

Congenital Cataracts

BIRTH DEFECT RESEARCH FOR CHILDREN



What are Congenital Cataracts?

A Congenital Cataract is a clouding of the eye's lens that occurs in the developing baby at some point during pregnancy. The lens of the eye is located behind the colored iris. Its job is to help focus light entering the eye. When a cataract is present, vision can be impaired because light cannot properly reach the retina, which is the inner layer at the back of the eye. Congenital Cataracts can occur in one or both eyes.



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How many children have Congenital Cataracts?

Congenital cataracts affect one out of every 250 newborns. About one-half of these babies also have other eye defects.

How do you know if your child has Congenital Cataracts?

Most Congenital Cataracts are invisible until they become dense enough to cause loss of sight. The lens of the child's eye will no longer look transparent. A whitish or grayish discoloration can appear in an otherwise normally dark pupil. Parents are usually the first to notice these signs and suspect a vision problem. A doctor can detect Congenital Cataracts by examining a child's eyes with a special lamp called a slit lamp, by the use of ultrasound, or by a standard eye exam.

A doctor may suspect that a newborn will have congenital cataracts due to risk factors such as a family history of cataracts, specific prenatal exposures, inherited metabolic diseases, or some of the syndromes listed in the next section. In these situations, the doctor can examine the newborn's eyes and detect cataracts with a slit lamp.

What causes Congenital Cataracts?

Approximately one third of congenital cataracts are hereditary. They may be caused by an abnormality in a gene that is inherited from one parent. Other congenital cataracts may be caused by exposure to viruses, radiation, or certain medications as well as metabolic diseases and some syndromes.

A partial list of potential causes of Congenital Cataracts includes:

Galactosemia (inability to metabolize simple sugar galactose)

Congenital rubella syndrome (German/three-day measles)

Lowe syndrome (characterized by lack of muscle tone, mental retardation, and problems with eyes and kidneys)

Down syndrome (chromosome abnormality resulting in mental retardation and other abnormalities)

Pierre-Robin syndrome (characterized by shortness of the lower jaw and cleft palate)

Hallerman-Streiff syndrome (characterized by malformed head and facial bones with eye abnormalities)

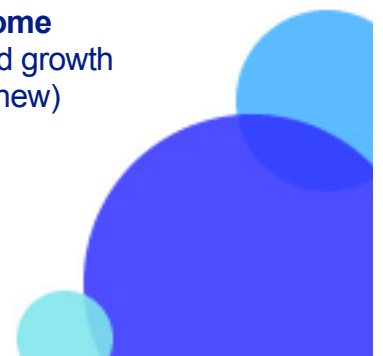
Cerebrohepatorenal syndrome (characterized by head and facial abnormalities and problems with liver and kidneys)

Trisomy 13 (central nervous system defects and mental retardation with cleft palate and heart abnormalities)

Conradi syndrome (growth deficiencies and unusual facial characteristics)

Ectodermal dysplasia (abnormal development of skin, hair, nails, teeth and sweat glands)

Marinesco-Sjogren syndrome (characterized by mental and growth retardation with inability to chew)



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In many cases of congenital cataracts the cause cannot be determined and genetic counseling is suggested.

How can you help a child with Congenital Cataracts?

Early detection and treatment of congenital cataracts can prevent blindness. Some cataracts cause little vision loss and no treatment is necessary. Other cataracts must be surgically removed by an ophthalmologist (medical doctor who specializes in eyes). Surgery can be performed when babies are only a few days old. The surgery is a short operation requiring general anesthesia. The child will feel little or no pain and will be able to go home after a few hours or the next day. The child will wear a protective pad over the eye for a short time and activity will be restricted for up to one month. Eye drops may be used several times per day during the early weeks after surgery. Patching is often used after single-eye surgery. This involves wearing a patch over the healthy eye for a few hours a day which forces the child to use the other eye.

Because most of the lens of the child's eye is removed during surgery, visual correction will be needed. Correction options include eyeglasses, contact lenses, or artificial lens implants called intraocular lenses (IOLs). The ophthalmologist can determine the best option based on your child's circumstances. Lens implants are usually performed during the surgery to remove the cataract.

What's in the future for a child with Congenital Cataracts?

Cataract surgery is very safe and effective for most children. Visual clarity will depend on the severity of the cataract (location, shape, and structure) and the age of the child when surgery is performed. Glaucoma develops in 20% of the children who have had cataract surgery. Also, retinal detachment can develop years after surgery so continued ophthalmologist follow-up is necessary.

Fact Sheet by:

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