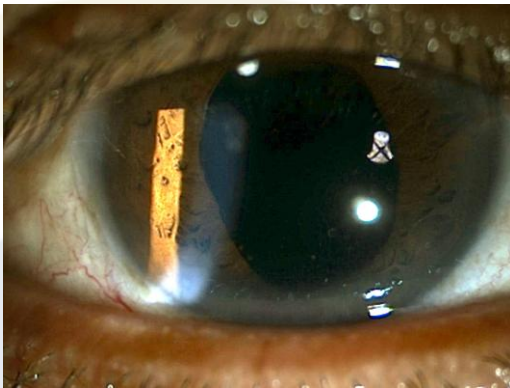
- POW 3: cultures positive for Dematiaceous mold, Cladosporium species
- Voriconazole MIC: 0.5 mcg/mL
- Amphotericin B MIC: 2.0 mcg/mL
- Fortified antibiotics discontinued
- Prednisolone decreased to BID
- Start: Systemic voriconazole 200 mg PO BID and topical 1% Voriconazole QID OD



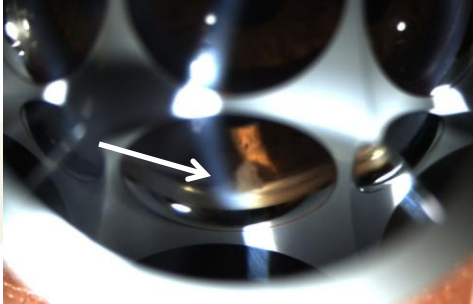
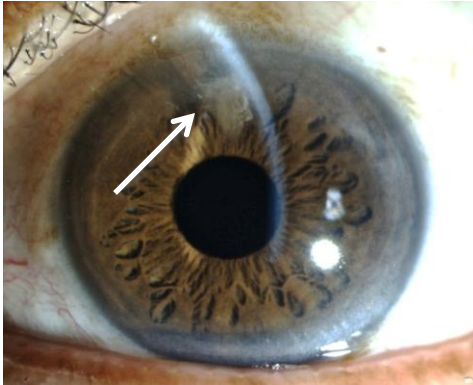
Methods: Patient A, OD



- POW 4: Fungus ball has regrown
- VA excellent at 20/25, thus conservative management pursued
- Authors wanted to give voriconazole the opportunity to reach therapeutic levels
- After 6 weeks topical and systemic Voriconazole, fungus ball nearly extinguished
- Vitreous remains clear



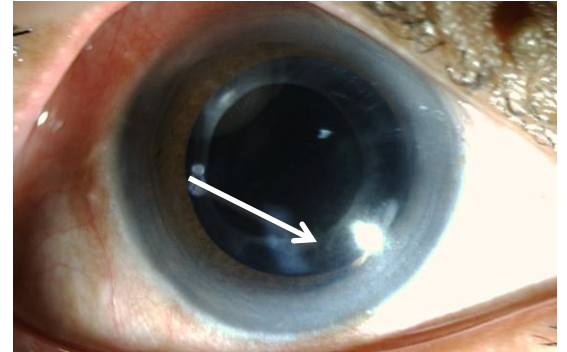
Methods: Patient A, OS



- Fungal hyphae OS presents 6 wks after fungus ball presented in patient's fellow eye
- Growth in AC and vitreous cells despite systemic Voriconazole x 3 weeks prompts PPV with intravitreal voriconazole injection
- Post op Rx: Topical 1% voriconazole QID OS and 1% prednisolone acetate BID OS



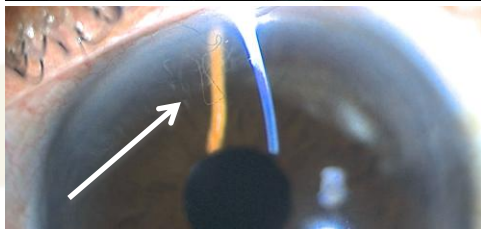
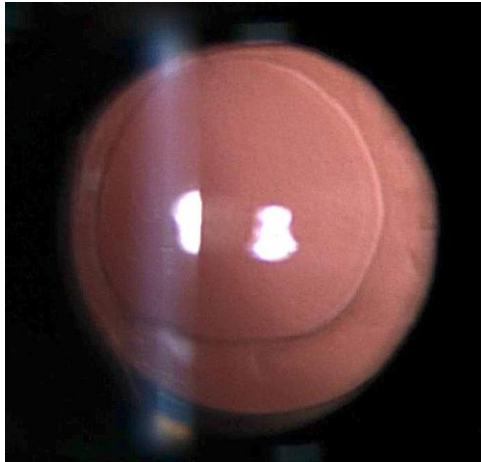
Methods: Patient B, OD



- Spouse of Patient A underwent CE/IOL by the same surgeon, on the same day
- Extensive brown fungal hyphae seen on anterior capsular bag 5 weeks s/p CE/IOL in India
- VA excellent at 20/20
- Plan: PPV and intravitreal voriconazole injection without lens explantation
- Post op Rx: Voriconazole 200mg PO BID, topical 1% voriconazole QID, 1% prednisolone acetate BID



Methods: Patient B, OS



Interestingly, a long blue fiber was seen in the clear corneal incision

- Fellow eye of patient B with only mild AC reaction
- VA 20/20
- A trace amount of brown hyphae was seen on the largely clear capsular bag
- Plan: conservative/medical management given excellent VA and mild AC reaction



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Results

- There is no evidence of fungal recurrences at 6 months follow up for all eyes.
- All four eyes still have persistent trace anterior chamber cells and will continue antifungal therapy for a minimum of 12 months.
- Voriconazole serum trough levels will be obtained.



Results

Age/ Gender	Eye	Pre- operative BCVA	Post- operative BCVA	Follow up (months)	Surgical Intervention	Medical Intervention
61/M	OD	Light Perception	20/20	6.5	¹ Anterior chamber wash out	Voriconazole 200 mg PO BID, topical 1% voriconazole QID
61/M	OS	20/30	20/20	6.5	¹ PPV with intravitreal antifungal	Voriconazole 200 mg PO BID, topical 1% voriconazole QID
59/F	OD	20/20	20/20	6	¹ PPV with intravitreal antifungal	Voriconazole 200 mg PO BID, topical 1% voriconazole QID
59/F	OS	20/20	20/20	6	none	Voriconazole 200 mg PO BID, topical 1% voriconazole QID

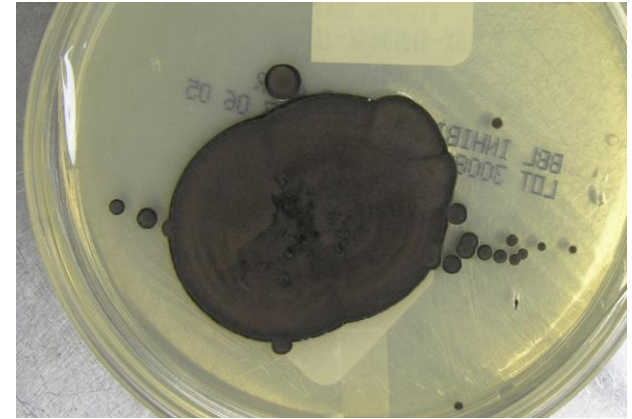
1. Cultures positive for dematiaceous mold



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Conclusion



- This study demonstrates excellent clinical outcomes can be achieved in dematiaceous mold endophthalmitis.
- Cultures and sensitivities are invaluable in atypical courses of endophthalmitis.
- Close follow up examinations and prompt interventions are recommended.

