

# LAZY EYE

Estimated figures reveal that 4% of the population have lazy eye, which usually occurs during childhood. We look at what causes it and how early diagnosis and treatment can save your child's vision.



Commonly known as lazy eye, amblyopia refers to poor vision in a child even when the structure of his eye is normal — an impediment to the cortical visual development in the brain.

## Causes

Amblyopia generally begins with one eye having better vision than the other. When the brain receives both a fuzzy and clear image, it registers the latter and ignores the former. In most cases, amblyopia only affects one eye; if both eyes are deprived of good, clear visual images for prolonged periods, amblyopia can arise in both eyes. This can result in permanent poor vision in the absence of timely treatment.

The three main causes of lazy eye are:

- 1 Strabismus** This refers to the misalignment of the eyes, and affects 2–4% of the population. The brain overlooks the image from the misaligned eye, with vision in that eye eventually deteriorating.
- 2 Deprivation amblyopia** This happens because light is hindered from coming through. This could be due to the presence of a droopy eyelid, cataract, blood or other matter located in the back of the eye.
- 3 Refractive amblyopia** This occurs when there is a large or unequal amount of refractive error (glasses strength/degree) in a child's eyes — also known as abnormal spectacle power. The brain will usually 'switch off' the eye that has higher refractive error. This form of amblyopia often goes undetected until the child has a vision test, as the eyes look normal and the child functions well.

## Risk factors

A child faces a higher risk of amblyopia in the following circumstances:

- High astigmatism, long-sightedness (hyperopia) or very high short-sightedness (myopia)
- Born prematurely

- Cerebral palsy
- Mental retardation
- Positive family history

Amblyopia cannot be ascertained by just looking at the child. Early diagnosis and treatment are critical as, after the age of eight, visual impairment may become permanent. Notably, if a child does not have lazy eye by that age, he or she is unlikely to develop it.

## Treatment

The most common treatment is to train the weak eye by patching the good eye, often for several hours per day. Glasses are also required to help the eyes focus. If there is a cataract or droopy eyelid, surgery is recommended to treat the underlying cause. With strabismus, surgery on the eye muscles may be suggested to realign the eyes.

If the amblyopia is mild, the doctor may prescribe eye drops to blur the strong eye so that the child can skip the patch. Treatment may take months or even years to yield results, and is often more effective when started early. Have your child's eyes checked if you or the school health services sense a potential problem. 🏥



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