



NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.

Helping Hand™

Health Education for Patients and Families

Pediatric Glaucoma

Glaucoma (glaa-**kow**-muh) is a group of diseases that cause damage to the optic nerve. It occurs when eye pressure is too high. In most cases, high eye pressure occurs when the fluid in the eye (aqueous humor) doesn't drain properly. Glaucoma is most common in adults, but people of any age can develop it. It is a serious vision-threatening disease. Children who have glaucoma need to be closely monitored because glaucoma is usually a lifelong problem.

Other names for pediatric glaucoma are:

- Congenital glaucoma: birth to 3 years of age
- Juvenile glaucoma: after 3 years of age
- Some causes of secondary glaucoma include:
 - Reiger syndrome, not having an iris (aniridia), Sturge-Weber syndrome, inflammation Neurofibromatosis, retinopathy of prematurity, long-time steroid use, trauma, and surgery to remove a cataract. Not all patients with these conditions will develop glaucoma.

Signs and Symptoms

Common signs and symptoms of pediatric glaucoma are:

- Excessive tearing
- Eye pain (only if the pressure is extremely high). Most patients with glaucoma do not have pain.
- Being sensitive to light
- Loss of side (peripheral) vision
- Having a large cloudy cornea

However, pediatric glaucoma can develop without any of these signs. People with a family history of glaucoma have a higher risk of developing it.

Diagnosis

To diagnose glaucoma in children, your child's eye doctor (ophthalmologist) will perform a complete dilated eye exam in the office or under general anesthesia in an operating room.

During the eye exam, they will check:

- The intraocular (inside eye) pressure (IOP).
- The drainage angle of the eye.
- Axil length (length of eye from front to back).
- Perform tests to evaluate nerve cupping (size of the depression in the middle of the nerve) and nerve damage.
- The focus power of the higher. This can change due to poorly controlled pressures.

Treatment

Treatment for pediatric glaucoma begins by lowering your child's IOP. This is done by using eye drops or prescription medicine your child takes by mouth.

If the medicine doesn't work, other options include the following:

- Trabeculotomy (surgery to help eye fluid drain)
- Goniotomy (procedure to open up the drainage angle)
- Trabeculectomy (a surgery to help drain eye fluid in children)
- Tube shunt
- Laser procedure to destroy some of the ciliary body that makes the fluid

Children with glaucoma often have many surgeries and appointments because if the pressure in the eye is not controlled for even a short time, the vision can be damaged forever.

What to Do at Home

- Use eye drops or oral medicine as prescribed by your child's doctor or health care provider.
- Watch for signs and symptoms of eye pressure not being controlled.

Follow-up Care

Your child will have regular follow-up appointments with an ophthalmologist.