

The lowdown on LAZY EYE

Amblyopia or 'lazy eye' is reduced vision in one eye that did not develop normal vision during early childhood. If left untreated in early childhood, amblyopia will usually continue into adulthood.

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1 What is amblyopia or lazy eye?

Amblyopia, commonly known as lazy eye, is a condition where vision in one of the eyes is reduced due to defective development of normal sight during early childhood.

2 What causes it?

Anything that interferes with clear vision in either eye during the period between birth to eight years can lead to the development of amblyopia because the brain starts to ignore images seen by the “lazy” eye, favouring the “good” eye instead.

Some common causes are squint (i.e. mis-alignment of the eyes), abnormally high spectacle power (e.g. short-, long-sightedness and astigmatism) or childhood cataracts.

Amblyopia normally affects one eye, but if both eyes are similarly deprived of clear visual images for sustained periods during childhood, this condition can affect both eyes too.

3 Is it more common amongst children or adults?

Amblyopia is often diagnosed in childhood, during vision screening conducted in school, or by family physicians, paediatricians or optometrists. However, adults who were not diagnosed and treated in early childhood can be amblyopic as well.

4 How common is it in Singapore?

Amblyopia accounts for more vision loss in children than all other childhood causes of vision loss combined. In a recent population-based study of 3009 Singaporean children, amblyopia prevalence in children aged between 30 and 72 months was 1.2%.*

*Chia et al. *Invest Ophthalmol Vis Sci* 2010

5 How is amblyopia diagnosed?

Often, amblyopia may not be detected till each eye is tested individually during vision screening. Alternatively, a child may present with a squint where one eye appears to be misaligned.

It is appropriate to consult an ophthalmologist when a child complains of or develops symptoms such as blurring of vision or eye squinting etc. The Health Promotion Board currently conducts annual eye screening for all children ages 5 and 6 years in kindergartens and childcare centres, and older children in all primary schools.

6 What is the treatment like?

To correct amblyopia, the child must be made to use the “lazy” eye. This is done by patching (i.e. covering with an eye patch) the “good” eye, or blurring the “good” eye with eye drops for several hours a day, often for weeks or months. This in turn forces the brain to use the “lazy” eye, enabling it to develop normal vision.

Other mainstays of amblyopia treatment are to enable as clear an image as possible. For example, this may include wearing spectacles if

required, at all times or by surgical removal of childhood cataracts.

The child should be reviewed regularly to monitor the treatment progress.



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In addition, if patching treatment to the “good” eye is unsupervised, the “good” eye’s vision can decline as well.

8 What is the success rate of treatment?

Successful treatment depends on how severe the amblyopia is, and the age of the child when treatment is started. If diagnosed early, successful treatment is possible and treatment time is shorter. If detected after the age of eight, the success rate is relatively lower.

9 Can it be prevented?

Yes. Eye screening can pick up the risk factors for amblyopia such as squint, abnormally high spectacle power, or large differences in spectacle power between both eyes. HT

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Dr Zena Lim
Paediatric Ophthalmology & Adult Strabismus Service & Cataract and Comprehensive Ophthalmology Service Consultant
MMed(Ophth), FRCS(Ed)

Dr Zena Lim is a consultant with the Singapore National Eye Centre, as well as a visiting consultant at KK Women's and Children's Hospital. She is also an adjunct research fellow with the Singapore Eye Research Institute. Dr Lim has presented at numerous international and local conferences, and published in peer-reviewed medical journals. She is actively involved in teaching medical students and residents. Her research interests include pediatric cataract, complex strabismus and retinopathy of prematurity.