



# CATARACT EXTRACTION SURGERY WITH AND WITHOUT INTRAOCULAR LENS INSERTION

AT CHILDREN'S HOSPITAL OF PITTSBURGH OF UPMC, we believe parents and guardians can contribute to the success of this surgery and invite you to participate. Please read the following information to learn about the surgery and how you can help.

# Fast Facts About Cataract Extraction

- A cataract extraction is surgery to remove a cloudy lens from the eye.
- Some patients who have cataract surgery will receive an intraocular lens to replace the cloudy lens. The surgeon will decide if an intraocular lens is right for your child.
- Cataract extraction is an outpatient surgery, so your child may go home afterward, but must come back in for a follow-up visit with the doctor the day after the surgery.
- The surgery is done under general anesthesia, which means that your child will be sound asleep.
- A pediatric anesthesiologist—a doctor who specializes in anesthesia for children—will give the medications that will make your child sleep during the surgery.
- A pediatric ophthalmologist—a doctor who specializes in eye surgery for children—will do your child's cataract extraction.
- When general anesthesia is needed, there are special rules for eating and drinking before the procedure.
- This surgery will take about 30 minutes to a little more than 1 hour, but recovery from the anesthesia might take several hours.

#### What Is A Cataract?

A cataract (CAT-er-akt) is an abnormality in the lens of the eye. The lens of the eye is similar to the lens of a camera—it helps you focus on objects both near and far away. To work well, the lens must be clear.

As we age, the lens slowly becomes cloudy, so most adults who live into their 60s will eventually get at least some mild cataracts.

Unlike in adults, cataracts in children are often serious and can sometimes cause a permanent loss of vision.

Depending on the type of cataract, newborns may require cataract surgery within the first 1-2 months of life because the brain is in a period of rapid visual development.

Although common in adults, cataracts are unusual in children and are often the result of injury to the eye or in association with other medical conditions.



# What Is A Cataract Extraction and Intraocular Lens Insertion?

Cataract extraction (ex-TRACK-shun) is a surgery to remove the cloudy lens from the eye. The surgeon makes a small incision (cut) on the surface of the eye near the clear part of the eye called the cornea. A small instrument is inserted into the incision and the cloudy lens material is removed from the eye.

Depending on the age of your child and the condition of his or her eye, the doctor might replace your child's cloudy lens with a small, plastic lens called an intraocular (*in-tra-OCK-yoo-ler*) lens. This intraocular lens, also known as an implant or artificial lens, is used to help the eye focus after surgery. The lenses come in different strengths, like glasses, and the surgeon will do several measurements to decide which lens strength is right for your child. The implant will allow your child to use thinner glasses or a lower power contact lens after the surgery.

If your child is very young at the time of the cataract extraction, or if your child has had a serious eye injury, an intraocular lens may not be implanted at the time of the surgery. Your child might need to have a future eye surgery to implant the intraocular lens when he or she is older, or when the eye injury has healed.

Most children will go home with an eye patch and a shield. You will be given a prescription for eye drops to give your child to prevent infection and to reduce swelling after the surgery.

#### CATARACT EXTRACTION SURGERY WITH AND WITHOUT INTRAOCULAR LENS INSERTION cont'd

# Home Preparation

In the 2 weeks before the surgery, do not give your child any aspirin or ibuprofen. That includes Motrin®, Advil®, Bayer®, Pediaprofen®, Aspergum®, Pepto Bismol® and Alka Seltzer®. Your child may take Tylenol®.

The day before the surgery, do not allow your child to get any kind of vaccination.

When general anesthesia is needed, there are important rules for eating and drinking that must be followed in the hours before the surgery. One business day before your child's surgery, you will receive a phone call from a nurse between the hours of 1 and 9 p.m. (Nurses do not make these calls on weekends or holidays.) Please have paper and a pen ready to write down these important instructions.

■ The nurse will give you specific eating and drinking instructions for your child based on your child's age. Following are the **usual** instructions given for eating and drinking. No matter what age your child is, you should follow the specific instructions given to you on the phone by the nurse.

#### For children older than 12 months:

After midnight the night before the surgery, do not give any solid food or non-clear liquids. That includes milk, formula, juices with pulp, coffee and chewing gum or candy.

#### For infants under 12 months:

- Up to 6 hours before the scheduled arrival time, formulafed babies may be given formula.
- Up to 4 hours before the scheduled arrival time, breastfed babies may nurse.

#### For all children:

- Up to 2 hours before the **scheduled arrival time**, give only clear liquids. Clear liquids include water, Pedialyte®, Kool-Aid® and juices you can see through, such as apple or white grape juice.
- In the 2 hours before the **scheduled arrival time**, give nothing to eat or drink.

#### A Parent's/Guardian's Role

The most important role of a parent or guardian is to help your child stay calm and relaxed before the surgery. The best way to help your child stay calm is for you to stay calm.

- You may bring along a "comfort" item—such as a favorite stuffed animal or "blankie"—for your child to hold before and after the surgery.
- If you are a guardian of the child having surgery, please bring the necessary paperwork with you to prove your quardianship.
- During the surgery, at least one parent or guardian should remain in the surgical family waiting area at all times in case the family needs to be reached.

# Going to Sleep

A pediatric anesthesiologist—a doctor who specializes in anesthesia for children—will give the medications that will make your child sleep during the surgery.

Before the procedure, a member of the anesthesia staff will meet with you to take your child's vital signs, weight and medical history. As the parent or legal guardian, you will be asked to sign a consent form before the anesthesia is given.

The anesthesiologist will meet with you and your child to review your child's medical information and decide which kind of sleep medication your child should receive.

If your child is very scared or upset, the doctor may give a special medication to help him or her relax.

This medication is flavored and takes effect in 10 to 15 minutes.

Younger children will get their sleep medication through a "space mask" that will carry air mixed with medication. Your child may choose a favorite scent to flavor the air flowing through the mask. There are no shots or needles used while your child is still awake.

Older children may choose between getting their medication through the mask or

directly into a vein through an intravenous (IV) line.

■ When your child has fallen asleep, you will be taken to the waiting room. If it has not already been done, an IV will be started so that medication can be given to keep your child sleeping throughout the procedure.

# The Cataract Extraction With and Without Intraocular Lens Insertion

This surgery is done through the Same Day Surgery Center at Children's Hospital of Pittsburgh in Oakland.

When you check in at the registration desk, you will be asked for the clearance form from your child's primary care physician (PCP). This PCP form was given to you at the appointment with the ophthalmologist when you scheduled your child's surgery.

Once your child is registered, you and your child will be called to the examining room.

- A nurse will take your child's weight, vital signs and medical history. The nurse will ask you to name any medications your child might be taking, as well as the dosages and the time last taken.
- A member of the anesthesia team will meet with you to discuss your child's medical history and answer any questions you might have about the anesthesia. As the parent or guardian, you will be asked to sign a consent form for the anesthesia.

#### CATARACT EXTRACTION SURGERY WITH AND WITHOUT INTRAOCULAR LENS INSERTION CONT'd

Your child's doctor also will meet with you and your child to discuss the procedure and answer any questions you might have. As the parent or guardian, you will be asked to sign a consent form for the procedure.

You and your child will be moved to a holding area near the operating room (OR). When the operating room is ready your child will go to the OR and you will be directed to the OR waiting room. We ask that at least one parent stay in the OR waiting room at all times.

- Your child will be given the anesthesia medication that was selected based on his or her age, weight and medical history.
- When your child is fully asleep, the surgery will begin.
- The doctor will make a small incision on the surface of the eye near the cornea.
- The doctor will insert a small instrument into the incision and the cataract will be removed.
- If the doctor has decided that your child should receive an intraocular lens, it will be inserted into the eye to replace the cloudy lens at this time.

A suture or stitch is often used to close the incision. The sutures may need to be removed on a future appointment.

- The doctor will place a patch and a small plastic shield over the eye to protect it after the surgery.
- The anesthesia medications will be stopped and your child will begin to wake up.
- Your child will be moved to the recovery room so that you can be there as he or she wakes up.

# While Asleep

While your child is asleep, his or her heart rate, blood pressure, temperature and blood oxygen level will be checked continuously.

- During the surgery, your child will have a breathing tube placed in the airway while he or she is asleep. Your child might have a sore throat after the surgery.
- To keep your child asleep during the surgery, he or she might be given anesthetic medication through the breathing tube, through the IV tube or both. When the surgery is over, the medications will be stopped and your child will begin to wake up.

## Waking Up

When your child is moved to the recovery room, you will be called so that you can be there as he or she wakes up. While your child is in recovery, your surgeon will talk to you about the surgery. This is a good time to ask questions about pain medications, diet and activity.

- Your child will need to stay in the recovery room to be watched until he or she is alert and his or her vital signs are stable. The length of time your child will spend in the recovery room will vary because some children take longer than others to wake up after anesthesia.
- Children coming out of anesthesia react in different ways. Your child may cry, be fussy or confused, be sick to his or her stomach, or vomit. These reactions are normal and will go away as the anesthesia wears off.
- When your child is fully awake, he or she may be given a Popsicle® or slushy to drink. If he or she can keep the liquid down, your child will be discharged and may go home.

### After the Cataract Extraction

When your child is discharged from the hospital, he or she still might be groggy and should take it easy for the rest of the day.

- Your child might have a patch on the eye that will need to be removed by the doctor the next day.
- Your child might not open that eye for a few days after surgery.
- Your child's eye might be sore or feel like there is something in the eye. This feeling is normal and may last for a day or so. You may give your child Tylenol® to relieve the discomfort.
- The white surface of your child's eye might be pink to very red after the surgery.

# At-Home Care and Follow-Up Visits

You will need to bring your child to see the doctor 1 day after the surgery.

- At the first follow-up visit, you will be given antibiotic eye drops to put in your child's eye. The doctor will tell you how often and for how many days you should give your child the drops.
- Your child may return to school or daycare when he or she feels well enough.
- Your child may return to normal daily activities, but should not participate in gym class, swimming, or other sports or physical activities for at least 2 weeks after the surgery.
- Your doctor will need to see your child again for a check-up in approximately 4 to 6 weeks after the surgery.

#### CATARACT EXTRACTION SURGERY WITH AND WITHOUT INTRAOCULAR LENS INSERTION cont'd

#### When to Call the Surgeon

The following symptoms may be cause for concern:

- Signs of infection, such as eye drainage that has gotten worse or has changed to green or yellow
- Loss of vision
- Pain that has gotten worse
- Increased swelling
- Fever higher than 100 degrees F.
- Nausea and vomiting that won't go away

If your child has any of these symptoms, you should call the surgeon's office at 412-692-8940 immediately. If you are calling during the evening or on a weekend, please call the hospital at 412-692-5325 and ask to page the ophthalmology resident on call.

## Special Needs

If your child has any special needs or health issues you feel the doctor needs to know about, please call the Division of Ophthalmology at Children's Hospital *before* the surgery and ask to speak with a nurse. It is important to notify us *in advance* about any special needs your child might have.

Division of Ophthalmology **Children's Hospital of Pittsburgh of UPMC**z One Children's Hospital Drive 4401 Penn Ave. Pittsburgh, PA 15224 412-692-8940 412-692-5325 evenings and weekends

To see the list of all available patient procedures descriptions, please visit www.chp.edu/procedures.