

# Unexplained vision loss after vitrectomy for floaters

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## Purpose:

Vitrectomy for floaters ('floaterectomy') in an otherwise healthy eye remains a controversial topic. It has recently been the focus of a BEAVRS survey, the results of which we discuss separately as a Rapid-Fire presentation at BEAVRS 2024.

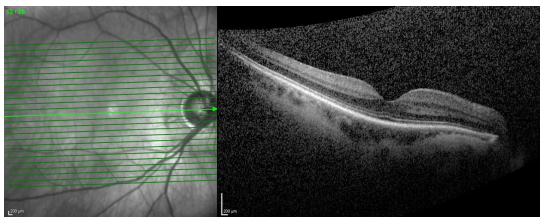
## Setting:

We describe the case of a 50-year-old lady, who underwent a right floaterectomy under general anaesthesia.

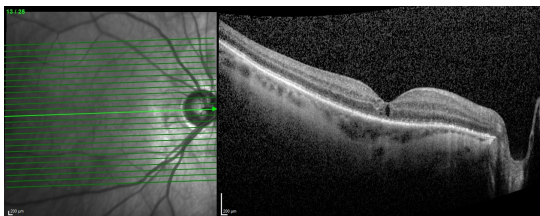
## Methods:

Our patient complained of floaters in both eyes for several years. She was previously myopic, having undergone laser refractive surgery. Following an uneventful and successful left floaterectomy under general anaesthesia (GA), she was consented for the same procedure to her right eye. The surgery lasted 14 minutes under GA with a sub-Tenon anaesthetic. She was noted to be relatively bradycardic (average heart rate 40 beats per minute) and hypotensive (average blood pressure 85/50 mmHg) throughout the entire surgical procedure.

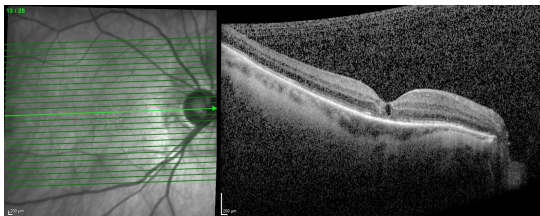
Pre-op



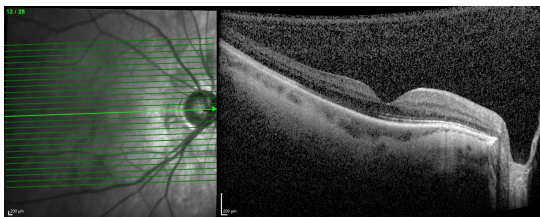
1 week post-op



1 month post-op



4 months post-op



## Methods (continued):

Induction of a posterior vitreous detachment was not required. Cryotherapy was performed to a retinal break and the operation completed with a fluid-air exchange and sub-conjunctival antibiotic.

## Results:

At her one-week postoperative review, right eye best-corrected visual acuity (BCVA) had dropped from 6/9 to 6/36, and she complained of patchy central vision. Optical coherence tomography (OCT) demonstrated marked outer nuclear layer disruption at the central macula. Fluorescein and indocyanine angiography revealed no abnormalities, however reduced choroidal flow was noted on OCT angiography. Four weeks after surgery, right eye BCVA had improved to 6/18 with some resolution of the macular OCT changes.

## Conclusions:

Possible mechanisms of macular damage in this case include hypoperfusion, retinal toxicity from the sub-conjunctival antibiotic and the potential role of the GA. This is a stark reminder of the importance of explaining the surgical risk when consenting patients for a floaterectomy.