

WHAT IS A HYPHEMA?

A hyphema is when blood collects between the clear front part of the eye (cornea) and the colored part of the eye (iris).

WHAT CAUSES A HYPHEMA?

A hyphema usually happens because of a strong hit to the eye, especially during sports or play. Sometimes it can happen after surgery or if there are abnormal blood vessels in the eye. In rare cases, certain medical problems like juvenile xanthogranuloma and cancer can cause a hyphema.



Fig. 1: A hyphema: an accumulation of blood in the anterior chamber (front part of the eye)

WHAT ARE THE SYMPTOMS OF A HYPHEMA?

People with a hyphema often have eye pain, blurry vision, loss of vision, and sensitivity to light. In some cases you can even see the blood in the eye without any special tools.

HOW IS A HYPHEMA DIAGNOSED?

An eye doctor, called an ophthalmologist, will do a detailed eye checkup. They will do many things like check vision, measure eye pressure and look in the eye with a special light. They might also use eye drops to make the pupils (dark spot in the center of the colored part of the eye) larger and check the back of the eye. This helps to make sure there are no other problems like retinal detachment, cataract, or more blood in the eye.



HOW IS A HYPHEMA TREATED?

When treating a hyphema, the goals are to help clear the blood out, make sure the eye pressure stays normal, and prevent more bleeding. It is important for a person with a hyphema to rest and limit their activity for several days. The head should be kept higher than the feet, even while sleeping, and the eye needs to be protected with a shield. Doctors may prescribe steroid eye drops to help with inflammation and dilating drops (to make the pupil bigger) to help with pain. With a hyphema, it is important not to take aspirin or ibuprofen as they can make the bleeding worse.

Sometimes, the blood from a hyphema can clog normal eye drainage and cause high eye pressure. If the eye pressure stays too high for too long this can cause glaucoma and permanent eye damage. This can be more common in people with sickle cell anemia.

IS SURGERY EVER INDICATED FOR A HYPHEMA?

If the blood does not clear with rest and medication or if the eye pressure is too high for too long, then surgery may be needed to remove the blood.

ARE THERE ANY LONG-TERM EFFECTS FROM A HYPHEMA?

While many people heal well from a hyphema and get their vision back, there can be complications. If the eye bleeds again while healing or other parts of the eye are injured, there may be permanent vision problems. Sometimes the eye's drainage canals are damaged due to the injury, causing glaucoma (vision loss from high eye pressure). An ophthalmologist can check for damage to the drainage canals with special tools and testing and then decide if ongoing monitoring is needed. It is important for parents, schools, and communities to encourage use of eye protection during sports and play to prevent eye injuries, including hyphema.

More scientific information on hyphema can be found:

- <https://eyewiki.org/Hyphema>

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