

## INFORMATION ABOUT EYE MUSCLE SURGERY

**Introduction:** The staff at Children's Eye Care will guide you and your child through the surgical experience. With your help, we will support your child. Parents have a role in helping this become a positive experience. Talk, listen, and reassure your child about surgery. Be honest and do not threaten your child with shots. Remember, you are the most important support person for your child.

DATE: \_\_\_\_\_ FACILITY: \_\_\_\_\_

**The facility staff will call you the afternoon before surgery to let you know what time to arrive. BE SURE THAT WE HAVE A PHONE NUMBER WHERE YOU CAN BE REACHED.**

**Before surgery:** It is important that the following diet guidelines be strictly observed before surgery. If diet guidelines are not followed, surgery may be cancelled.

Children should have **NOTHING TO EAT OR DRINK AFTER MIDNIGHT** the night before surgery. This is done as a precaution because anesthesia is safest if the stomach is empty at the time of surgery. Infants and young children who awoken in the middle of the night to eat will be given special guidelines. Young children are scheduled as early in the morning as possible to minimize their greater difficulty in going without food or water.

Children's Eye Care encourages parents and children to visit the hospital/surgery center before the day of surgery. This helps relieve some anxieties for the patient and family. The child may also bring a favorite toy or stuffed animal if they choose to do so. You will be asked to arrive at least 1 1/2 hour prior to the start of surgery. **Nurses from the facility will call you the afternoon before surgery to let you know when to arrive.** This allows time for completion of paperwork and examination by the nurse. There is no routine lab work, but lab work may be needed for infants under 6 months and those with chronic illnesses. Patients requiring lab work should arrive about 2 hours prior to surgery.

The anesthesiologist and your eye doctor will examine your child (or you) before surgery, checking the eyes to make sure nothing has changed, listening to the heart and lungs, and looking for signs of infection such as fever, swollen lymph nodes, productive cough or nasal discharge. This examination is designed to identify problems which could affect the surgery or anesthesia. It is not meant to be a substitute for a complete examination by a pediatrician or family physician. Patients with significant medical problems should consult their pediatrician or family doctor and obtain clearance for surgery. Please notify your doctor or any of the staff at Children's Eye Care of any changes in physical condition (cold or fever) or if your child has been exposed to any communicable diseases before surgery. **If your child becomes ill the evening before surgery, please contact your eye doctor immediately** (see phone numbers at end of this sheet).

**During surgery** - Anesthesiologists (MD's or DO's) with special training in pediatric anesthesia are used for all surgeries on children. Children go to sleep by breathing anesthetic agents and oxygen through a facemask. During surgery children continue to breathe either through the facemask or through a small mask which fits in the back of the throat. The heart rate and rhythm, blood pressure, and oxygen concentration in the blood are monitored constantly throughout the surgery. Children who are too fearful to breathe through a mask can be sedated with medicine by mouth or nose prior to surgery. IV's are started after the child is asleep. Operating room policy does not permit parents to go into the operating room with their child, but you will be allowed to be with your child until the time of surgery and shortly after in recovery. Parents of young children are encouraged to stay in the area during surgery.

**Location** - Surgery will be done at one of the following facilities:

- 1) Surgery Center of Oklahoma - 9500 N. Broadway Extension - (405) 235-4525  
Located on the east side of the Broadway Extension (HWY 77) and just north of Britton Road. Turn right off the frontage road to park.
- 2) Baptist Medical Plaza - 3433 N. W. 56<sup>th</sup> St., Ste. 300 - (405) 945-4208  
Park in the N. W. 56th St. parking garage at the SE corner of the hospital. On your left as you drive in is a circle drive entrance to the hospital Plaza, Building B. Take the lobby elevator to the 3rd floor.
- 3) Mercy Hospital - 4300 W. Memorial Road - (405) 752-3947  
Go to the Outpatient Surgery Center on the 1st floor near the NW corner of the main hospital building.
- 4) Deaconess Hospital - 5501 N. Portland - (405) 604-4275  
Go to the Outpatient Surgery Center on the 1st floor, south of the main hospital building and Emergency Room entrance.
- 5) Oklahoma City Clinic Surgery Center - 701 N. E. 10<sup>th</sup> St., Ste. 124 - (405)280-5510  
Enter the front door of the clinic, which faces east, and turn left.
- 6) McGee Eye Surgery Center - 1000 N. Lincoln - (405)232-8696 x 25  
Located in the OU Harold Hamm Diabetes Center, in the center of the first floor
- 7) Foundation Surgery Center- 14000 N. Portland Ave, Ste. 100- (405) 936-8130

You will be given a map and brochure, if they are available.

## **BENEFITS, ALTERNATIVES, AND RISKS OF EYE MUSCLE SURGERY**

When you come to the hospital, **you will be asked to sign a consent form giving your doctor permission to perform the eye muscle surgery on you or your child** . The hospital consent form is a standardized form used for all types of surgeries. It does not provide specific information about the nature of eye muscle surgery and its risks, benefits, and alternatives. This information sheet gives you more specific information. Please read it and ask any questions that you have--either now, by phone, or on the morning of surgery. **When you sign the form consenting to surgery, you are also acknowledging that your questions about risks, benefits, and alternatives have been answered.**

**Benefits of surgery** - The primary goal of most eye muscle surgery is to improve, restore, or make possible the ability to use the eyes together. This is possible in 75% or more of patients. Improved ability to use the eyes together allows better depth perception, may provide a broader field of vision, and often gives a sense of better vision overall. Restoring good alignment can eliminate double vision in adults.

Children whose eyes cross are at risk for amblyopia ("lazy eye"), decreased vision in an eye which results from the brain using one eye and ignoring the other eye. Surgery itself will not restore good vision in an eye with amblyopia. But after vision in the amblyopic eye has been returned to normal with patching and/or glasses (patching the "good" eye forces the brain to pay attention to the eye it has been ignoring and thus improves vision), surgery may help prevent the recurrence of amblyopia by enabling the brain to use both eyes at the same time.

**Chances of success** - It is not possible to guarantee success with eye muscle surgery. The odds of success depend on the type of eye misalignment and on what the patient hopes for and means by success. In general, alignment of the eyes is improved in over 90% of cases. The eyes are straight enough to make it possible to use the eyes together in over 70% of

cases. In general, surgery is relatively more successful in those patients with occasional misalignment, or recent onset of constant misalignment, and in patients with good vision in each eye. Surgery is relatively less successful if crossing developed prior to 6 months of age, if misalignment is constant, if vision is poor in one eye, and in certain cases of muscle inflammation or nerve palsy. Ask your doctor if you have further questions about factors which affect the outcome of your surgery.

**Alternatives to surgery** - For children, glasses may eliminate crossing in some cases. Surgery will usually not be recommended unless this approach has failed, or would not be expected to work. Eye exercises are seldom helpful. Eye drops are rarely helpful and may be associated with complications, if used long term. Some surgery may be safely, or even beneficially, postponed. More often, it is better to perform surgery sooner rather than later.

In adults and some children, prism may be added to glasses to eliminate double vision. This may be hard to tolerate. Some adults choose to avoid double vision by closing, blurring, or covering an eye. The timing of surgery is usually not as important in adults as in children.

**Risk of anesthesia** - The risk of a serious complication from general anesthesia--such as heart stopping, breathing stopping, or severe rise in body temperature, causing brain damage or death--is about 1 in 20,000.

**Risk of vision loss** - The risk of losing vision in an eye, either partially or completely, as a result of complications from eye muscle surgery, is about 1 in 5,000. Complications which can cause loss of vision include infection and a suture being placed too deeply, resulting in retinal detachment or bleeding inside the eye.

**Other possible complications** - Other possible complications of eye muscle surgery include double vision; limited movement of the eye due to scarring or a muscle pulling loose; scarring or change in appearance of the white of the eye; change in appearance of the eyelids (eye seems more wide open or more closed than before); minor infection or inflammation after surgery which can be controlled with eye drops. Some complications apply only to surgery done on certain muscles or in a certain way. The operation on muscles is through an incision made through the conjunctiva (white part of eye) to reduce the risk of scarring or any permanent change in the appearance of the white of the eye.

**Again, please do not hesitate to ask if you have any questions about the benefits, alternatives, and risks of eye muscle surgery.**

## **INSTRUCTIONS AFTER EYE MUSCLE SURGERY**

**Immediately after surgery** - Parents are allowed in the recovery room approximately 30 minutes after the completion of surgery. During these first minutes the patient is typically restless, alternately waking and sleeping. Recovery room nurses are also busy checking the patient and receiving a report from the anesthesiologist and operating room nurses. The doctor will speak to you about the surgery and give you his instructions.

**In the recovery room** - Patients are drowsy, and usually have less pain than nausea. A small percentage of patients will vomit. Family members should not overly encourage patients to eat and drink to make up for going without food and water before surgery. Too much food or water too soon may increase nausea and vomiting. It is better to drink small sips frequently and eat small portions of food frequently rather than larger amounts less often. Clear liquids and soft, low fat, and easily digested foods are helpful in the beginning. Children are unlikely to become dehydrated, if this approach is followed.

**What to watch for at home** - There may be drops of blood in the tears the first day. The tears may look yellow and watery. The white of the eye in the area of the operated muscle will be red. This gradually regresses over two to six weeks. As long as the redness is slowly fading and not worsening, there is usually no reason for concern. Sometimes the redness will shift from the side of the eye to below the eye. This is an effect of gravity and not a signal of spreading inflammation.

Use the drops or ointment as directed. Generally it is easiest to place the drop or ointment just inside the lower lid. If you have trouble getting drops in the child's eyes, have the child lie on his back, then place a drop on the inside corner of the closed eyelids next to the nose. Then just have the child lie there until he opens his eyes. Similarly, ointment may be placed along the lashes and allowed to melt into the eye.

Glasses worn before surgery should be worn after surgery, unless they contain ground in prism. Glasses with ground in prism must be replaced. Press on prisms can simply be removed. The doctor will tell you if glasses should be changed or not worn after surgery. If there is any question about this, please do not hesitate to ask your doctor.

**Precautions** - Keep water out of the eyes when bathing or showering the first two days. Avoid rubbing the eyes. Avoid blowing dust and dirt and dirty environments for the first week. No swimming with head under water for 10 days. All these precautions are to reduce the risk of infection. There really is very little risk of a recently operated muscle pulling loose. Within a day or two the muscle is almost as firmly attached as ever.

**When to call the doctor** - If there is increased swelling of the tear sac, increased redness of the eye, or pus in the corner of the eye, questions or concerns, call your doctor at:

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| 1) CEC, 8:00 A. M. - 5:00 P. M | (405) 751-2020       |
| 2) Dr. Mark Scott, M. D        | Cell: (405) 834-2941 |
| 3) Dr. James Richard, M. D     | Cell: (405) 812-6056 |
| 4) Dr. Lucas Trigler, M. D     | Cell: (405) 819-9211 |

If you are unable to reach your physician, call or go to an emergency department.