

Prosthetic Tinted Lens Use to Manage Symptoms Secondary to a Traumatic Eye Injury

Purpose

Traumatic injuries to the eye can lead to a cascade of symptoms that can be debilitating to patients. Loss of vision, eye pain, headaches, and photophobia are often common symptoms for patients that have suffered from a traumatic injury. This case report discusses the use of a prosthetic tinted lens to relieve the symptoms of a patient that had suffered an eye injury.

Methods

Case Presentation

A 15-year-old white male presented with a complaint of photophobia and headaches. The photophobia was described to be worse in the right eye. The headaches were described as constant with severity ranging from 6/10 to 10/10. The patient's past ocular history was positive for a traumatic injury to the right eye while playing baseball two years prior. The patient had been referred by his another optometrist for a specialty lens fitting.

Methods

Exam Findings

Presenting acuity was light perception only in the right eye and 20/20 in the left eye. Extraocular motilities showed 1+ under action of the superior rectus in the right eye and were normal in the left eye. Confrontation visual fields revealed a total central scotoma in the right eye and full to finger counting in the left eye. Pupil testing revealed a fixed, 7.5mm dilated pupil in the right eye with a positive APD and a round, reactive, 5mm pupil in the left eye. Slit lamp examination was unremarkable aside from an irregular, dilated iris in the right eye. An Orion BioColor tinted lens was placed on the patient's right eye to reduce the amount of light entering the pupil. The lens had a clear, 5mm pupil but a painted, opaque iris. The patient reported immediate photophobia symptom relief. A color matched lens was then ordered and dispensed to the patient at a later follow up. Over the next few months the fit of the lens was altered slightly to achieve optimal comfort throughout the day and an opaque pupil was added to the design to further decrease light entering the eye.



Right eye posterior pole fundus photo



Prosthetic tinted lens in place



Orion BioColor lens design options

Results

Long term treatment and management of traumatic injuries often depends greatly on the symptoms of the patient. Once the acute nature of the problem has been managed, patients often need continued therapy to treat the chronic sequelae of the initial insult. The use of prosthetic tinted lenses has been shown to improve photophobia and cosmesis in patients with irregular irides.

Conclusion

Chronic sequelae of traumatic eye injuries can be devastating. However, with proper management, patients can experience symptomatic relief.

References

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