Moorfields Eye Hospital NHS Foundation Trust

NHS

Patient information – strabismus service

Squint surgery in adults

This leaflet aims to answer some of the questions you may have about squint surgery. The leaflet does not cover everything, as every patient and every squint is different. Your surgeon will discuss your particular case with you. Please ask the clinical staff about anything you do not understand.

What is the aim of surgery?

1. To improve the alignment of your eyes and make the squint smaller in size.
2. In some patients, to reduce or try to eliminate double vision.
3. Occasionally to improve an abnormal position 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 outside eye muscles which move 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 surgery.

Stitches are used to attach the muscles in their new positions. These stitches will often dissolve so do not need to be removed. Squint surgery is nearly always a day- case procedure which means you should be in and out of hospital on the same day.

Before the day of surgery

Prior to surgery you will be required to have a pre-operation assessment. This is to ensure you are fit to have surgery; to answer any questions you may have and provide information on the operation and plan for your discharge. The assessment will involve a basic health check; the pre- op assessment nurse will take a medical history including current medication and perform investigations as required. Some patients may require a review by an anaesthetist prior to surgery. The pre-op assessment is valid for six months. You will be provided with instructions for the day of surgery.

On the day of surgery

You will be asked to come early so that you can be prepared for surgery. Most surgery takes place in the morning; therefore you should not eat or drink from midnight the night before. You can drink clear fluids **up to two hours** before the operation. You should not drink or eat before the operation. We will explain the exact timings to you before the day of the operation. Before being discharged after your operation,

you will receive eye drops with instructions and a follow-up appointment. **There are two kinds of squint surgeries– non-adjustable and adjustable.**

Non-adjustable surgery

Squint surgery is usually carried out under general anaesthetic and generally takes up to an hour, depending on the number of muscles that need surgery. When you have recovered from the anaesthetic and the nurses are happy for you to be discharged, you are free to go home, which will usually be a few hours later.

Adjustable surgery

Squint surgery using an adjustable suture may give a better result in certain types of squint-for example, for patients who have had a squint operation before, those at high risk of double vision, or those with a squint due to injury or thyroid eye problems. However, the redness in the eye often takes a little longer to settle down after adjustable surgery.

Part 1 - The main operation

The main part of the operation is carried out in the operating theatre usually under general anaesthetic (with you asleep).

Part 2 - Adjusting the stitch

The final position of the muscles is adjusted once you have woken up from the anaesthetic, and are able to look at a target. If you wear glasses for distance or near vision, please bring these with you for this part of the operation.

Adjustment is usually done on the ward, after drops of anaesthetic have been put into your eye to take away any pain. You may however feel a pressure sensation.

Does the surgery cure the squint?

Overall, about 90% patients feel some improvement in their squint after surgery.

The amount of correction that is right for one patient may be too much or too little for another with exactly the same size squint, so your squint may not be completely corrected by the operation. Although your eyes may be straight just after surgery, many patients require more than one operation in their lifetime. If your squint returns, it may drift in either the same or opposite direction. We can't predict when that drift may occur.

Does the surgery cure the need for glasses or a lazy eye?

No, the operation does not change your vision or need for glasses.

What are the risks of the operation?

Squint surgery is generally a safe procedure. However, as with any operation, complications can and do occur. Generally, these are relatively minor but on rare occasions they may be serious. **Please remember that the complications listed below are detailed for your information; the vast majority of people have no significant problems following squint surgery.**

Under and overcorrection

As the results of squint surgery are not completely predictable, your original squint may still be present (under correction) or the squint direction may change (overcorrection). Occasionally a different type of squint may occur. These problems may require another operation.

Double vision

You may experience double vision after surgery, as your brain adjusts to the new position of your eyes. This is common and often settles in days or weeks but may take months to improve. Some patients may continue to experience double vision when they look to the side in order to achieve a good effect when the eyes look straight ahead. Rarely, double vision whilst looking straight ahead can be permanent, in which case further treatment might be needed. If you already experience double vision, you might experience a different type of double vision after surgery. Botulinum toxin injections are sometimes performed before surgery to assess your risk of this.

Allergy/stitches

Some patients may have a mild allergic reaction to the medication they have been prescribed after surgery. This results in itching/irritation and some redness and puffiness of the eyelids. It usually settles very quickly when you have finished your course of eye drops. You may develop an infection or abscess around the stitches. This is more likely to occur if you go swimming within the first four weeks after surgery. A cyst can develop over the site of the stitches but this normally settles with drops until the stitches absorb. Occasionally further surgery will be needed to remove it.

Redness

The redness in the eye can take as long as three months to go away. Occasionally the eye does not completely return to its normal colour. This is seen particularly with repeated operations.

Scarring

Most of the scarring of the conjunctiva (the skin of the eye) is not noticeable after three months following surgery, but occasionally visible scars will remain, especially with repeat operations. You should not wear contact lenses for 4-6 weeks following your operation.

Pupil dilation

Rarely, after an operation for a vertical squint you may notice that the pupil is slightly larger or a slightly different shape on the operated side.

Lost or slipped muscle

Rarely, one of the eye muscles may slip back from its new position during the operation or shortly afterwards. If this occurs, the eye is less able to move around and, if this is severe, further surgery may be required. Sometimes it is not possible to correct this. The risk of slipped muscle requiring further surgery is about 1 in 1,000.

Needle penetration

If the stitches are too deep or the white of the eye is thin, a small hole in the eye may occur, which may require antibiotic treatment and possibly some laser treatment to seal the puncture site. Depending on the location of the hole, your sight may be affected. The risk of the needle passing too deeply is very low- (about 0.1-1% risk). Please note that this risk is higher if you have a thin sclera (the dense connective tissue of the eyeball that forms the 'white' of the eye), for example if you have had previous squint surgery or are very short sighted.

Anterior segment ischaemia (poor blood supply)

Rarely, the blood circulation to the front of the eye can be reduced following surgery, producing a dilated pupil and blurred vision. This usually only occurs in patients who have had multiple surgeries. The risk is about 1 in 13,000 cases.

Infection

Infection is a risk with any operation and, although rare, can result in loss of the eye or vision.

Loss of vision

Although very rare, loss of vision in the eye being operated can occur following squint surgery. Risk of serious damage to the eye or vision is approximately 1 in 30,000.

Anaesthetic risks

Anaesthetics are usually safe but there are small and potentially serious risks. Unpredictable reactions occur in around 1 in 20,000 cases and unfortunately death in around 1 in 100,000. The details of anaesthesia will be given to you separately before your operation.

After your operation

After your operation, your eye(s) will be swollen, red and sore and your vision may be blurry. Your eye may be also quite painful. Start the drops you have been prescribed that evening, and take painkillers such as paracetamol and ibuprofen as necessary. The pain usually wears off within a few days. The redness and discomfort can last for up to three months, particularly with adjustable and repeat squint operations.

You should not sign any legal documents or drive for 48 hours after the general anaesthetic. We would advise that you take one, or occasionally two, weeks off work. Work and normal activities including sport can be resumed as soon as you feel comfortable to do so. It is quite safe to use your eyes for visual tasks such as reading and watching television. Please ensure you return for follow-up appointments as advised.

Summary of care after your operation

- Use your eye drops as prescribed.
- Use painkillers such as paracetamol and ibuprofen if your eyes are painful.
- Use cooled boiled water and a clean tissue or cotton wool to clean any stickiness from your eyes. Avoid water entering your eyes from the bath or shower for the first week.

•Don't rub your eye(s) as this may loosen the stitches.
•Don't swim for four weeks.
•Please attend your post-operative (follow-up) clinic appointment.
•Continue using glasses if you have them
•Avoid wearing contact lenses in the operated eye(s) until you are advised it is safe to do so by your doctor or orthoptist.

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Revision number: 4
Approval date: December 2018
Review date: December 2021

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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