

Information for Patients

Adult Strabismus (Squint) Surgery with Fixed or Adjustable Sutures (Stitches) under General Anaesthesia

This leaflet provides information for adults needing surgical treatment for 'misaligned eyes', commonly known as squint and medically called strabismus. In this information we aim to cover most patient concerns, but please raise with us your questions or doubts. For some patients surgery will be the best option. If you are to undergo surgery you will be asked to sign a consent form, so it is important that you understand the contents of this information leaflet before you decide to go ahead with surgery.

The Manchester Royal Eye Hospital is a teaching hospital and as such is responsible for the training of junior doctors specialising in Ophthalmology. Your operation will be undertaken by the consultant or another senior eye surgeon. Some operations are performed by doctors in training under consultant supervision. There are medical students attached to the Manchester Royal Eye Hospital who may be in the theatre to **observe only**.

What is a squint?

Both eyes normally look in the same direction and work together. A squint is present when both eyes are not looking in the same direction. The eyes are not working together and double vision may be present.

What causes a squint?

There are two main types of squint: childhood and adult.

- Childhood squint can be caused by errors in the focusing of the eyes and may improve with glasses. Others result from simple eye muscle

imbalance. Occasionally disease affecting the brain or the eye may cause a squint.

- Adult squints can follow on from a squint in childhood. Disease affecting the brain and eyes is also a common cause of squint in adults.

What are the types of squint?

The squinting eye may look towards the nose (convergent), away from the nose (divergent), upwards or downwards. The squint may swap from one eye to the other.

What are the symptoms of a squint?

A squint can cause visual disturbance (double and blurred vision), eye strain or headaches.

Some squints do not cause any symptoms but can affect eye contact, communication and confidence of a person because of the cosmetic appearance of the eyes.

Will the squint need further investigations?

If the cause of your squint is not known then further investigations may be necessary. This may involve blood tests and special scans.

How is adult squint treated?

The treatment will depend on the type of squint you have. Possible treatments include:

- No treatment required;
- Eye exercises;
- Prism glasses;
- Botulinum toxin (there is a separate information leaflet available for this);
- Squint surgery;
- Occasionally a patch placed over one eye or on the lens of your glasses may be required.

The treatment option that is best for you will be discussed with you in more detail by the Orthoptist or Ophthalmologist that you have seen.

What does squint surgery involve?

The operation will be performed under general anaesthetic. Each eye has six muscles which can be accessed through the conjunctiva (the membrane surrounding the eyeball). The muscles may be slackened off or tightened up and this corrects the squint. The eye will not be taken out of the socket during surgery.

Your eye may be covered with an eye pad immediately following your operation. This eye pad will be removed by your nurse on the ward once you are awake.

What does an adjustable suture involve?

This technique is used to improve the success rate of the operation. At the end of the operation, the muscle will be secured with an adjustable stitch that will remain accessible under the conjunctiva of your eye. This is similar to the knot used when tying your shoelace. On the ward after the operation you will be examined by the Orthoptist to determine if an adjustment is necessary. For this you will need to wear your distance and reading glasses, therefore do not forget to bring these when coming to hospital for surgery.

If no adjustment is necessary then nothing further will need to be done. If it is felt that the position of your eye needs modifying then your eye doctor will carry out the adjustment. Anaesthetic drops will be put in your eye to numb it and a nurse will be with you during the procedure. You will be asked to lie flat on the bed while a small clip is put in place to hold your eyelids open. The loose stitches in your eye will be manipulated to adjust the muscle or muscles and more measurements of the position of the eye will be taken. At the end of the procedure the stitches will be secured.

How long will I be in hospital?

Most patients are admitted on the day of surgery and are discharged home later that day. An overnight stay may be necessary if the effects of the general anaesthetic are causing nausea or vomiting.

What are the dos and don'ts after surgery?

Do:

- Use the antibiotic/anti-inflammatory drops after the operation for one week to one month according to the advice of the surgeon.
- Take care when washing your face and hair to avoid getting soap or shampoo in your eyes.
- Take 3–5 days off work to aid recovery.
- Leave your eye uncovered if you wish.
- Avoid contact sports for 6 weeks.
- Use a clean tissue every time you need to wipe your eye (do not rub your eye either with a tissue or with your fingers).

Do not:

- Go swimming for 4 weeks after your operation. This is to prevent possible infection.
- Drive or operate machinery until your vision has settled.

What can I normally expect after squint surgery?

- **Pain** - Pain and discomfort lasts for a few weeks and can be relieved by taking pain relief medication, for example Paracetamol. **If you are already taking pain relief medication for a different condition continue with these, but do not take both.**
- **Swelling and bruising** – This lasts for 1-2 months and is usually worse in the morning.
- **Stitches** – Most of the stitches we use will slowly dissolve by 6–8 weeks after surgery. Occasionally a permanent stitch needs to be used.
- **Blood stained tears and watering** – This is common for the first few weeks. Blood will be seen on the tissue when you wipe your eye.
- **Blurred Vision** – This is common in the operated eye. It will usually improve over several weeks. New glasses or a change of glasses may be required.

What are the unwanted effects following surgery?

- **Under-correction of the squint** – Further treatment may be necessary. This may involve surgery, botulinum toxin injection or prism glasses.
- **Over-correction of the squint** – This may improve with time. Further treatment may be necessary. This may involve surgery, botulinum toxin injections or prism glasses.
- **Double vision occurring after the operation or getting worse** – This may improve with time as you gradually get used to the situation. Further treatment may involve surgery, botulinum toxin injection, prism glasses or occlusion.
- **An allergic or reaction to antibiotics/anti-inflammatory drops** – The drops should be stopped. A different type of drop may be used.
- Very rarely the drops may cause a temporary increase in the pressure inside the eye (intra-ocular pressure, or IOP). The pressure will be checked at your first visit following surgery and so it is important that you attend this appointment.
- **Change in the focus of the eye** – This may result in you needing glasses or a change in your present glasses prescription.
- **Visible scarring on the eye** – This is usually seen when the eye has had more than one operation. A minor amount of scarring on the conjunctiva is common. The scarring can take up to two years to fade and may continue to be apparent after swimming or exposure to cold winds. Severe scarring may need surgery to remove the scar.
- **Persistent redness of the eye** – Commonly the redness of the eye resolves by 2 months after the operation. Occasionally slight redness may persist up to 2 years, especially after swimming or exposure to cold winds
- **Retained stitch or a late reaction to a stitch** – The stitch may need to be removed.
- **Loss of sight** – This is an extremely rare complication. It can result from an infection or bleeding inside the eye or a retinal detachment.

Your post-operative visit.

It is important that you attend this appointment. You will be assessed by the Orthoptist who will assess your eye movements and measure any remaining squint.

You will also be seen by the Ophthalmologist who will make sure that the eye(s) is healing properly and measure your IOP. They will also advise you on whether you need to continue using your eye drops.

Please make sure you bring your glasses to this appointment (even if you feel that they are no longer right for you).

The information in this leaflet is intended as a guide only, as each patient's experience will be different.

If you require any further information, please contact the Orthoptic department on (0161) 701 4882, Monday to Friday, 8.30 am - 4.30 pm.

If you need to speak to someone outside of these hours, please ring the Emergency Eye Department on (0161) 276 5597 everyday between 8.00 am and 9.00 pm.

If at any time you are unable to contact a member of staff on the above numbers, telephone Ward 55 on (0161) 276 5512, 24 hours a day.