Squint
Crossed Eye
Strabismus
What is a squint?
Squint or crossed eye can be seen in children and adults, where both eyes are not aligned. This would result in the eyes not working together as a pair. One eye may turn either inwards, outwards, downwards or upwards, whilst the other eye looks straight.

What causes squint?
There are numerous causes for a squint, but in many cases the cause is not known.

There are some factors which can make a squint more likely to occur:

- Uncorrected long sight (hypermetropia) is the most common reason for inward deviation or convergent squint. Distance and near vision are blurred and the effort required to see more clearly can cause one eye to turn inwards. Properly prescribed glasses can help straighten the eyes.
Can newborn babies have squint?

- Occasionally squint can be caused by a weak or abnormal eye muscle.
- Premature babies, children with delayed milestones may sometimes be born with squint.
- Brain issues, trauma, tumors can rarely cause squint.
- Long standing cataracts can also rarely lead to squint.

Some babies are born with squint, but more often a squint develops or becomes noticeable in infancy or early childhood (up to 3-4 years of age).

A lot of babies can have an occasional inward turning of one or both eyes in the first 3 months of life, but this is perfectly normal and is part of their brain learning how to co-ordinate the two eyes. If this continues after 4-6 months of age then it is not normal, and your baby will need to have an eye examination.
• Very occasionally, squint can develop in an older child (over 5 years of age). This may cause the child to be aware of seeing double due to the child’s eyes not working together. This needs urgent consultation with the eye doctor.

How is squint treated?

The three main treatments to manage squint and its consequences are glasses, patching and surgery. Your child may need one, two or all three of these three treatments, depending upon the type of squint that they have.

Glasses

Glasses may be needed to correct long sightedness, short sightedness and/or astigmatism. Wearing glasses will help your child’s vision and can sometimes reduce the size of the squint and may occasionally correct it as well.

It is important that your child wears their glasses all the time, to help the vision develop, which will have a long-term benefit on their squint.
Role of patching

The development of squint during childhood is a significant risk to a child’s vision. In infants and young children, the brain will ignore what is seen by the squinting eye. The child’s vision is developing rapidly during these early years and if one eye is not used due to the squint, the vision in that eye stops developing, resulting in and poor vision leading to the risk of ‘LAZY EYE’.

Patching enables the child to use even the squinting eye, which can improve the vision in this eye. Patching can sometimes have a beneficial effect on the size of the squint, as a result of treating the reduced vision.
Surgery

If your child needs glasses and/or patching treatment to help their vision, it is important that this is done prior to surgery to improve vision, before surgery is considered. Surgery helps to:

1. To align the eyes, in order for them to work together
2. Strengthen binocular vision or 3D vision or binocular cooperation
3. SQUINT surgery is not just a cosmetic surgery

The eye doctor can help you decide when surgery is needed depending upon the nature and type of squint and associated issues like 3D vision and risk of lazy eye.
What is done in strabismus surgery?

The Ophthalmologist makes a small opening in the tissue covering the eye to reach the eye muscles. During surgery certain muscles are repositioned, depending on which direction the eye is turning. Surgery may be needed for one or both the eyes.

While performing strabismus surgery on children, a general anesthetic is administered. Local anesthesia is an option for adults. Recovery time is rapid and patients are usually able to resume their normal activities within a few days. As with any surgery, eye muscle surgery has certain risks, such as infection, bleeding, excessive scarring, and some very rare complications that can lead to loss of vision. Sometimes, there can be over correction or under correction of squint and temporary double vision.
After surgery, glasses or prisms may be useful to improve vision. Further surgery may be needed later to keep the eyes straight. For children with constant strabismus, early surgery offers the best chance for the eyes to work well together. In general, it is easier for children to undergo such surgery before school-going age.

Strabismus surgery is a safe and effective treatment for eye misalignment. It is not, however, a substitute for glasses or amblyopia therapy.

**Injections**

Botulinum Toxin, can be an alternative to eye muscle surgery for some individuals. An injection of this drug into an eye muscle temporarily relaxes the muscle, allowing the opposite muscle to tighten and straighten the eyes.

Although the effects of the drug wear off after several weeks, sometimes the misalignment may be permanently corrected.

In some instances, prisms can be used to overcome double vision caused by squint. Prisms do not align the eyes like surgery would but they can help the patient to bring together two separated images and can relieve double vision.

*We thank Ms Seema Banerjee for the illustrations*