

# Glaucoma

Glaucoma is a serious eye disease caused by increased pressure inside the eye. Some babies are born with glaucoma. Prompt diagnosis and treatment are needed to save the child's vision. In other infants or in older children, glaucoma may result from injuries or other eye diseases.

## What is glaucoma?

Glaucoma refers to several types of eye diseases in which the pressure inside the eyeball is higher than normal. This causes damage to the optic nerve, which is essential for vision. The optic nerve damage may lead to blindness.

Glaucoma is relatively rare in children, but it can occur. Most infants and toddlers with glaucoma have the congenital form of the disease: they are born with an abnormality that doesn't allow normal drainage of fluid from the eyeball. Glaucoma can also result from other eye defects or diseases or from trauma.

Glaucoma requires expert treatment to protect your child's vision. Unfortunately, glaucoma can be difficult to recognize in children. Treatment often includes surgery.

## What does it look like?

The typical symptoms of glaucoma in infants are tearing, sensitivity to light, and hard blinking. Other symptoms may include:

- "Bloodshot" eyes—redness of the white part of the eye.
- Big irises (the colored part of the eye).
- Clouding of the cornea (the normally clear part of the eye that covers the iris and pupil). This makes the irises appear cloudy.
- Enlarged eyes. This may be more noticeable if just one eye has glaucoma.
- Vision problems; these can be difficult to recognize in infants.

## What causes glaucoma?

- In most infants with glaucoma, the disease is caused by an abnormality of the drainage system of the inner eye.
- Glaucoma in infants may also occur as part of more complex eye problems and congenital (present from birth) diseases.
- Later in childhood, glaucoma may result from eye injuries, including bleeding inside the eye (not on the white

part of the eye). It can also be a complication of other diseases.

## What are some possible complications of glaucoma?

Vision loss is the main complication. The goal of treatment is to preserve your child's vision as much as possible.

## What puts your child at risk of glaucoma?

- Certain genetic diseases.
- Other eye diseases, eye surgery, and severe eye injuries.

## Can glaucoma be prevented?

- Most of the time, there is no way to prevent childhood glaucoma. If you or others in your family have genetic diseases associated with glaucoma, genetic counseling may help you to understand this risk.
- Make sure your child wears protective eyewear when playing certain sports (for example, racquetball) or during other activities that could result in objects flying into the eye.

## How is glaucoma diagnosed?

- Glaucoma is suspected if you or your doctor notices the typical symptoms in your child: light bothering the eyes, blinking, redness and tearing.
- If glaucoma is suspected, we will recommend a visit to an eye specialist (ophthalmologist). The ophthalmologist will perform a test called tonometry to measure pressure inside the eyeball. The test is painless, but an anesthetic may be placed into the eye to numb it.
- Determining the exact cause and type of your child's glaucoma is essential to deciding on the best treatment.

## How is glaucoma treated?

- Treatment for glaucoma varies, depending on the cause. At all times, the goal of treatment is to reduce the pressure within your child's eye to as close to normal as possible! This prevents further loss of vision.
- Surgery is usually needed for children with glaucoma. One of several different procedures may be recommended, either to allow fluid to drain from the eyes or

to reduce the amount of fluid produced. Some children require repeated eye surgeries as they grow.

- Other treatments may be needed as well, including special glasses and medications. The eye doctor will monitor your child's vision closely to achieve the best possible results.



### **When should I call your office?**

Children being treated for glaucoma should have regular follow-up visits to the eye doctor. Call your eye doctor if there is any change in your child's vision.