

Eye Problems in Children

“Twinkle twinkle little star”

Good eye health and clear vision are very important for the development of children. With proper vision, children gain knowledge and skills which will remain with them their entire life.

Certain eye disorders like refractive errors, squint and amblyopia(lazy eye) mainly affect children. Children are different from adults in the sense that a child’s brain develops more rapidly. Any problem a child experiences with his vision will disrupt the development of his usual pathways to the brain and can cause permanent visual impairment. Early detection and treatment can prevent visual loss, learning disabilities and delayed development. Children often cannot tell us when they are having problems with the using of their eyes. Parents, grandparents and teachers are often the first people to suspect that a child has a problem and the earlier a problem is detected and treated, the more successful the treatment.

Some of the warning symptoms that indicate that the child may have a visual problem and which warrants a consultation of an eye specialist are:

1. The baby does not focus or follow objects nor do they make eye contact by three months.
2. Eyes are constantly watering and are sensitive to light.
3. Involuntary to& fro movements of the eyes.
4. Redness in either eye for few days.
5. Child tilts his head or his eyes appear to constantly or intermittently turn in/out/up/down.
6. Eyelids tend to droop.
7. Child constantly rubs his eyes.

8. White colour in the centre of the Iris in the eye (dark coloured area of the eye).
9. Child complains of headache or feeling of tiredness after reading.
10. Child holds his book very close to his face or is unable to see the words written on the board at school.

Recommendations for eye testing in children:

1. New-born : all new-borns are examined in the nursery for eye infections, abnormal light reflexes and other disorders such as cataract.
2. 6 months : visual screening of infants should be performed especially for evaluation of squint.
3. 3-4 years : formal visual activity tests and complete eye examinations.

Some of the common eye problems seen in children are:

Refractive errors:

- a) Myopia(near sightedness)- image from a distant object is focused in front of the retina and causes distant objects to appear out of focus, leading to headache. Glasses have to be worn to bring the image to focus on the retina.
- b) Hypermetropia(far sightedness)- image from objects fall behind the retina causing near objects to appear out of focus giving way to fatigue, eye-strain, eye- throbbing, difficulty in reading and squint. Glasses have to be worn to bring the image into focus.
- c) Astigmatism- image of an object falls at two focal points in two different locations thus causing distant and near objects to appear blurred causing fatigue and eye-strain.

Strabismus (squint)

Squint is a misalignment of the two eyes in which either one or both eyes may turn inward / outward / upward / downward. It occurs due to failure of the eye muscles to work together. If a parent feels that a child's eye appears to be deviating, they should consult the ophthalmologist immediately since delay in treatment can cause permanent visual impairment.

A child will outgrow his squint is a myth. It can cause profound visual impairment. Treatment options for a child with squint may include glasses, eye exercises or surgery to straighten the eyes.



Fig. (5.a) Deviation of the eye



Fig. (5.b) Before Surgery



Fig. (5.c) After Surgery

Amblyopia (lazy eye)

Amblyopia or lazy eye is reduced vision in an eye which had not received adequate stimulus during early childhood. It can occur due to squints, refractive errors etc... The eye which has good vision suppresses the image from the other eye which becomes weak and if not treated in time becomes lazy or useless.

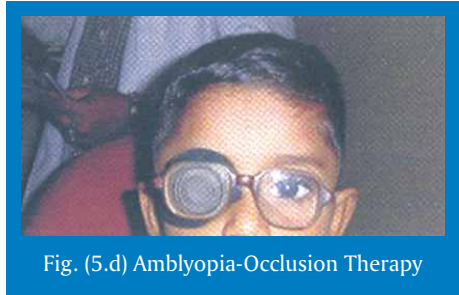


Fig. (5.d) Amblyopia-Occlusion Therapy

With early treatment the sight in the lazy eye can be restored by first treating the underlying cause. This is followed by patching the better eye for a variable period of time forcing the lazy eye to work by strengthening its vision. Medication in the form of drops or ointment to blur the vision of the good eye can also be used in addition to force the weaker eye to work.

Retinopathy of pre maturity(ROP)

ROP is a disorder of the blood vessels of the retina (light sensitive part of the eye). It is seen in premature and low birth weight babies. In ROP the blood vessels can bleed causing retinal scarring and detachment resulting in visual loss. Early stages of ROP show improvement without treatment but serious eye damage can occur in later stages. In order to prevent visual complications all premature babies born before 28 weeks should undergo regular eye screening from four weeks of age and if they show signs of severe ROP, treatment like laser, cryotherapy or surgery may have to be undertaken.

Eye Injuries in Children

Injuries in children can cause serious eye damage which can be prevented with a few safety precautions like:

1. Select toys appropriate for the child's age and activity. Children should not be allowed to play with toys with sharp edges or toys which fly or shoot.

2. Children should be provided supervision for activities that use sharp objects such as in arts and crafts.
3. Hazardous cleaning agents and sprays should be kept out of reach of children.
4. Children should not be allowed to ignite fireworks and should never stand near others who are doing the same since fireworks are potentially dangerous for children of any age.
5. Children should wear appropriate eye-wear during sports/recreation/lab activities.

First Aid for Childhood Injuries

- a) Instruct the child not to rub his eye.
- b) Do not try to remove particles from a child's eye.
- c) In case of a chemical injury wash the eyes with clean water.
- d) Seek medical help immediately.

Caveats

- Squint is not a sign of luck.
- Squint present since birth is called congenital squint and will require surgery.
- Squint if left uncorrected can lead to loss of vision in squinted eye(lazy eye).
- Certain types of squint can be corrected by glasses (Accomodative Esotropia)
- It is essential and very important to prevent and correct eye problems in children so as to restore and regain the normal vision.
- Any eye problem in Children should be immediately treated to avoid future visual problem.
- All Children should be examined by an ophthalmologist regularly