

Introduction

Squint (strabismus) refers to the misalignment of the eyeballs, one focuses on an object, while the other drifts in another direction. The aim of squint surgery is to re-align the eyeballs to relieve double vision, to improve fusion of image and hence to prevent the development of lazy eyes especially in childhood. The surgery may also improve cosmesis and abnormal head posture.

The Operation / Procedure

Squint surgery may be performed on one or both eyes under local or general anesthesia. GA is usually adopted for procedure performed on children. A small incision is made in the conjunctiva, the white part of the eye. One or more of the eye muscles are strengthened or weakened to allow proper alignment of the eye. Suturing is usually required.

There will be no significant effect on light refraction and thus patient needs to continue with the wearing of glasses if such was needed before surgery. In general, squint surgery is a safe procedure, but complications may still occur during the operation, or within days, months or even years after the operation.

Preoperative Preparation

1. Admit 1 day before or on same day of this elective operation.
2. Anesthetic assessment. **Inform your doctor** if you have other systemic disease such as hypertension, stroke, heart disease, diabetes or take western medication (especially blood thinners like Aspirin or Warfarin), traditional Chinese medicine or healthy supplements on a regular basis.
3. Keep fast for 6 to 8 hours before operation.
4. Blood tests, chest x-ray etc. may be required to prepare for general anaesthesia.
5. Empty bladder and change to operation clothes before transfer to operating room.
6. Pre-medication, intravenous line and antibiotic prophylaxis may be required.

Postoperative Instruction

A. General

1. Mild throat discomfort or pain because of intubation.
2. Mild discomfort or pain over the operation site. Inform nurse or doctor if pain severe.
3. Nausea or vomiting are common; inform nurses if symptoms severe.
4. Inform nurses if more analgesics are required.
5. Can mobilize and get out of bed 6 hours after operation, usually go home on day 2 after the operation.

B. Wound care

1. In the first day after operation, patients can have shower with caution (keep wound dressing dry).
2. You may see stitches in the conjunctiva, they will be absorbed naturally.
3. The operated eye may need regular cleaning around the lids, with cold boiled water but do not use cotton wool.

C. Diet

Resume diet, usually 4 hours after anaesthesia, and when taking sips of water well.

Common Risks and Complications (not all possible complications are listed)

A. Anesthesia related complications

1. Cardiovascular : myocardial infarction or ischaemia, stroke, deep vein thrombosis, pulmonary embolism, etc.
2. Respiratory : atelectasis, pneumonia, asthmatic attack, exacerbation of chronic obstructive airway disease
3. Allergic reaction and shock.

Risks associated with local anesthesia:

Eyeball perforation	Retinal vascular occlusion	Respiratory and cardiac disturbances
Optic nerve injury	Droopy lid	Decrease in blood pressure

B. Procedure related complications

Tearing and mild eye discharge	Corneal abrasion (scratch)
Swelling, redness, inflammation and bleeding on the conjunctiva up to several months	Slipped or lost muscle especially when the operated muscles are fibrotic and under high tension
Eye infection and inflammation	Accidental penetration of the eyeball causing bleeding, damages inside the eye and possible retinal detachment, occasionally leading to blindness
Scarring affecting eyeball movements	Vascular occlusion may lead to vision loss (rare)
Double vision	Drooping lid and sink-in eyeball (enophthalmos) (rare)
Over-correction or under-correction	Cardiac or respiratory disturbances (extremely rare)

Spectacles, prisms, occlusion treatment for lazy eye may be needed or continued after the operation.

Re-operation or even multiple surgeries may be necessary in some situation.

Things to take on discharge

1. The procedure does not improve the general cosmesis.
2. Stitches in conjunctiva will be absorbed naturally, the conjunctiva may be congested or red with surrounding swelling.
3. Some may have transient double vision.
4. It may help to correct impaired vision of a lazy eye (before the age of 8 years), eye glasses or eye occlusion patch may have to be continued as usual.
5. Follow instruction on taking eye drops or eye ointment and see the doctor as scheduled.
6. Do not rub eye(s), do contact sports or vigorous activities.
7. Avoid water, soap or shampoo getting into the eye.
8. Wear clothes with buttons, not pullovers, to avoid the clothes touching and infect the operated eye.
9. Leave night light on to avoid falls when you go to toilet. As you may not be accustomed to the eye pad or blurring after surgery.
10. If you experience acute blurred vision, excessive bleeding from the operated eye, signs of infection such as fever and chills, redness, swelling, increasing pain, or excessive discharge from the procedure site, you should see your doctor immediately or seek medical attention at nearby accident and emergency department.

Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor. Evangel Hospital reserves the right to amend this leaflet without prior notice. We welcome suggestions or enquiries on the information provided in this leaflet. Please contact our Healthcare professionals so that we could follow up and make improvement.

Reference:

Hospital Authority: "Strabismus / Squint Surgery" (2023)

Smart Patient: http://www.ekg.org.hk/pilic/public/Ophthal_PILIC/Ophthal_StrabismusSquintRepair_0074_eng.pdf (06-07-2023)