

Case presentation: Bleb Related Endophthalmitis

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Purpose

Presentation of a case of bleb related endophthalmitis

Materials and Methods

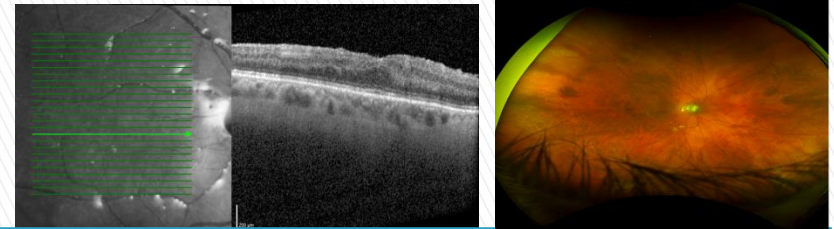
A caucasian lady in her mid 70's presented to the eye emergency department at Galway University Hospital, complaining of acute onset of pain and reduced vision in her right eye. She was known to our unit with bilateral primary open angle glaucoma for which she underwent bilateral trabeculectomies. The trabeculectomy in the right eye was done 10 years prior to her presentation with a redo of the trab same year followed by multiple right bleb revisions and cataract surgery. In the right eye she also previously experienced 2 episodes of a leaking bleb with blebitis without endophthalmitis that were successfully treated with intensive Ofloxacin drop administration. The last episode happened 6 months prior to this presentation.

Her vision at presentation to eye casualty was of light perception (previous bcva 6/12) in her right eye and 6/6 in her left eye.

The slit lamp examination revealed: right eye injection 3+, a white creamy looking superior bleb with Seidel negative, AC cells, fibrin and 1 mm hypopyon. Her intraocular pressure was 4 mmHg in the right eye. Therefore she was admitted to the hospital and underwent vitreous tap and intravitreal injection of vancomycin 1mg and ceftazidime 2mg and was monitored closely. After 48 hours of topical and systemic treatment the patient's visual acuity did not improve and the vitreo-retinal team decided for urgent vitrectomy.

Results

From the vitreous sample there was no pathogen growth on the cultures. At the time of surgery the retina looked ischaemic with diffuse haemorrhages and superior atrophic retinal holes. The operation involved anterior chamber fibrinous membrane and hypopyon removal along with 25 G pars plana vitrectomy, cryotherapy to atrophic holes and silicone oil 1000 cs tamponade. Post vitrectomy, the patient was clinically improved and her vision improved to 6/36 with silicone oil tamponade.



Conclusion

- Patients that undergo trabeculectomy require long term follow-up with possibility of redo operations or bleb revisions depending on the IOP level and degree of fibrosis.
- Assessing bleb leakage with Seidel test at each visit following trabeculectomy is imperative in order to identify a leaking bleb that could potentially lead to associated infections and further complications.
- Even in cases with no bleb leakage there is a risk of bleb related endophthalmitis that has in general a poor prognosis.

References: 1. Higginbotham EJ, Stevens RK, Musch DC, et al. Bleb-related endophthalmitis after trabeculectomy with mitomycin C. *Ophthalmology*. 1996 Apr;103(4):650-656.

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