

## PATIENT INFORMATION

# Squint (Strabismus) Surgery – Information for Carers

A squint is the name for a problem with the eyes where one eye turns in, out, up or down and is not in line with the other eye. This might happen all the time (constant), or some of the time (intermittent). The medical term for a squint is **strabismus**. Sometimes people use the word 'squint' to mean a screwed-up eye, or a droopy eyelid, but at the eye clinic we use the word to mean a turn in the eye.

Not all squints need surgery. Some squints that are small, or that aren't there all the time, or that are fully controlled by glasses, or that aren't causing too many problems, do not need surgery. Sometimes the risks of squint surgery might outweigh the benefits.

You have been given this leaflet because squint surgery is a possibility for your child. The leaflet will help you to decide if you want to go ahead, and give you the information that you need to help you make that decision.

## Why is squint surgery needed?

Squint surgery might be needed for one or more reasons:

1. To help your child's brain learn to use their two eyes together as a pair, to give the chance for them to develop 'binocular vision' – the ability to use both eyes at the same time for looking at things. This is normally the reason if your child has been offered surgery at a very young age (normally less than 18m).

2. To make it easier for your child to keep their eyes straight if their eyes have an underlying tendency to turn in or out, which your child can only control for less than 50% of the time.
3. To help get rid of double vision. If your child has developed a turn in the eye that causes them to see double, squint surgery can help to straighten the eyes and help them to see a single image again.
4. To help straighten the eyes if your child's eyes are still turning despite wearing glasses. In this case the operation will be to help straighten the eyes when they are wearing glasses (not when their glasses are off).
5. To help straighten the eyes if the look of the squint is very noticeable or bothersome to your child.
6. Sometimes squint surgery is done to help straighten a head tilt or turn that your child is using to help their vision.

The team will discuss with you and your child (in an age-appropriate way) what the reason is for offering squint surgery to your child.

### **Important things to remember:**

1. Squint surgery does not improve the straight-ahead vision (**visual acuity**)
2. Squint surgery is not offered instead of patching – it is not a treatment for a lazy eye (**amblyopia**). Patching may still be needed after surgery
3. If your child needs glasses, they will still need glasses after surgery. The strength of the glasses needed afterwards can sometimes be a bit different to before surgery.
4. It's really important to realise that although your child might only need one operation, a significant number of people will need more than one operation, over time, for their squint. We think that about 1 in 4 or 5 people go on to need two or more operations (20-25%). This means that even if you make the difficult decision to go ahead now, your child will still need assessments at the hospital, and may need other treatments (patching, glasses or other operations). Unfortunately, it's not a case of 'do it now while they are young, then it will be fixed for ever'.

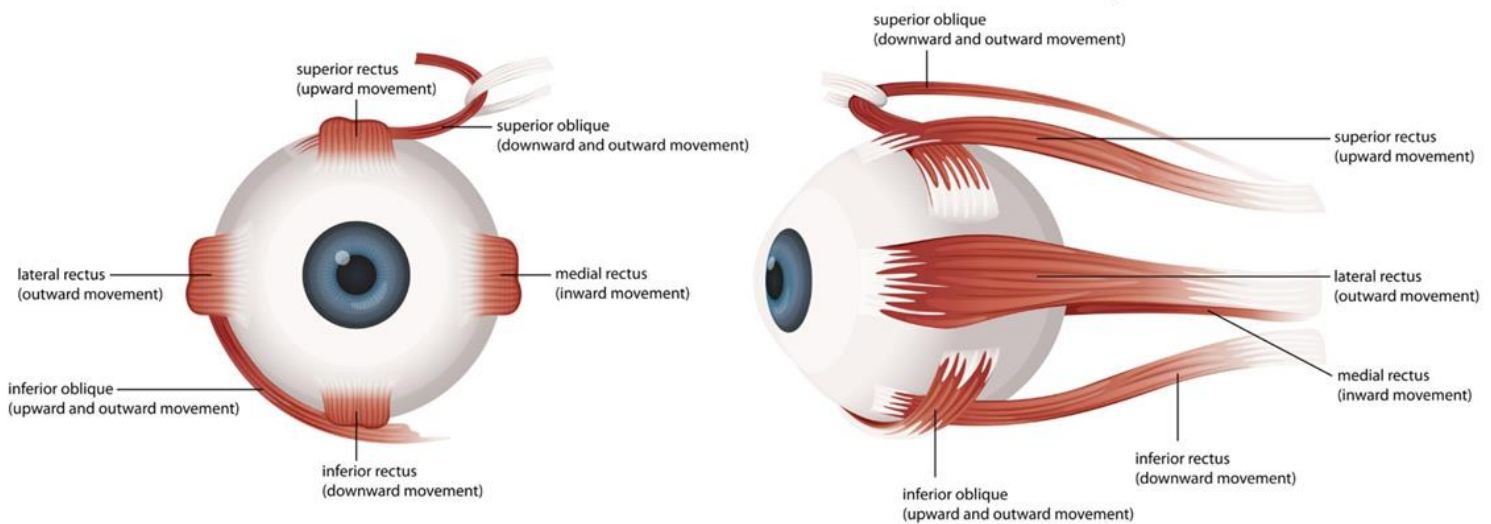
### **What happens during surgery?**

The operation is done under general anaesthetic (asleep) as a day case procedure. Your child will have a pre-assessment appointment before the day they are due to come in, and the nurse will be able to explain what will happen before and after surgery.

The operation will usually take place on a Thursday morning and your child will normally be able to go home in the early afternoon. You will be seen by the surgeon and the anaesthetic doctor (**anaesthetist**), the one who will be giving the anaesthetic, before the operation.

Each eyeball has 6 muscles attached to it which move the eye around. These muscles are under the white covering of the eyeball (the **conjunctiva**). During the operation, the conjunctiva is lifted up, and one or more of the muscles is tightened or weakened by being cut and moved, and then stitched back in place using very fine absorbable stitches. Then the conjunctiva is stitched back down, again with stitches that will dissolve by themselves. Local anaesthetic is given around the eye at the end of the operation.

## Muscles of the Human Eye



The eyeball is never removed from the socket and the operation does not involve the eyelids or the skin of the face.

The operation can be done on one or both eyes, to balance the eyes. In some cases it might not be done on the eye that seems to be turning, but you will talk about which eye is going to be operated on with the Consultant before the operation.

The operation itself takes about 30 minutes for each muscle that is operated on. You will be told how many muscles will need to be operated on. Each child is different and the time it takes them to go to sleep with the anaesthetic and wake up again afterwards varies a lot.

One parent or carer can be with your child as they fall asleep, and you will be called as soon as you are able to see them after the operation.

They will not usually need to have a patch or a dressing on the eye after surgery.

### After the surgery

When your child wakes up, they will be cross and their eyes will be sore. They may be confused as they will not want to open their eyes as they will feel sore and gritty. They may feel sick. This usually improves quickly over the following day or so, and

they will usually be able to go back to school or nursery on the Monday after the operation.

The eye(s) that have been operated on will be red but should slowly get less red and less painful day by day. If it does not, you should let us know. Try to discourage your child from rubbing their eye, but it is unlikely that they will do any significant damage to their eye or the operation by rubbing it.

You will need to use drops that we give you in the eye that has had the operation, and these need to go in 4 times a day for 4 weeks. The nurse that looks after you on the day will explain about the drops, and about how to clean the eye with clean cotton wool and boiled water.

Some of the stitches that are used are blue, the blue stitch may be visible under the conjunctiva for several weeks.

You will usually have your first appointment with the orthoptists 3 weeks after the operation. This will give us some idea of how the operation has gone, but it may take longer for the eye to settle into its new position. Usually, we would have a good idea of the effect the squint operation has had by 3 months after the operation.

Your child should not swim for 3 weeks. They should try to keep the eye clean and not play in the mud or sand for this time. Try to keep soap and shampoo out of the eye. Your child can however read, do PE, watch a screen, play games and use a computer as normal. If your child has double vision, they will need to take extra care moving around.

## **Risks**

### 1. Further surgery

The biggest risk of squint surgery is the risk of needing another operation. That risk is about 1:4 to 1:5 people

Another operation might be needed soon after the first one, or years later, perhaps even as an adult.

The reasons further surgery might be needed are:

- a. The first operation has not straightened up the squint enough (under-correction)
- b. The first operation has done too much, and the eyes are now turning the opposite way (overcorrection)
- c. Things are fine for a while but slowly change months or years later
- d. There is a complication during or after surgery which needs an operation to fix (rare)
- e. The operation has caused your child to have double vision which has not settled

### 2. Double vision

It is very common to have some double vision (seeing two of things) when the position of the eyes is moved by squint surgery, especially when looking around to the sides. This might last for a few days or a few weeks. If it lasts for longer, your child might need more treatment. You will be supported by the orthoptic team

### 3. Redness

The eye that has been operated on may stay red for a few weeks, up to 3 months. If the eye has had surgery before, it might stay pink for much longer.

#### 4. Infection

About 1 in 150 children get an infection after the operation (conjunctivitis). We give eye drops to use after the surgery to help prevent this, but if it happens it might require further drops, or antibiotics taken by mouth. Very rarely people need to come into hospital to have medical or surgical treatment for an infection or other complication.

#### 5. Allergy

A few people are allergic to either the stitches, drops or skin cleaning liquids used during surgery. This might cause itching, redness and puffy eyelids.

#### 6. Risk of damaging the eye or the vision

Most people who have squint surgery have a good outcome. We know by looking at the results of all the squint operations which are done over the whole country that the risk of a serious complication is about 1 in 2500. This includes all the serious risks: loss of vision, bleeding, retinal detachment (because of a needle passing into the eye during surgery), a 'lost muscle' (when a muscle slips out of sight during surgery), inflammation, and ischaemia (a shortage of blood supply to the front of the eye after surgery).

### **More information?**

There are lots of website you can look at, and you can also talk to your orthoptist and doctor.

<https://www.nhs.uk/conditions/squint/surgery/>



<http://www.squintclinic.com/>



---

For further assistance or to receive this information in a different format, please contact the department which created this leaflet.