# **Squint Surgery**



This information sheet provides answers to some of the questions you may have about squint (strabismus). Your surgeon will discuss your particular case with you since every patient and every squint is different.

### Aims of surgery:

Usually for one or a combination of the following:

- To improve the alignment of your eyes
- To reduce or try to eliminate double vision
- Occasionally to improve an abnormal position of the head

# **Surgical Procedure:**

Squint surgery is a common eye operation and 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 which are often dissolvable so do not need to be removed. Squint surgery is nearly always a day case procedure.

# Types of squint surgery:

There are two kinds of squint surgeries: non-adjustable and adjustable.

1. Non-adjustable 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.

## Types of squint surgery (continued)...

2. Adjustable surgery uses an adjustable suture and may give a better result in certain types of squint. Your surgeon will advise if you require an adjustable suture. The main part of the operation is carried out in the operating theatre usually under general anaesthetic (when you are asleep). The final position of the muscles is then adjusted to give the best alignment. This is carried out under local anaesthetic eye drops once you have woken up from the anaesthetic. If you wear glasses for near or for distance they should be worn during this procedure so ensure you have them with you. The redness in the eye can take a little longer to settle down after adjustable surgery.

### Prior to surgery:

- A pre-operation assessment will be organised to ensure you are fit to have surgery and to answer any questions you may have.
- Measurements of your squint will be taken and documented which will determine which eye muscles are required to be operated on
- The assessment will involve a basic health check including a medical history and current medications.
- Some patients may require a review by an anaesthetist prior to surgery. This may be a phone call or a face to face consult.

## After squint surgery:

Overall, 90% of 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 a different direction.
- Squint surgery will not replace the need for glasses or alter your visual acuity
- Children may need to start/continue with patching treatment or atropine occlusion
- Immediately after your eye(s) will be swollen, red and sore and your vision may be blurry.
  Your eye may be also quite painful. It is common for some bloodstained fluid to discharge from the eye(s)
- Start the drops you have been prescribed, and take painkillers such as paracetamol and ibuprofen as necessary. The pain usually wears off within a few days.
- Any redness and discomfort can last for up to three months, particularly with adjustable surgery and repeat squint operations. Children tend to heal more quickly than adults.
- 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.

#### **Risks of Squint surgery:**

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 further surgery
- **Double vision:** You may have experienced double vision prior to any surgery and you may also 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. In some patients the double vision may remain and can change position. Botulinum toxin injections are sometimes performed before surgery to assess your risk of this.
- Allergy: 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. 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: 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.

# Risks of Squint surgery (continued...):

- 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 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).
- 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: This is a risk with any operation and, although rare, can result in loss of the eye or vision. Risk of serious damage to the eye or vision is approximately 1 in 30,000
- Anaesthetic: Although usually safe with any anaesthetic there are small and potentially serious risks. Unpredictable reactions can occur in around 1 in 20,000 cases and unfortunately death in around 1 in 100,000.

## 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 clean gauze to clean any stickiness from your eyes.
- Avoid water entering your eyes from the bath or shower for the first week.
- Do not rub your eye(s) as this may loosen the stitches.
- Do not swim for four weeks.
- Please attend your post-operative (follow-up) clinic appointment.
- Continue using glasses if you have them but avoid wearing contact lenses in the operated eye(s) until you are advised it is safe to do so.
- Please call Nelson Eye Surgeons 03 545 7900 with any questions or concerns.