

When Mrs. & Mr. Patil had their first daughter 8 months ago they were very joyous. The baby was very healthy and had a “beautiful large eyes”. After two weeks the mother felt that baby use to have excessive tearing whenever their use to be bright sunlight and the clear central part of eye had blue shadow. They took the baby to pediatrician who asks them to go and visit nearby ophthalmologist. The ophthalmologist suspected “primary congenital glaucoma” and ask patient to visit “Bombay City eye Institute & Research Centre” for further management. The baby was examined under anesthesia and the diagnosis was confirmed. Her corneal diameter was 12 mm (normally for 1 month old child the corneal diameter would be approximately 10 mm) and the eye pressure was 26 mm Hg with corneal edema (normally in 1 month old child the eye pressure would be 10- 12 mm Hg). The parents were counseled about the gravity of situation and the baby was operated for glaucoma surgery (to control her eye pressure). After both eye surgeries, the eye pressure now is approximately 12 mm Hg, cornea is clear. The mother is very happy as baby is able to recognize her and able to see. Now 3 years after the surgery the baby’s eyes are still large but it is clear and has a good vision to see this world.

Primary Congenital Glaucoma (PCG) is very rare but sight threatening disorders in children. Contrary to adult glaucoma, diagnosis of congenital glaucoma doesn’t depend on optic disc damage and visual field changes (documented on perimetry). Rather for diagnosis of Primary Congenital glaucoma, parameter like IOP, corneal diameter, corneal edema are considered crucial. Visual field testing is also not possible before surgery due to corneal clouding at the time of presentation in PCG. Surgery is only treatment option in primary congenital glaucoma and at the same time long-term surgical success is moderate. Hence the need for life long monitoring for early detection of progression is essential.

It is usually seen in one in 10,000 live birth in india. It is more common is population where there is higher rate of consaganious marriage. In most cases, childhood glaucoma is diagnosed by the age of six months, with 80 diagnosed by the first year of life.

Signs of Childhood Glaucoma

- Unusually large eyes
- Excessive tearing
- Cloudy eyes
- Light sensitivity

Symptoms:

Symptoms of childhood glaucoma include enlarged eyes, cloudiness of the cornea, and photosensitivity (sensitivity to light).

How is it Treated?

In an uncomplicated case, surgery can often correct such structural defects. Childhood glaucoma is usually a surgical disease and medication is usually required till surgeon plans out the surgery and get anesthesia clearance. Medical treatments may involve the use of topical eye drops and oral medications.

There are two main types of surgical treatments: filtering surgery and laser surgery. Filtering surgery involves the use of small surgical tools to create a drainage canal in the eye.

In a complicated childhood glaucoma, surgeon may decide to implant the drainage device with valve to control the eye pressure.

Signs and Symptoms of Childhood Glaucoma

What to watch for in children under the age of two:

- Does your child have unusually large eyes?
- Is there excessive tearing in your child's eyes?
- Are your child's eyes cloudy?

Other signs for all children under 18:

- Are your child's eyes particularly sensitive to sunlight or a camera flash?
- Have you noticed significant vision loss in your child?
- Do your child's eyes have difficulty adjusting in the dark?
- Does your child complain of headaches and/or eye pain?
- Does your child have red eyes all the time?

Other conditions to be monitored:

- Any child with eye injury or a history of a serious eye injury.
- Any child who has had cataract surgery. (Up to 30 % of patients can develop glaucoma after the surgery.)

