

# Sickle Cell Trait and Glaucoma Post-Hyphema: Tips to Protect Your Patient's Vision



**People with sickle cell trait (SCT) who experience an eye injury are more likely to develop glaucoma post-hyphema. This condition can lead to impaired vision and may even cause permanent eye damage. Therefore, if you have a patient with SCT who has suffered an eye injury, it is important that they are evaluated right away by an ophthalmologist who can closely monitor their care.**

## What is glaucoma post-hyphema?

Hyphema, the presence of blood in the anterior chamber of the eye, may follow eye injury. It occurs at a rate of 2 per 10,000 individuals in the general population. Glaucoma, or increased intraocular pressure, may occur after hyphema, and in that case is known as glaucoma post-hyphema.

## Who is at risk for glaucoma post-hyphema?

People with SCT are at increased risk of glaucoma post-hyphema. Therefore, individuals with SCT and hyphema require urgent evaluation and close monitoring by an ophthalmologist.

## What are the signs and symptoms of glaucoma post-hyphema?

Trauma to the eye followed by eye pain, sensitivity to light, and vision changes, such as decreased vision or vision loss, may suggest that a hyphema has occurred. Sometimes hyphema can lead to glaucoma and damage to the optic nerve. So once hyphema has occurred, persistent vision impairment suggests rebleeding or glaucoma. Any trauma to the eye should be treated as a medical emergency, and the individual with SCT should seek immediate medical attention.

## What treatments are available for glaucoma post-hyphema in a person with SCT?

Treatment of hyphema in individuals with SCT should be provided by an ophthalmologist. Initial treatment for hyphema includes eye protection to limit further trauma, and might also require bedrest and sedation for those who are found to have an increased risk for rebleeding. Since there is a significant risk for glaucoma post-hyphema, the ophthalmologist must also be familiar with prevention and management of glaucoma. The ophthalmologist should also be made aware that the person has SCT since some medications used to treat increased intraocular pressure might cause sickling complications in individuals with SCT. If intraocular pressure cannot be managed in 24 hours, surgical intervention will be necessary.

## What does a healthcare provider who is taking care of a person with SCT need to know about glaucoma post-hyphema?

Any person with SCT who experiences eye trauma should seek immediate attention and care by an ophthalmologist, and he or she should inform the ophthalmologist about having SCT. People with SCT who experience hyphema should be closely followed to monitor any complications. If urgent care is required, they should go to the nearest emergency room.



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