

Hyphema

Hyphema is a term used to describe bleeding in the anterior chamber (the space between the **cornea** and the **iris**) of the eye. It occurs when blood vessels in the iris bleed and leak into the clear **aqueous fluid**. Hyphemas are usually characterized by pooling of blood in the anterior chamber that may be visible to the naked eye. The red blood cells of very small hyphemas are visible only with magnification. Even the slightest amount of blood in the anterior chamber will cause decreased vision when mixed in the clear aqueous fluid.

Bleeding in the anterior chamber is most often caused by blunt trauma to the eye. It may also be associated with surgical procedures. Other causes include abnormal vessel growth in the eye and certain ocular tumors.



Signs and Symptoms

- Decreased vision (Depending on the amount of blood in the eye, vision may be reduced to only hand movements and light perception only)
- Pool of blood in the anterior chamber
- Elevated **intraocular pressure** (in some cases)

Detection and Diagnosis

It is very important for the doctor to determine the cause of the hyphema. If the hyphema is related to an ocular injury, any detail regarding the nature of the trauma is helpful. The doctor will assess **visual acuity**, measure intraocular pressure, and examine the eye with a **slit lamp microscope** and **ophthalmoscope**.

Treatment

The treatment is dependent on the cause and severity of the hyphema. Frequently, the blood is reabsorbed over a period of days to weeks. During this time, the doctor will carefully monitor the intraocular pressure for signs of the blood preventing normal flow of the aqueous through the eye's **angle structures**. If the eye pressure becomes elevated, eye drops may be prescribed to control it. The **pupils** are also evaluated to rule out damage to the iris.

In some cases, a procedure is performed to irrigate the blood from the anterior chamber to prevent secondary complications such as **glaucoma** and blood stains on the cornea.