

Patient Information- 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. Miss West 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.

Pre-Operative assessment

Prior to surgery you will be required to have a pre-operation assessment. This is to ensure you are fit to have surgery; 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.

You will be provided with instructions for the day of surgery.

What happens on the day of the operation?

You will be asked to come early so that you can be prepared for surgery.

- Please make sure that you have not had anything to eat or drink after the times that you have been told.
- You will need to arrange your own transport to and from the hospital. After the operation, we advise that you do not drive yourself and do not take public transport to get home.
- All patients are asked to arrive at the same time, so that the doctor and the anaesthetist can see them before starting operating. This means that there may be a wait before your operation.
- When you arrive, Miss West will answer any questions, confirm your consent to the operation and ask you to sign the consent form. She will make a mark on your forehead with a felt tip pen above the eye(s) that will be operated on. This will wipe off after the operation.
- The anaesthetist will check on your health and explain about the anaesthetic.
- Shortly before going to the operating theatre the nurse will provide you with a theatre gown and ask you to change. The nurse will then take you to the anaesthetic room.

- You will be given the anaesthetic by an injection into the back of your hand. Squint surgery is done under a general anaesthetic so you will not be aware of anything during the operation. Squint operations usually take about 45 minutes depending on the number of muscles that need surgery.

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

Non-adjustable surgery

Squint surgery is usually carried out under general anaesthetic. 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 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 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; most 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.

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 Anaesthetist will discuss the details of anaesthesia with you separately before your operation.

After your operation

After the operation you will be taken to the recovery room to wake up. The nurse will then take you back to your room on the ward for you to rest until you are ready to go home.

- Once you are feeling well you will be offered a drink and food.
- If you have had an adjustable operation then once you are awake and feeling well enough the doctor and orthoptist will come to your room to assess your eyes and do the adjustment.

When can I go home?

The nurse will advise you when you are ready to go home. You will need to be feeling well and to be eating and drinking. It is not possible to give an exact time as it depends on the time of the surgery and how you are feeling afterwards. Most people can go home between two and four hours after the operation but occasionally people need to stay in overnight.

- You should arrange for someone to collect you after the operation, as it is best not to drive or use public transport straightaway.
- We advise that you should have an adult with you for 24 hours after the operation.
- Please bring sunglasses or your own glasses to wear on the way home to protect your eyes.

What should I expect after the operation?

The eye(s) will be quite uncomfortable for a few days after the operation. Whilst you are on the ward the nurses will provide medication, if needed, to help with any discomfort. Please make sure that you have some pain relief medication to use if needed after you get home, for example, paracetamol or ibuprofen. Before you leave the hospital, the nurses will advise you when you can next take medication. When using medication to relieve discomfort please follow the instructions and contact us for advice if in doubt.

- You will be given eye drops to use after the operation to help the eye(s) to heal. The nurse on the ward will explain how and when to use the drops.
- The white area of the eye(s), where the operation was done, will look red after the operation. This will improve in the first couple of weeks but may take a few months to settle, particularly with adjustable and repeat squint operations. You may also notice that there is some red discharge from the eye(s) and that the eyelids are sticky on waking for the first few days after the operation. Use cooled boiled water and a clean tissue or cotton wool to clean any stickiness from your eyes.
- You will need about one week off work/full activities after the squint operation.
- Things to avoid after the operation:
 - Sports and strenuous activities - for two weeks
 - Swimming - for four weeks
- You should not sign any legal documents or drive for 48 hours after the general anaesthetic. After this you can start driving as soon as you feel safe and confident, provided that you do not have double vision.
- You can wash your hair, although it is best not to do this for the first day or two after the operation. Try to avoid getting water or shampoo into the eyes.
- Contact lenses should not be used in the operated eye(s), for at least a week after the operation, so please bring your glasses with you to wear home and until the eye(s) have healed.
- The redness and discomfort can last for up to three months, particularly with adjustable and repeat squint operations.
- It is quite safe to use your eyes for visual tasks such as reading and watching television.

We will provide you with contact information in case of any queries or concerns. Please ensure you return for follow-up appointments as advised.