# Understanding Lazy Eye



**EunJung Park** 

# **TABLE OF CONTENT**

Common Condition	4
Causes	6
Treatment	10
Find Out Your Local Eye Clinics	14





# Lazy Eye

# Common Condition

A Lazy eye is a childhood condition where the vision does not develop properly. It's known medically as Amblyopia. It happens because one or both eyes are unable to build a strong link to the brain. It usually only affects one eye and means that the child can see less clearly out of the affected eye and relies more on the "good" eye. It's estimated that 1 in 50 children develop a lazy eye.

animation < Understanding Lazy interactive 3D model Eye>

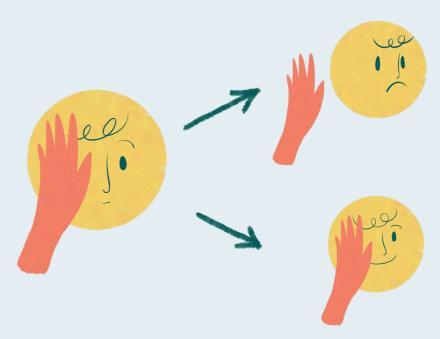
Scan or click here to watch the Scan or click here to see an





#### How to check if my child has a lazy eye?

A lazy eye does not usually cause symptoms. Younger children are often unaware that there's anything wrong with their vision and, if they are, they're usually unable to explain what's wrong. Older children may complain that they cannot see as well through one eye and have problems with reading, writing and drawing. In some cases, you may notice that one eye looks different from the other.



A common cause of a lazy eye is a squint or when a child needs to wear glasses, but they don't. If your child is too young to tell you how good their vision is, you can check their eyes by covering each eye with your hand, one at a time. They might object to covering the good eye, but they might not mind if you cover the lazy eye. If they try to push your hand away from one eye but not the other, it may be a sign they can see better out of one eye.

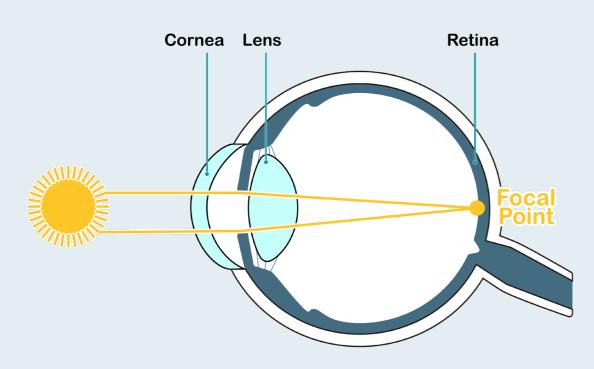
## Causes

What are the most common causes of amblyopia?

# 1. Long sightedness, Short sightedness and Astigmatism

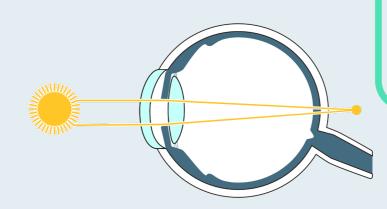
Long sightedness, short sightedness and astigmatism are eyesight problems cause the light rays entering the eye not to properly focused. These conditions are managed by wearing prescription glasses.

#### **Anatomy of Eye**



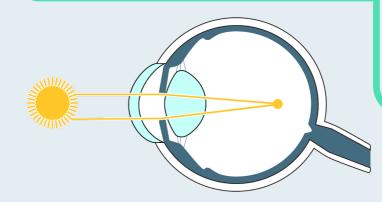
We cann see the world clearly when Cornea and Lens refract light from outside, and the light focus on Retina (Focal Point).

### Long-sightedness



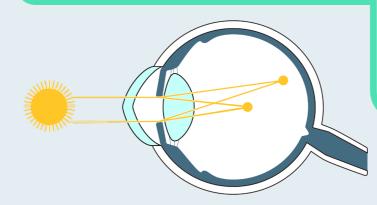
Long-sightedness is where distant objects appear normal but nearby objects are blurred.

### **Short-sightedness**



Short-sightedness is where nearby objects appear normal but distant objects are blurred.

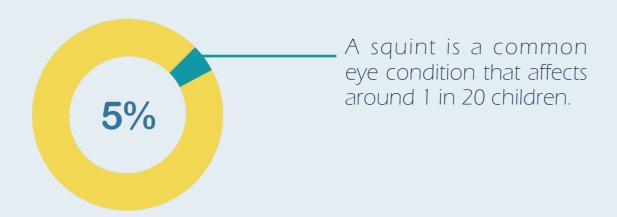
### **Astigmatism**



Astigmatism is where an irregular-shaped cornea or lens leads to blurred or distorted vision due to problems focusing.

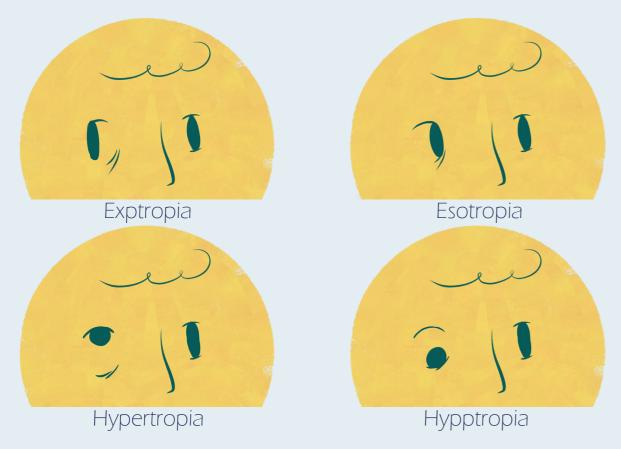
#### 2.Squint

A squint, also called strabismus, is where the eyes point in different directions. It's particularly common in young children, but can occur at any age.



If a child has a squint, one eye looks straight ahead but the other eye looks off to the left, right, up or down. This causes the brain to receive two very different images that it cannot combine.

### **Type of Squint**



In children who are still developing, it can cause the brain to ignore images from the squinting eye, leading to a lazy eye.

Some babies are born with squints. Older children can develop a squint as a result of eyesight problems such as long sightedness, short sightedness or astigmatism.

### 3. Less common eye problems

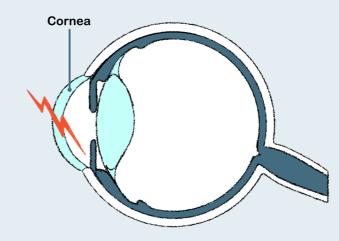
Less common eye problems that can cause a lazy eye.



Childhood cataracts: a clouding of the naturally clear lens of the eye.



A droopy eyelid (ptosis): May result from damage to the nerve that controls the muscles of the eyelid, problems with the muscle strength or from swelling of the lid.



A scar on the transparent layer at the front of the eye (cornea)

8

## **Treatment**

The younger the child is when a lazy eye is diagnosed, the more successful treatment is likely to be. Treatment is less successful if it's started after the age of 6, and it's unlikely to be successful if it's started after the age of 8.



Treating or correcting any underlying eye problems

#### Glasses

Shortsightedness or longsightedness, and astigmatism can be corrected using glasses. These usually need to be worn constantly and checked regularly. Glasses may also help to straighten a squint, and in some cases can fix the lazy eye without the need for further treatment. Your child may say they can see better without their glasses. This is because their eyes have become used to working hard to focus and they now find it difficult to let the glasses focus for them. They will need plenty of encouragement to wear their glasses continuously and "grow into" their glasses. Contact lenses are an alternative to glasses, but they may only be suitable for older children.

# **Encouraging use** of a Lazy eye

### Eye patch

This involves placing a patch with a sticky rim over the "good" eye so the lazy eye is forced to work. It can be very effective in improving the sight in the lazy eye. Patches often need to be worn with glasses. The length of time the child will need to wear the patch will depend on how old they are, how serious the problem is, and how much they co-operate with wearing the patch. Patches are most effective before a child reaches 6 years of age. Most children will need to wear the patch for a few hours a day for several months.

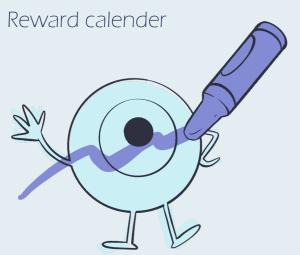
Using a patch to treat a lazy eye can be time-consuming and can often be an unpleasant experience for the child until they get used to it. This is understandable – from their point of view, you're making their vision worse by taking their good eye away from them.



This is why the most important thing for you to do is explain the reasons for using a patch, and the importance of sticking with the treatment, to your child so that they're motivated to do it. Here is the link for a picture book <a href="#">HOW</a>
<a href="#">CAN EYEPATCH CAN HELP YOU?></a> to help your child to understand the treatment.</a>

# How to encourage child to use the patch





Playing with colouring



Reading or school work



Playing with electronic tablet

### **Eye drops (Atropine)**

Atropine eye drops can be used to blur the vision in the good eye, which encourages the child to use the lazy eye. Side effects that can occur after using eyedrops include eye irritation, reddening (flushing) of the skin, headaches. However, these side effects are usually rare and rarely outweigh the benefits of using eye drops.



Eye drops can be as effective as using a patch. Often the choice of eyedrops or patches is a matter of preference. Children who do not like having drops in their eyes can wear a patch, and those who do not like wearing a patch can use eyedrops.

# Find Your Local Eye Clinics

Scan QR code or click <u>here</u> for more information of Lazy Eye.



Angus

Dundee

Q

Orthoptic Department
Outpatients
Perth Royal Infirmary

Perth PH1 1NX **Care Centre** Station Road

Whitehills Community

Station Road Forfar DD8 3DY

#### **Arbroath Infirmary**

Rosemount Road Arbroath DD11 2AT

#### **Stracathro Hospital**

Brechin Angus DD9 7QA

#### **Links Health Centre**

Marine Avenue Montrose DD10 8TY

 Orthoptic Department Eye Clinic Area 6A Outpatients

Ninewells Hospital
DD1 9SY

#### **Lochee Health Centre**

1 Marshall Street Dundee DD2 3BR

#### **The Crescent**

71 Lothian Crescent Dundee DD4 0HU

Perth

DD4 01 10

Soersky output of the season o