

Cataracts in Infancy

My husband and I recently noticed that our 2-year-old son's pupil was not clear and looked white. We took him to an ophthalmologist who diagnosed him with a cataract in that eye. What should we do, as surgery is planned in the near future?

Due to your son's age, it is very important he have the best correction possible, as soon as possible, for long-term maximum visual potential of both eyes. Otherwise, amblyopia, or "lazy eye", may develop due to deprivation or lack of stimulus to the retina, specifically the macula (responsible for central detailed visual acuity). This may affect other skills such as fine and gross motor skills, along with development of the visual system – all intertwined.

If there is a cataract in one eye only, the correction for your son will be in the form of an intraocular lens implantation or contact lens that will correct his vision maximally.

Interestingly, the Infant Aphakia Treatment Study was recently completed scrutinizing different forms of treatment to resolve the issue. Aphakia refers to the condition where the natural crystalline lens has been removed from the eye, most often during cataract surgery. The study was designed to provide empirical evidence of whether optical treatment with an intraocular lens (IOL) or a contact lens after unilateral cataract surgery during infancy is associated with a better visual outcome. In a randomized, multicenter (12 sites) clinical trial, 114 infants with unilateral congenital cataracts were assigned to undergo cataract surgery with or without IOL implantation. The optimal optical treatment of aphakia in infants is unknown.

Opinions vary about when cataract surgery should be performed on an infant. On the other hand, cataract surgery may need to be performed as soon as possible to ensure that the lens is clear enough to allow normal development of the baby's visual system. Some experts say the optimal time to intervene and remove a visually significant congenital cataract from an infant's eye is between the age of 6 weeks and 3 months.

I currently have four young patients wearing contact lenses due to aphakia as a result of removal of the lens or lenses in one or both eyes due to retinopathy of prematurity and surgical intervention, congenital cataracts and microphthalmia (short eye) and cataracts. The youngest infant was fit with contact lenses at 52 days old and all four are doing well, with the longest contact lens treatment time of nearly two years.

A critical aspect for these children in consideration of long-term outcomes is the collaboration and co-management with the optometrist, retina and pediatric ophthalmologists and a low vision eye doctor. My strong advice would be to consult your ophthalmologist or optometrist in the very near future for the

appropriate short and long-term direction to ensure the best possible vision for the rest of your son's life.