PEDIATRIC CATARACT SURGERY

A cataract is a clouding of the normally clear lens in the eye. Infantile cataracts are usually due to a lens malformation early intrauterine. Cataracts in older children usually occur as a result of a less severe malformation or following eye trauma. If the cataract is very dense, vision is reduced to a fog in that eye. If it is smaller or less dense, vision in that eye may be slightly too moderately blurred.

Benefits
Dense cataracts apparent at birth must be surgically removed within weeks so that vision can develop normally.

Alternatives
Less severe cataracts may be initially treated with patching therapy and/or dilation eye drops. Observation may be the option chosen depending on the density of the cataract. If these methods allow the patient to maintain good vision in the eye, surgery is deferred. If the vision becomes poor despite these methods, cataract surgery is advised.

Method of surgical removal
Cataracts that occur in infants and children are different from those that occurs in the senior population. Pediatric cataracts require different instrumentation and techniques. A stainless steel instrument no thicker than a toothpick enters the eye. It is inserted through a tiny hole that is made in the wall of the eye using a microscope. A second hole is placed to allow fluid to be flushed into the eye. The cataract, or cloudy lens, is cut into pieces and vacuumed away. It may be necessary to remove the vitreous, or thick gel, that fills in the middle of the eye. The space created in the eye is filled by a special clear fluid inserted in the eye at the time of surgery.
Treatment after Surgery: Glasses, Contact Lenses, or Implant

The lens inside the eye focuses the light rays to a sharp point on the retina in the back of the eye. If the lens is removed, a lens implant inside the eye, a soft contact lens on the cornea outside of the eye, or thick eyeglasses must be used so the light rays can be properly focused.

1. Lens implant
   A plastic lens may be surgically inserted into the eye of a toddler or older child. The advantages of implants are that they avoid heavy glasses and the need to insert and remove a contact lens. An implant is designed to stay in the eye permanently. The power of the implant is selected based on the measurements of the eye at the time of surgery with an estimation for the future eye size included in the measurements. Even with an implant, patients will need to wear glasses for optimal vision.

2. Contact Lens Fitting
   Contact lenses are the preferred method of treatment for infants. Both eyes are more easily used together with contacts than glasses based on the fact that they produce less image magnification than glasses. Also, that are more cosmetically sound than glasses. However, contact lenses for infants can be quite expensive. The lenses can be torn or lost, and a fast growing baby needs more frequent power changes. Parents must learn how to insert, remove, and clean the lenses for their child. Contact lenses are usually fit within one to three weeks after surgery.

3. Eyeglasses
   Eyeglasses are only effective for restoring eye focusing when cataracts have been removed from both eyes. However, the glasses are very thick and magnify the appearance of the eyes. At around age three and older, bifocal glasses may be prescribed to provide focusing at both near and far distances.

Eye Patching
   If your child has amblyopia, or lazy vision, patching therapy will be started in the days or weeks before surgery. The other eye will be covered for many of the waking hours to aid in the development of vision from the operated eye.
Risks of Cataracts/Cataract Surgery

Amblyopia (lazy vision) may persist despite cataract removal. The risk of persistence depends on the density of the amblyopia and whether or not it responds well to patching after surgery.

Strabismus (eye crossing) appears in many children with a dense cataract in one eye. A crossed eye can appear before or after cataract surgery because of the decreased vision.

Glaucoma (high eye pressure) can develop months to years following cataract removal. It is not caused by the surgery, but rather by a malformation of the drainage channels in that eye. About one in five children with a cataract will later require treatment for glaucoma. Eye pressure should be checked regularly throughout life.

Complications from surgery that are of a serious nature are unusual (1 in 2000 or less). These include anesthetic reactions, a detached retina, infection, or hemorrhage. In rare circumstances, a membrane (SECONDARY CATARACT) can grow back in the middle of the eye. The membrane can be removed with further surgery. Modern instrumentation and techniques of cataract surgery performed by a Pediatric Ophthalmologist allow for a safe and effective procedure.

Prior to the Date of Surgery

The patient should get medical clearance from the Primary Care Physician using the form given to you. Please return the form to Dr. Blatt during the pre-operative examination.

Vigamox eye drops should be started 2 days prior to surgery (one drop, three times each day, in both eyes)

Your pre-operative appointment for final measurements and instructions is scheduled for ________________ at ____________ at our

Date                                Time
Office at 675 Old Ballas Road, Suite 220.

Night before Surgery

1 A child 36 months old and younger may have regular foods and liquids up to six hours before the scheduled surgery time. Clear liquids (water, apple juice, Kool-Aid or Pedialyte) should be encouraged up to two hours before surgery. Breast milk should be encouraged up to three hours before surgery.

2 A patient older than 3 years should have NOTHING to eat after midnight. The patient may have clear liquids (water, apple juice, Kool-Aid or Pedialyte) up to four hours before surgery.

3 If your child is acutely ill with a fever, deep cough, or vomiting in the days preceding surgery, please let us know.
Date and Time of Operation:

Surgery will be on ____________, at _________________

Please arrive at __________ am/pm

Day of Surgery

On the day of the procedure, you will proceed to the “OUTPATIENT” Surgery area. Your child will be given a hospital gown and have his or her vital signs recorded. Dr. Blatt and the Anesthesiologist will see you before surgery. When the patient is taken into the Operating Room, you will be directed to the Patient Waiting room.

Anesthesia

The anesthesia doctor may order a preoperative drink that is a sedative. The anesthesiologist will meet with you to explain the procedure. Young children are put to sleep within seconds by breathing gas from a mask held near the face. An intravenous (IV) line and a breathing tube (endotracheal tube) are placed only after they are asleep and the breathing tube is removed before they are fully awake.

Older children and adults will usually be given an IV line beforehand so that sedative medications can be administered.

The routine may be slightly altered based on any special needs or medical conditions of the patient.

Length of Surgery

Generally, cataract surgery and the measurements of the eye under anesthesia are completed in 1.5 to 2 hours, depending on the complexity of the case. After the surgery is completed, Dr. Blatt will find you to discuss the operation.

Recovery

The patient is taken from the OR to the Post-Anesthesia Recovery area for the thirty to sixty minutes. The patient awakens more fully from the anesthesia in the recovery room and is carefully monitored by the nursing staff. The patient will be encouraged to drink clear liquids, and the IV tube will be removed. A family member may join the patient as soon as he or she begins to wake up.
Postoperative Discomfort and Nausea

There may be mild discomfort from the surgery, and the nurses will treat it with the appropriate medication. Tylenol may also be used. Cataract surgery does not cause severe discomfort, however, nausea is common. If vomiting occurs, medication may be prescribed.

Discharge to Home Instructions

Most patients are discharged to home within two to three hours after surgery. Relax at home. No swimming or playing around dirt for 2 weeks after surgery.

Post-operative visits

The first post-operative visit is scheduled for ____________ at
Date ____________ at our office at 675 Old Ballas Road, Suite 220.
Time

The second post-operative visit is scheduled for ____________ at
Date ____________ at our office at 675 Old Ballas Road, Suite 220.
Time

Post Operative Medications

1. Eye drops and ointment may be used to help healing and prevent infection in the first six to eight weeks after surgery. Additional prescriptions for eye drops may be provided to you the day after surgery. Tylenol, not aspirin, can be used for pain. When giving the eye medicine, try not to apply pressure on the eyeball itself.

2. The patient will require rest and relaxation for a few days following surgery. Bathing and washing hair with the eye gently closed will not interfere with the healing. Your child should avoid submerging the eyes underwater in a swimming pool for 4 weeks after surgery. Redness usually disappears in a few weeks.

Eye Shield and Eyeglasses

In the weeks following the surgery, your child’s eye will need protection from possible injury. An eye shield will provide that at night and nap time. It is to be worn for two weeks. Eyeglasses with polycarbonate safety lenses will protect the eye during waking hours. The lenses of the glasses may be exchanged for more precise prescription lenses in the first month after the operation.

Dr. Blatt can be reached at 314-997-3937 or 314-388-5172
Office Exchange
In the event of a complication such as severe or unusual pain, decrease in vision, or unusual discharge from eye.

**Pediatric Cataract Surgery Consent**

I, _______________ authorize Andrew N. Blatt, MD and such persons assisting under the direct supervision of Dr. Blatt, to perform Strabismus Surgery.

If the contemplated surgery reveals a condition, which Dr. Blatt’s best judgment indicates need for further evaluation or treatment, I authorize the performance of such procedures during the time of the operation.

I understand the risks associated with strabismus surgery as enumerated on page 2 as well as the benefits of and alternatives to strabismus surgery.

I realize that complications related to anesthesia are possible as enumerated on page 2. I consent to the use of drugs, intravenous infusions, and/or blood transfusion, in the event of a complication.

I am aware that no guarantees have been given regarding the surgical outcome.

I have read these instructions and my questions have been answered to my satisfaction. I understand the benefits, and risks associated with strabismus surgery.

_______________________                                                  ________________________
Patient’s name                                                                     Signature of Patient

__________                                                                        _________________________
Date                                                                                     Signature of Parent or Guardian

_______________________                                       _____________
Signature of witness                                                     Date