



Eye Health Center of Troy

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Medicine Resident Teaching Series: Pediatric Eye Exam

When do I take my child for an eye examination?

Like a lot of other things in a child's early development, vision is firmly established by the time the child is 7 years old although recent research suggests that the process can go until the 10th birthday.

For a primary care giver, the basic skill of detecting the presence (or absence) of a red reflex is very crucial. Absence of red reflex can be due to congenital cataract or retinoblastoma, both needing immediate attention. Hence the red reflex sign is very important in a baby. A baby less than 3 months old cannot focus on a test object so concerns about crossing or wandering eyes, though taken seriously, can be monitored conservatively provided the red reflex is good. If one is not certain of the ocular alignment after 3-6 months of age, a referral to ophthalmology is warranted. Formal testing of visual acuity with the help of eye charts is not possible until the child is verbal. Other clues, such as, the parents observing the child sitting too close to the TV, squinting or holding books too close to the face should be looked for. These concerns should be addressed by testing the visual acuity in the office. At this time care should be taken to test each eye separately, the other eye is occluded well with a piece of 2-inch adhesive paper tape or an ocular occluder. Occluding the other eye with a hand may cause the child to "peek" through the gap between fingers leading to overestimated visual acuity. Visual acuity is usually tested by an ancillary staff; they should be taught the right technique.

Most common cause of blurry vision in kids is refractive error. Refractive error occurs when the light entering the eye does not focus on the retina (emmetropia) but either in front of retina (myopia) or behind the retina (hyperopia or hypermetropia). When the light focuses on more than one focal point the eye has astigmatism. Different lens designs correct different types of refractive errors.

TIP : Red reflex is seen by peeking through the direct ophthalmoscope. Using a flash light does not produce red reflex because not enough light reaches the retina to be reflected back.

Stereoscopic vision: Great screening tool.

Children love to put on 3D lenses to look at objects in a 3-D plane.