

## TRAUMATIC HYPHEMA

Bleeding in the anterior chamber, the small space inside your eye between the cornea (transparent outer surface) and the iris (colored part) is called a hyphema (hy-fee-muh). It is caused most commonly by a blow to the eyeball that tears a blood vessel inside. For this reason, it is referred to as traumatic • hyphema (trauma means injury).

Fists, baseballs, softballs, tennis balls, racquetballs, snowballs, rocks B-Bs and pellets from guns, and many other sources can do great damage. The damage can stem from the injury itself or from the hyphema caused by it.

### *Why is a hyphema serious?*

The anterior chamber is filled with a watery fluid (called the aqueous) that circulates within the eye and eventually leaves the eye through tiny drainage channels to enter the bloodstream. If blood blocks those channels so that the fluid cannot readily leave the anterior chamber, pressure can build up within the eyeball. Too much pressure can cause secondary glaucoma, a dangerous and sometimes painful condition that can eventually destroy vision. This is not usually a concern at first, but it becomes much more likely if there is more bleeding a few days after the original hyphema.

Aside from the hyphema, the injury causing it may also cause other damage to the eye, especially if the eye has been torn or penetrated. Other delayed effects from the injury may include retinal tears, retinal detachment, and cataract.

### *Treatment*

The most important part of the initial treatment of hyphema is eye rest, for which hospitalization is often necessary. There is a five-day danger period for re-bleeding and for the more severe problems stemming from the new hemorrhage. During this time, the eye is usually patched and/or covered with a shield to protect it from being bumped, rubbed, or irritated in anyway that could cause the broken blood vessels to bleed again. Oral or systemic medications are usually

given to reduce the chances for re-bleeding. If the patient is restless, a sedative or tranquilizer may also be prescribed. Children and adolescents, especially, may need to be hospitalized for several days if they cannot be kept quiet with bed rest at home. If re-bleeding does occur, it is a threat to eyesight, so major medical and surgical treatment may become necessary.

### *Prognosis*

Fortunately, most hyphemas treated appropriately do not develop serious re-bleeding and secondary glaucoma. But the eye does not tolerate any type of trauma well, and even with the best of care, some eyes will develop serious complications and visual impairment.

If you have had a traumatic hyphema, it is wise to have annual eye examinations for many years afterwards, to watch for the development of late-occurring complications.