SQUINT SURGERY
(WITH FIXED SUTURES)

Information Leaflet
Introduction
Fixed squint surgery is a time-honoured method to correct eye misalignment. It is the procedure of choice for some types of squint, for children and for those who dislike undergoing surgery while awake.

What is a squint?
A squint (strabismus) is when the eyes are not looking in the same direction, i.e. the eyes do not appear straight. The squint can be there all the time or just some of the time, such as when the eyes are tired. An eye may turn in (convergent squint) or out (divergent squint) or one eye can be higher or lower than the other (vertical squint). A squint might be in one eye or swap between the two eyes.

What are the expected benefits of the operation?
Squint surgery is carried out for different reasons. Your surgeon will discuss them with you when you are listed for surgery or at the pre-assessment.

The main goals of squint surgery are:
- Change the position of the eye(s)
- Reduce double vision
- Reduce an abnormal head posture (tilt, face turn, chin up/down etc)

Advances in strabismus surgery now provide benefits to most adults as well as children. Treating adults with strabismus can help improve depth perception (3D vision) and enlarge the field of vision. Most patients report improved self-esteem, communication skills, job opportunities, reading and driving after squint surgery.

Alternatives to strabismus surgery are available for some patients, such as prism glasses, botulinum toxin injections or special contact lenses. Your consultant will discuss all option at the time of listing for surgery. Do not hesitate to ask for further clarification if needed.

What happens before the operation?
Once an operation date has been arranged, you will be given a date to come in for two pre-operative assessments. One assessment will be to see a specialist nurse whilst the other will be with the orthoptist. The nurse will ensure that you are fit for surgery and will advise you about how to prepare for surgery. The orthoptist will take final measurements of your squint up to two weeks before your surgery date, this is to ensure that the surgeon has up to date information in order to plan surgery effectively. On occasions, it might be necessary to change the original surgical plan. It is extremely important that you attend this appointment as surgery can not go ahead without final measurements. Please bring along any glasses you are currently wearing to your orthoptic assessment.

If you are unable to attend your Orthoptic pre operative assessment please ring 0161 419 5357.
What happens on the day of surgery?
Please arrive at the Stockport Eye Centre on time. You will have a general anaesthetic so you should not eat or drink anything from midnight, otherwise the operation will be cancelled. Your surgeon will see you on the day of surgery for a final review and signing the consent form.

What happens during the operation?
You will be asleep for the main part of the operation. Squint surgery will involve tightening up, slackening off or moving some of the 6 muscles around the eye to a new position. The eye is not removed during surgery. At the end of the procedure, the surgeon will inject some local anaesthetic around the eye to minimise discomfort for the first few hours after surgery.

How long will the operation take?
On average, it takes about 20-30 minutes per muscle. This figure depends also on the age of the patient, his/her tendency to bleed, the size and position of the eyeball and whether it is the first operation or not. Patients that have undergone squint surgery previously have more scarring around the muscles, making further surgery more difficult. At times, the surgeon has to deal with unexpected findings and this will prolong the operation time.

Will I have to stay overnight?
No, unless you feel unwell or vomit after general anaesthetic. Our patients are usually able to go home in the afternoon after they have had something to eat and drink.

What happens after I leave the hospital?
You will be given eye drops to use for 2 weeks and we will arrange a post-operative appointment approximately 2 weeks after surgery. Please keep this appointment as it is very important to assess the position of the eye and to monitor the healing process.

It is quite normal to see double for few days afterwards, this is because your brain is adjusting to a new eye position. It is also normal to experience gritty eye sensation at first – this is due to the superficial sutures (“stitches”) used in the operation. You don’t need to have those sutures removed as they dissolve gradually. The sutures we use dissolve after 6-8 weeks.

When will I be able to resume normal activities?
Most patients go back to work or to their usual leisure activities, including sports, one week after surgery. The only exception is swimming, which should be avoided for 4 weeks after surgery. Please bear this in mind when booking holidays after your strabismus surgery (there is no contraindication to travelling, including flying). You can use your glasses as normal, watch TV, read etc. as long as you feel up to it. You will not be able to wear contact lenses while the eyes are still red. The eyes can remain red up to 8 weeks after surgery; however this varies from person to person. Using make up after strabismus surgery is possible, giving preference to water-based products that require less rubbing to remove. Avoid using make up in close proximity of the eye (e.g. use mascara only at the tip of the eyelashes) for the first 4 weeks.
If you are experiencing double vision after your surgery please do not drive or operate machinery. If the double vision persists or gets worse please contact the Orthoptics department (0161 419 5357).

**Common problems after surgery:**

Nausea: This is possible after general anaesthetic. It can be relieved by medication.

- **Pain:** Pain and discomfort last for a few weeks and can be relieved by simple pain killers. Gritty eye sensation is usually caused by the sutures (stitches) and this settles after few weeks. Please contact your GP or the Hospital urgently if you experience severe pain. Please avoid touching or rubbing the eye.

- **Swelling:** It is common to notice mild swelling of the area around the eyes. This usually lasts 1-2 months.

- **Watering** is very common for the first few weeks. Blood can be seen on the tissue when you will wipe your eye.

- **Allergic reaction to the eye drops:** Drops should be stopped and a different type of antibiotic might be given. Please ring 0161 419 5689 for advice.

- **Blurred vision:** This is common in the operated eye and it will usually improve over several weeks. New glasses can be required.

- **Persistent visual problems:** This surgery does not correct long standing visual problems from strabismus (“lazy eye”) or the cause of strabismus. Glasses and/or prisms may still need to be worn after surgery.

- **Double vision:** Many patients experience double vision while the brain adapts to the new alignment. The double vision usually disappears in a few days in children and in up to a fortnight in young adults; in some patients it may persist even longer, come back or be permanent. Patients can usually learn to ignore one of the images. If not, prism glasses or special contact lenses may be prescribed to improve the double vision. If you think that the double vision is getting worse or you cannot cope with the double vision, please contact the Orthoptics Department (0161 419 5357).

**Complications following surgery:**

Surgery has risks. Occasionally a complication will arise from the surgery carried out. Complications can happen right away or days, months, even years later. The risk of complications is different for each person, and depends on how long you have had the squint, whether you have already had surgery for strabismus previously, how well you heal, whether you have diseases of the eye or other parts of the body, and your medications.
This document will help you decide whether you are ready to accept the risks of strabismus surgery by listing the major risks (only major risks are listed):

- **Under/overcorrection**: this might improve with time. It takes at least two months for the results of the operation to become stable. Further treatment (special glasses, botulinum toxin injection, more surgery) may be necessary. It might not be possible to achieve perfect alignment.

- **Scarring**: every operation causes scarring. It is usually present over the white portion of the eye and it can fade away with time. Usually it is not noticeable after some months. In rare cases, or if the eye has had more than one operation, the scarring might be severe and require further surgery.

- **Change in eyelid position**: this is not very common and it happens more frequently in older patients. Another operation might be needed to correct the lid position.

- **Retained suture**: this is a late reaction to a stitch, which is not fully reabsorbed and often needs to be removed.

- **Change in focus of the eye**: this means that you might need glasses or a change in your present glasses.

- **Severe complications of strabismus surgery**: The British Ophthalmic Surveillance Unit (BOSU) has recently conducted a study into severe complications of strabismus surgery in the UK. According to the BOSU study, complications occur in 3 patients per 1000 (0.3%) overall. These figures include globe perforation (0.1% or 1 patient per 1000), muscle slippage (0.09% or 1 patient per 1100) and rarer complications such as infection, abnormal thinning of the eye (scleritis), lost muscle, retinal detachment and endophthalmitis. Loss of vision is a rare complication (0.05%, or 1 in 2000) and this can result from an infection or damage to the retina.


- This operation is carried out under **general anaesthesia**, which carries some risk. Your anaesthetist will discuss these risks with you before the operation.

Other sources of information:

Stockport Eye Centre 0161 419 5236
Orthoptics Department 0161 419 5357
Eye Casualty 0161 419 5689

If after reading this leaflet there any questions please ask the orthoptist or your surgeon.
Patient’s Acceptance of Risks
I understand that it is impossible for the doctor to inform me of every possible complication that might occur. I understand that more than one surgery may be required to treat the strabismus. By signing below, I agree that my consultant has answered all of my questions, that I have been offered a copy of the consent form and that I understand and accept the risks, benefits and alternatives of strabismus surgery.

Patient ..............................................................................................

Patients Signature ...........................................................................

Date............................................
If you would like this leaflet in a different format, for example, in large print, or on audiotape, or for people with learning disabilities, please contact:

Patient and Customer Services, Poplar Suite, Stepping Hill Hospital. Tel: 0161 419 5678

Information Leaflet. Email: PCS@stockport.nhs.uk.

---

A free interpreting Service is available if you need help with this information. Please telephone the Lips Service on 0161 922 5149 or E-mail: tam-pct.lips@nhs.net

<table>
<thead>
<tr>
<th>Language</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td><a href="mailto:tam-pct.LIPS@nhs.net">tam-pct.LIPS@nhs.net</a></td>
</tr>
<tr>
<td>Bengali</td>
<td><a href="mailto:tam-pct.lips@nhs.net">tam-pct.lips@nhs.net</a></td>
</tr>
<tr>
<td>Chinese</td>
<td><a href="mailto:tam-pct.LIPS@nhs.net">tam-pct.LIPS@nhs.net</a></td>
</tr>
<tr>
<td>Farsi</td>
<td><a href="mailto:tam-pct.LIPS@nhs.net">tam-pct.LIPS@nhs.net</a></td>
</tr>
<tr>
<td>Polish</td>
<td><a href="mailto:tam-pct.LIPS@nhs.net">tam-pct.LIPS@nhs.net</a></td>
</tr>
<tr>
<td>Urdu</td>
<td><a href="mailto:tam-pct.LIPS@nhs.net">tam-pct.LIPS@nhs.net</a></td>
</tr>
</tbody>
</table>

---

Our smoke free policy
Smoking is not allowed anywhere on our sites. Please read our leaflet ‘Policy on Smoke Free NHS Premises’ to find out more.

---

Leaflet number  PAED65
Publication date  September 2014
Review date  September 2016
Department  Ophthalmology
Location  Stepping Hill Hospital