Visual restoration after a penetrating ocular injury

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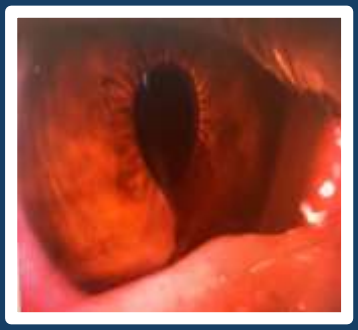
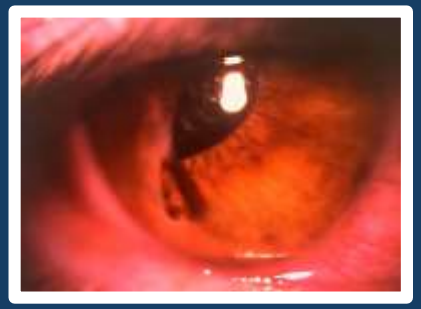
PURPOSE

To report a patient’s case, who sustained a full-thickness, penetrating ocular injury caused by the direct impact of a falling walnut and at the 5th month of recovery, he sustained a new one.

INTRODUCTION

Usually only 6.8% to 14.7% of ocular traumatic injuries are presented in an emergency medical setting. Is mostly commonly seen in the male population, because is classically associated with high-speed projectiles or sharp objects, but blunt contusions can also result in corneal rupture.
We classify the corneal laceration in partial thickness or full thickness and we continue the treatment accordingly.



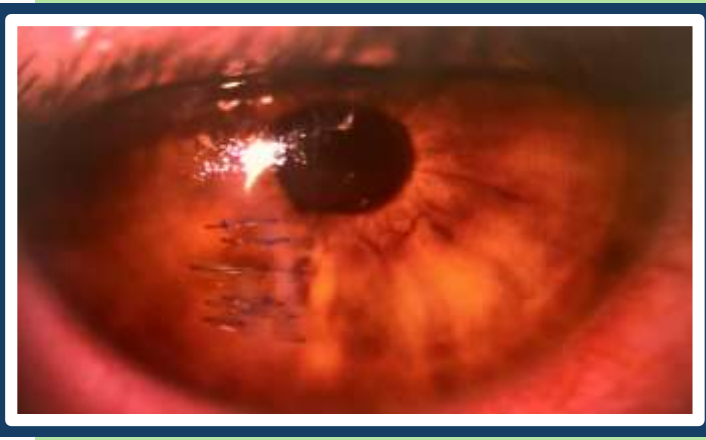


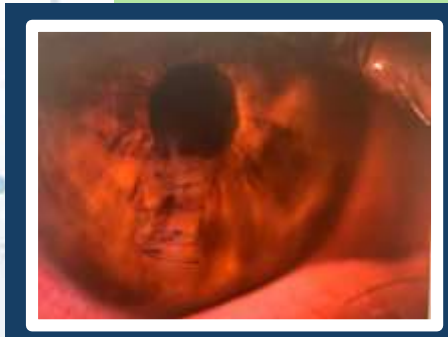
METHOD

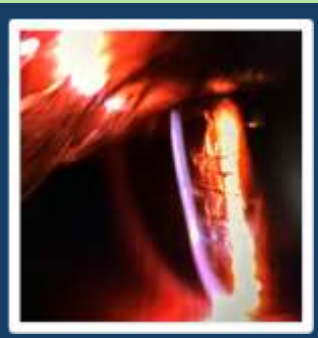
The patient arrived at our department two hours post-trauma. His iris was prolapsed creating a tamponade of the wound. He was taken directly to surgery, where the iris was repositioned into the anterior chamber and six corneal sutures were placed.

Postoperatively, the patient was hospitalized for intravenous antibiotics in combination with topical antibiotic and anti-inflammatory therapy. Due to an excellent initial clinical image, he was discharged on the second postoperative day with follow-up.

On the fourth day, we did a fundoscopic examination, which confirmed that other intraocular structures weren’t affected.





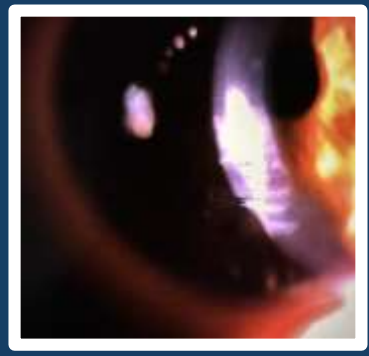


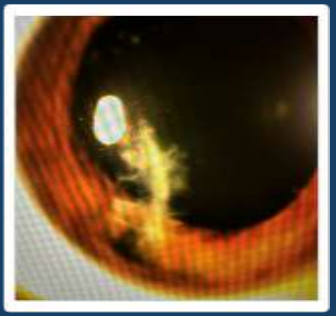
RESULTS

Regular follow-up was maintained weekly and, then on a monthly basis. At the fifth postoperative month, we started the removal of the corneal suture. Unfortunately, the patient suffered a second trauma to the same area caused by a foreign body. It was a partial thickness laceration. He went to an external ophthalmologist, who removed the foreign object and gave him topical treatment. Unfortunately, the wound was infected and created severe inflammatory response, accompanied by significant vision loss.

The patient started a topical treatment with corticosteroid and antibiotic drops, resulting in improvement within one week. By the third week, the inflammation had fully resolved, and visual acuity had returned to pre-injury levels. Fundoscopy again revealed no posterior segment involvement.

Suture removal continued gradually, and upon removal of the final suture, the patient's visual acuity had recovered to 9/10.





CONCLUSION

This case highlights the importance of close monitoring following ocular trauma, as well as the potential for full visual recovery despite severe complications, when managed appropriately.