Strabismus Surgery



What is strabismus?

Strabismus is the medical word for a misalignment of the eyes. One eye may turn inwards, outwards, or more rarely upwards or downwards, while the other eye looks straight. The turn can alternate between the eyes. The eye turn can be noticeable all the time or it can be intermittent, where sometimes the eyes are straight and sometimes the eyes cross or drift.

What are the treatments for strabismus?

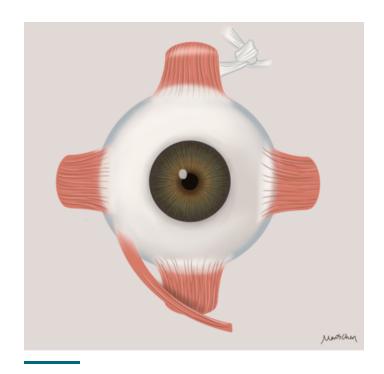
The treatment for strabismus depends on the type of eye turn and the overall eye health. The first step is to evaluate whether the vision in each eye is equal and normal, whether glasses are required, and whether the eye anatomy and health is normal.

Children with strabismus are at risk of developing a lazy eye, amblyopia, and sometimes they may have to wear an eye patch for a few hours every day to help strengthen the weaker eye.

Eye surgery for strabismus may be required to straighten the eyes and can be performed in children and adults. If done at a very young age, then strabismus surgery can also help in the development of 3D vision (stereoacuity).

What is involved in strabismus surgery?

Strabismus surgery is a common and safe day procedure performed under general anaesthetic in children and adults. Your ophthalmologist will measure the angle of strabismus several times before surgery to confirm how much surgery to perform on the muscles of the eye.



Extraocular muscles insert on the surface of the eye. They are weakened (recessed) or tightened (resected) in strabismus surgery to straighten the eyes

During the surgery, the loose covering to the white of the eye, the conjunctiva, is opened and the muscle is then secured with a stitch (suture) and repositioned at a new location based on the measured amount of strabismus. The eye muscles are weakened or tightened by moving the muscles on the surface of the eye and the eye remains in the socket during the surgery. Strabismus surgery takes about 1 hour and is an elective day procedure.



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What are the risks of surgery?

An important risk during the surgery is the need for general anesthetic. If the patient has underlying medical issues, they may require a preoperative anesthesia consultation to ensure that it is safe to proceed with the general anesthetic.

We do not fully understand why some children develop strabismus and surgery doesn't cure the underlying reason for the strabismus, which involves the complex communication pathways between the eyes, the eye muscles, and the brain. For this reason, it can be difficult to predict the exact position of the eyes after surgery and in up to 20% of cases, a second strabismus surgery may be required.

Strabismus surgery takes place on the surface of the eye making risk to vision or any serious complication extremely rare.

Rare but serious complications may include bleeding, infection, scleral perforation, slipped muscle, and retinal detachment. The risk of vision loss after strabismus surgery is less than 1 in 100,000.



The lateral rectus muscle is exposed with muscle hooks during strabismus surgery

What can I expect after strabismus surgery?

On the day of the surgery the patient may feel nauseous from the anaesthetic and it is normal for the eyes to be sore and irritated. Cool cloth compresses can help in the first 24hrs. Your eye surgeon may prescribe drops to take after surgery to help with the healing process. Patients should take acetaminophen and/or ibuprofen to treat pain for at least 48-72 hours after surgery, and should plan to have 1 week off of school or work.

It is normal for the eyes to be a bit blurry, sore, scratchy or itchy in the weeks after surgery and this will slowly improve. It is also normal to have double vision for a few weeks as the eye muscles heal. Most children feel much better by about 3 days after the surgery.

Patients can resume normal activities after surgery but it is best to avoid aggressive eye rubbing or activities at risk of direct trauma to the face (martial arts, contact sports). Do not put your face in a swimming pool or hot tub for a few weeks.

The redness and swelling on the white of the eyes will last for several weeks, and sometimes a few months. Patients may have a mild permanent discolouration from scaring on the white of the eyes in the area of the surgery.

Your eye surgeon will see you in the weeks after surgery to assess for healing and will see you a few months after surgery. It can take 6 weeks for the eye position to settle after the surgery.

To learn more about strabismus, scan this code or visit www.waterlooeye.ca



