

# THE COMBINATION OF BILATERAL COMPLETELY SUBLUXATED LENSES, MACULA OFF-RETINAL DETACHMENT FROM MULTIPLE GIANT TEARS, AND MACULAR TEARS FROM BLUNT TRAUMA

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### Introduction

Blunt ocular trauma can lead to complex damage within the eye, often affecting multiple structures simultaneously. In severe cases, bilateral lens subluxation, particularly when coupled with retinal detachment from giant retinal and macular tears, presents unique challenges in clinical assessment and surgical intervention. However, this combination of bilateral subluxated lenses and complex retinal injuries poses procedural difficulties. This paper aims to explore the surgical outcome and management strategy for a patient presenting with this rare and intricate combination on injuries following blunt trauma.

#### Settings

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## Methods

A 33-year-old Caucasian male with a long history of psychiatric disorder and self-harming was referred to Eye Casualty for gradual onset reduced vision after intentionally banging his head on a headlamp. Despite being uncooperative during examination, perception of light vision with normal intraocular pressure was noted. Slit lamp and fundus exams revealed severe intraocular damage, including complete lens subluxation and retinal detachment. B-scan showed retinal detachment in both eyes (Picture 1 - right eye; Picture 2 - left eye).





Pre-operative biometry was impossible to obtain. B-scan measured the anterior chamber depth (ACD) and axial length (AL). Keratometry values were estimated based on standard reference ranges. No prior optometric records were available to determine if the patient had a history of myopia, hyperopia, or emmetropia.

He underwent a single surgical procedure under general anesthesia for bilateral lensectomy, vitrectomy, and anterior chamber intraocular lens implantation.



Picture A,B: intraoperative aspect of the right eye; the arrow points to the arrowhead macular tear



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Picture C,D: intraoperative aspect of the left eye; the arrow points to the arrowhead macular tear

#### Results

Following surgery, the visual acuity improved, with a stably attached retina under silicone oil. The anterior chamber intraocular lens was in position bilaterally, with normal intraocular pressure. Due to the patient's lack of cooperation, administering postoperative treatment was challenging, as he occasionally refused the medication. The postoperative treatment period was extended, necessitating prolonged steroid therapy. Despite this, his visual acuity remained at the level of counting fingers.

#### Conclusions

Managing retinal detachment with complete lens subluxation is challenging, especially in a patient with variable cooperation. The finding of bilateral arrowhead macula tears is unusual. The patient's psychiatric background complicates surgical planning and interferes with postoperative recovery.