



Orthoptic Department, Royal Eye Infirmary

Squint Surgery in Children

What is the surgery for?

The aim of this surgery is to reduce the size of the squint by realigning the eyes. The eye(s) may be turned in, out, up or down. In some cases, surgery is used to reduce or eliminate double vision, and in others, it may also improve the co-ordinated use of both eyes together (binocular vision) which helps 3-D vision. Although the aim of squint surgery is to improve the appearance of the eye(s), it is important to note that it is not just a cosmetic procedure. The presence of a squint can mean that children are subjected to prejudice at school, in the workplace as adults and socially due to the appearance of their eyes.

How is the surgery done?

Squint surgery involves repositioning the relevant eye muscles. The eye is NOT taken out for the operation. The muscles lie on the sclera (the white of the eye) just under the membrane of the eye. After adjustment of the muscle strength, the muscles are sewn back onto the eye using dissolvable stitches.

The surgery is performed while your child is asleep under general anaesthetic. It takes about one and half hours and is usually done as a day case, with no overnight stay in hospital.

As a squint is an imbalance between the two eyes, sometimes it is necessary to operate on both eyes, even if the squint is only seen in one eye. More than one operation might be required to obtain the best result.

Does the surgery cure the squint?

The objective of surgery is to realign the eyes as well as possible primarily in the straight-ahead position and when looking downwards in the reading position. Good alignment in other directions of gaze may or may not be possible, depending on the type of squint your child has, and if this persists, it may require a further procedure.

The surgery should improve the appearance considerably. However, about one fifth of patients may require a further operation in the future. It is not always possible to achieve a perfect result and it is possible that the squint might return several years later.

Does the operation cure the need for glasses or patching?

No. Surgery does not improve the eyesight, so glasses and patching may still be required after the operation.

Is the eye painful afterwards?

Following squint surgery, it is common to feel a little unwell and vomit. The eyes are usually red, sore, watery and sticky for a few weeks following surgery, and may be painful in the first few days. The drops you are given for your child will reduce the inflammation and minimise the risk of infection or scarring. Paracetamol suspension can also be given.

Will my child's eyesight be affected?

Squint surgery does not affect eyesight, but your child may experience some blurring initially.

What are the risks of the operation?

The results of squint surgery are not completely predictable as the healing of the muscles and the brain-eye coordination are very variable, particularly if your child has had squint surgery before. The main risks are that the squint is not completely straightened (under correction) or that the squint direction changes (over correction).

Immediately after the operation, the eye will be red. This is normal and any bruising will disappear generally within a week. In extremely rare cases, the muscle might slip back from its intended new anchoring, resulting in the eyes being badly misaligned. This will necessitate a re-operation to re-secure the muscle. Equally rarely, the stitching needle to reattach the muscle in the new position on the thin surface of the eyeball might go too deep, resulting in an infection within the eye. This will result in your child being very uncomfortable and will need treatment in hospital.

Children may experience double vision afterwards, but this is usually temporary. Sometimes there are problems with the wound or scars on the eye surface where the surgical incision was made. There is a very small risk of damage to the eye or vision or paralysis of eye movement.

Please feel free to discuss any concerns regarding surgery with your child's consultant beforehand as individual cases vary.

Before the day of surgery

An orthoptic assessment is carried out in the eye clinic up to 2 weeks before the operation. Prior to the surgery, you will be asked to sign a consent form with the doctor who will ensure you are happy to proceed. This is usually done when your child is listed for squint correction surgery and the doctor will go through the consent procedure with you as their parent or guardian at that time. The main areas for discussion are:

- the risks of the procedure
- the benefits of having the procedure done
- any alternatives to surgery
- the risks of not having the procedure done and the process of the procedure.

It is worth remembering that once you have discussed the above, you may decide not to proceed with surgery. This is a perfectly sensible and acceptable option. Please do not be afraid to ask questions if you do not understand.

On the day of surgery

You will be asked to come to Kingfisher Ward early, so that your child can undergo preparations for the surgery, including a brief visit by the eye doctor and anaesthetist. You will come to the operating theatre with your child and stay until he/she is asleep, but you are not able to watch the surgery.

After the operation, the eye(s) will not usually be covered, and painkilling drops will have been put in before your child wakes up. The pupil/pupils might appear larger than normal due to the injection used during the operation to minimise bleeding.

Your child can be discharged on the same day by the nurses once he/she is awake and can drink and eat without vomiting. Occasionally, if a child feels very sleepy or sick, they may remain in hospital (with a parent/guardian) overnight

Before leaving hospital, you will receive eye drops with instructions, and an appointment for the eye department for approximately 4-6 weeks.

Instructions for care after the operation

- Try not to rub the eyes. Dab the eye(s) but do not rub as this may loosen the stitches.
- Your child will be prescribed eye drops to apply to the operated eye(s) four times per day for a month.
- Use cooled boiled water and cotton wool or gauze to clean any stickiness from the eyes.
- Use painkillers such as paracetamol or ibuprofen if the eyes are very uncomfortable.
- Your child can return to school in a few days when it is comfortable to do so.
- Do not swim for 4-6 weeks afterwards.
- No rough sports for 4-6 weeks afterwards.
- Attend the post-op clinic appointment (4-6 weeks after surgery).
- Continue using glasses if your child has them, unless advised otherwise.

Putting eye drops in after the operation

Wash your hands. Gently pull the lower lid down while your child looks up and place one or two drops into the groove between the lid and the eyeball. If this is not possible, you may need to part the lids and put the drops in as best you can. It is often easier with your child lying down or when they are sleeping.

Hygiene after the operation

For the first week after the operation, you can wash the face, shower or bathe, and wash the hair as normal. Simply keep the eyes tightly closed to prevent water entering the eyes. If the eye is sticky, or you need to clean near the eyelashes, use cooled boiled water to clean the lids with cotton wool, gauze or a clean flannel. After the first week, no extra precautions are required.

If you have any concerns

You should call the triage line on 01305 255192 immediately if:

- The eye becomes very red despite applying the eye drops.
- Your child complains of pain in the eye that keeps them awake.
- There is any yellow/green discharge from the eyes.

Contact Numbers

We hope that you have found this information useful. If you have any questions or are worried about anything, please speak to the following Dorset County Hospital Staff:

On the day of surgery:

Contact Kingfisher Day Surgery Unit (01305 255771) or Kingfisher Ward (01305 254253)

After discharge if any urgent concerns:

Contact the triage line Monday – Friday, 8am - 4.30pm (01305 255192) or your own GP for advice.

For general queries before or after surgery:

Contact the Orthoptic Department Monday – Wednesday 8am-5pm (01305 255924).

About this leaflet:

Author(s):	Tracy Crowley, Head Orthoptist; Mr A Mutamba, Consultant Ophthalmic Surgeon
Written:	July 2023
Approved:	February 2024
Review Date:	February 2027
Edition:	v1

If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk



© 2024 Dorset County Hospital NHS Foundation Trust
Williams Avenue, Dorchester, Dorset DT1 2JY
www.dchft.nhs.uk