

SQUINT / STRABISMUS

A squint, otherwise known as strabismus, is a condition in which the eyes are not properly aligned.

A squint may be present continuously or only sometimes (intermittently). Intermittent squints are often only noticeable, or more noticeable, when a child is tired or unwell.

A squint is visible (manifest) when one eye turns in, out, up or down while the other eye looks straight ahead.

The misalignment of the eyes can cause problems with vision and visual development, and can affect one's social interactions and acceptance.

Some children are born with a squint, while others may develop a squint later during childhood.

Very rarely squints can be a sign of neurological disease and/or tumours of the brain or eye.

Evaluation of squint/strabismus is indicated in the following circumstances:

- Any child over 3 months of age with a squint, or an abnormal head turn when looking at objects.
- A squint that develops later in childhood or in adulthood (this may cause double vision)

It is best to have the squint/strabismus seen to as soon as possible, as this can improve the outcome.

Treatment is usually recommended to restore vision and straighten (align) the eyes.

Causes of strabismus

Squints present at birth, or shortly after birth, are usually an inborn problem of muscle balance/alignment.

A squint may develop due to an uncorrected spectacle error, in which case it can be improved or fully treated with glasses.

There may be an underlying cause that requires specific treatment; such as an eyelid abnormality, cataract, or a problem in the back of the eye (retina and optic nerve) or brain.

Amblyopia ("lazy eye")

Amblyopia, or "lazy eye", is a difficult concept to explain and understand. It is characterised by poor vision in an eye that is otherwise physically normal. It happens in young children when a squint, poor vision or unequal spectacle error causes a difference in the images from the two eyes to be experienced by the brain. As a result the brain "turns off" the visual processing of one eye, to favour the other eye. This leads to a "good eye" and a "lazy eye" - where the vision does not improve despite the best glasses. Amblyopia can be treated with patching, where the "good eye" is covered to encourage the "lazy eye" to develop good vision. In order to have normal binocular (two-eye) vision, both eyes need to work together with equal vision. Patching should begin as early as possible, because the vision has fully developed and usually cannot be changed after 7 to 9 years of age.

Pseudostrabismus

Young children often have pseudostrabismus; where the child appears to be squint due to large skin folds between the nose and the eyes (epicanthic folds). These folds cover the nasal side of the eye opening, and make the child look like they are squint (especially when looking to the sides). These children do not usually need any treatment and outgrow this appearance, but it remains important to follow them up.

Treatment of strabismus

Treatment aims to preserve good vision, straighten the eyes, and restore binocular (two-eyed) vision.

Treatment of squint/strabismus includes the following:

- **Glasses/spectacles**
- **Eye patching** (amblyopia/"lazy eye" therapy)
- **Repeated visits** to measure the amount of squint/strabismus
- **Muscle surgery** (only needed in some cases)

Strabismus patients often require more than one operation; sometimes 2 to 3 operations which are done at different times/stages.

Glasses and/or patching may still be required after surgery.

Surgery is performed under general anaesthesia in most cases. The eyeball is not removed from the socket. The muscles, which are attached to the outside of the eye (sclera), are moved or shortened; and the globe is not entered. Tissue glue is used to seal the wounds on the surface of the eye to minimise discomfort.

It is done as a day procedure, and often the child is ready to go back to school in 3 to 4 days.

- **Botox injections**

Botox injections into the muscle(s) is an alternative to eye muscle surgery in some individuals. Although the effects of the drug wear off after several weeks, the misalignment can be temporarily, and sometimes permanently, corrected.