

Strabismus / Squint Surgery

Introduction

Squint (strabismus) refers to the misalignment of the eyeballs, one eyeball focuses on an object, while the other eye drifts in another direction. The aim of squint surgery is to re-align the eyeballs that helps relieve double vision, 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 Procedure

- Squint surgery may be performed on one or both eyes under local or general anesthesia. General anaesthesia is usually adopted for procedure performed on children.
- A small incision is made in the conjunctiva, the transparent membrane covering 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 in the operation.
- There will be no significant effect on the refraction on the eyeball and thus individual patient needs to continue with the wearing of glasses if such was needed before surgery.

Possible Risks and Complications

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. The possible complications associated with squint surgery include:

- Swelling, redness, inflammation and bleeding on the conjunctiva (the 'white' part of the eye). The conjunctival congestion and swelling may persist for several weeks to several months after surgery.
- Tearing and mild eye discharge
- Eye infection and inflammation
- Scarring around eyeball causing defective eyeball movements
- Corneal abrasion (scratch)
- Double vision
- Over-correction or under-correction

- Slipped or lost muscle especially when the operated muscles are fibrotic and under high tension.
- 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.
- Accidental penetration of the eyeball causing bleeding, damages inside the eye and possible retinal detachment occasionally leading to blindness.
- Infection and vascular occlusion may lead to vision loss in rare circumstances.
- Drooping lid and sinking-in of eyeball into orbit (enophthalmos) may occur in rare circumstances.
- The procedure may cause cardiac or respiratory disturbances in extreme condition.
- Risks associated with the anesthesia such as eyeball perforation, optic nerve injury, retinal vascular occlusion, droopy lid, respiratory and cardiac disturbances and decrease in blood pressure etc.

Before the Procedure

- Blood tests, chest x-ray etc. may be required to prepare for general anaesthesia.
- If needed, fasting as instructed by healthcare professionals
- 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.

After the Procedure

- You may see stitches in the conjunctiva, they will be absorbed naturally.
- The conjunctiva may be congested or red for several weeks with surrounding swelling.
- The operated eye may need regular cleaning around the lids, with cold boiled water but do not use cotton wool.
- Some may have transient double vision

Follow Up

- The procedure does improve the general cosmesis and 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.
- Follow instruction on taking eye drops or eye ointment and see the doctor as scheduled
- Do not rub eye(s)
- Prevent water, soap or shampoo from getting into the eye. Avoid washing your hair in the first post-operative week to prevent infection.
- Avoid swimming, contact sports or vigorous activities
- Wear clothes with buttons and not pullovers to avoid the clothes coming in contact with the operated eye to prevent infection
- Leave some light on when you go to toilet at night to avoid falls as you may not be accustomed to the eye pad or blurring after surgery.
- 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. The actual risks may be different for different patients. During the operation, unpredictable condition may arise, and additional procedures may be performed if necessary. For further information, please contact your doctor.