Surgery for squint (strabismus)

This leaflet aims to answer some of the questions you might have about your child’s squint surgery. Please note that it won’t cover everything, as every child and their squint is different. Your surgeon will discuss your child’s particular case with you but if you are unclear about any aspect of this treatment or have any further questions, please ask the doctor, nurse or orthoptist.

Frequently asked questions

What is the purpose of my child having squint surgery?
There may be a few purposes:
• To improve the position of the eyes and make the squint smaller/less obvious.
• To reduce (or get rid of) double vision or improve depth/3D vision.
• To improve an unusual tilt or turn of the head.

How is the surgery done?
Squint surgery is a very common eye operation. It usually involves tightening or moving one or more of the eye muscles on the surface of the eyeball, which in turn moves the eye. These muscles are attached quite close to the front of the eye under the conjunctiva (the clear surface layer). The eye is never taken out of the socket during squint surgery. Stitches (usually ones which dissolve) are used to attach the muscles in their new positions. Squint surgery is nearly always a day-case procedure, so your child should be in and out of hospital on the same day.

The operation is carried out under general anaesthetic and usually takes around an hour, depending on the number of muscles that need surgery. However, your child will be in the theatre department for longer, because they will need to spend some time in the recovery area until they have fully woken up. When your child has recovered fully from the anaesthetic and the nurses are happy for him/her to be discharged, you are free to go home – this will usually be a few hours later.

What happens before the day of surgery?
A pre-assessment is performed in the weeks leading up to your child’s
operation date, where an orthoptist will take up to date squint measurements.

What happens on the day of surgery?
You will be asked to come in early so that we can prepare your child for surgery. Your child should not drink or eat before the operation (the exact timings of this will be given by the ward nurses the day before the operation).

You will be able to go down to the operating theatre with your child and stay until he/she is asleep, but you will not be able to stay to watch the surgery. After the operation, you will receive eye drops with instructions, and a follow-up appointment will be booked for you.

Will the surgery cure my child’s squint?
In general, about 90% of patients will notice some improvement in their squint after surgery. Please be aware that the squint might not be completely corrected by the operation. This is because the amount of correction that is right for one child might be too much or too little for another, even if they have exactly the same size squint. Although your child’s eyes could be straight just after surgery, many children will require more than one operation in their lifetime. Please note that if the squint returns, it might ‘drift’ in either the same or opposite direction. We won’t be able to predict when this drift may occur.

Will the surgery cure a lazy eye or the need for glasses?
No, the operation will not change your child’s vision or their need for glasses or patching. Sometimes, more patching is needed after the operation.

What are the risks of the operation?
Squint surgery is generally a safe procedure. However complications can and do occur in any operation. Generally, these are minor and rarely serious.

For your information, we have listed all possible complications below, but please remember that the vast majority of people have no significant problems after this operation.

Under and overcorrection
Squint surgery results are not completely predictable. The original squint might carry on (under correction) or the squint direction could change (overcorrection). Occasionally, a different type of squint might appear. Therefore, in some cases another operation will be needed.

Double vision
Your child may notice double vision after surgery as their brain adjusts to the new position of their eyes. This is normal and generally settles in the following days or weeks. Some children might continue to get double vision when they look to the side. Rarely, the double vision can become permanent, in which case further treatment may be needed.
**Allergy/stitches**
Some patients might have a mild allergic reaction to the drops they have been prescribed to use after surgery. This can cause itching/irritation and redness/puffiness of the eyelids. However, this will usually settle very quickly when the drops are stopped. An infection or swelling may develop around the stitches. This is more likely to happen if your child goes swimming within the first four weeks after surgery, therefore this activity is not recommended. A cyst may develop over the area of the stitches, which will occasionally need further surgery to be removed.

**Redness**
The redness in your child’s eye which appears after surgery can take as long as three months to disappear. Occasionally, the eye will not completely return to its normal colour. This is most likely to happen after repeat squint operations.

**Scarring**
Generally any scarring of the conjunctiva (clear layer over the white of the eye) is not noticeable after three months, but occasionally visible scars will remain. This is especially possible after repeat operations. To reduce the chance of scarring it is important to use any drops which are prescribed after the operation.

**Lost or slipped muscle**
Rarely, during the operation or shortly afterwards, one of the eye muscles might slip back from its new position. If this happens, the eye will move poorly and more surgery may be needed. Sometimes, it will not be possible to correct this. However, please be aware that the risk of a slip needing surgery is about 1 in 1,000.

**Needle penetration**
There is a 2% risk of penetration (a small hole in the eye). This is caused by the stitches being too deep, or the white of the eye being too thin. If this happens, antibiotics and possibly some laser treatment to seal the hole may be needed. Depending on where the hole is in the eye, the sight may be affected.

**Infection**
Infection is a risk with any operation and, though rare, can cause loss of the eye or vision.

**Loss of vision**
Although very rare, loss of vision in the operated eye may happen as a result of this surgery. Risk of serious damage to the eye or vision is approximately one in 30,000.

**Anaesthetic risks**
Anaesthetics are usually safe, but there can be small and potentially serious risks. Unpredictable reactions can occur in around one in 20,000 cases and death in around one in 100,000.
Pupil dilation
Rarely, after an operation for a vertical squint you may notice the pupil is slightly larger on the side operated on.

Post-operative advice
After your child’s operation, their eye(s) will be swollen, red and sore and their vision may be blurry. You should start the drops you are given that same evening, and if your child is in pain, they can take painkillers suitable for children (for example, paracetamol and ibuprofen). The pain shouldn’t last more than a few days, however redness and mild discomfort can last for up to three months. This is most likely to happen with repeat squint operations. Your child might need a few days or a week off school or nursery to recover. Normal activity and sports except swimming can be started again as soon as your child feels ready. It is very important that you return for follow-up appointments as advised, so we can keep a check on your child’s recovery.

Summary of post-operative care:
- Use the eye drops and/or ointment as prescribed.
- If your child’s eyes are painful, give them painkillers such as paracetamol and ibuprofen.
- Use cooled boiled water and a clean tissue/cotton wool to remove any stickiness from your child’s eyes.
- Remind your child not to rub their eye(s) as this could loosen their stitches.
- If your child usually wears glasses they should continue wearing them.
- Your child should not go swimming for four weeks.
- It is essential that your child returns for their follow-up appointment in the clinic.

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Moorfields Direct telephone helpline
Phone: 020 7566 2345
Monday-Friday, 8.30am-9pm
Saturday, 9am-5pm
Information and advice on eye conditions and treatments from experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)
Phone: 020 7566 2324/ 020 7566 2325
Email: moorfields.pals@nhs.net
Moorfields’ PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.
Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs