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# Department of Ophthalmology

## Paediatric Ophthalmology

### Amblyopia (Lazy Eye) in Children

#### Parent information

#### What is amblyopia?

Amblyopia is a reduction in vision of one or both eyes, which persists even after glasses (if necessary) have been worn. It is often referred to as '**lazy eye**'. This is usually a result of an interruption in the visual development during early childhood, from birth to seven years. It is, therefore, extremely important that any treatment for amblyopia occurs during this time. If amblyopia is left untreated, the vision will be permanently impaired.

#### The causes of amblyopia

Amblyopia can be caused by:

- A turn in the eye, which is known as a squint (or strabismus).
- A difference in long sightedness (hypermetropia), short sightedness (myopia) or astigmatism between the two eyes.
- An obstacle blocking visual stimulation to the eye. For example, a droopy eyelid or cataract (a cloudy lens within the eye).

#### The diagnosis of amblyopia:

An Orthoptist will detect a difference in the vision between the two eyes and assess the eyes for any factors that can contribute to amblyopia developing i.e. a squint or droopy eyelid. An Ophthalmologist/Optomtrist will examine the back of the eyes, assess any need for glasses and if there is a reason for the reduced vision.

## Treatment of amblyopia

### Benefits

To support your child to develop the best possible vision in both eyes.

### Glasses treatment

Glasses will be prescribed if there is any significant long or short sightedness, or astigmatism. We would usually expect children to wear glasses for all waking hours unless instructed otherwise.

### Patching treatment

If the vision remains reduced in the “lazy” eye after glasses have been worn for up to 16 weeks, the usual treatment for amblyopia is to wear a patch over the good eye that will, in turn, stimulate the vision in the poorer sighted eye.

If your child wears glasses, an adhesive patch is usually worn directly on the face with glasses on top. Alternative patches include colourful fabric patches worn over glasses, behind the lens.

#### Colourful adhesive patch



#### Plain adhesive patch



#### Fabric patch



Occlusion does not replace the need for glasses, nor does it eliminate any squint. The length of time the patch will need to be worn will depend on the amount of amblyopia present. The poorer the vision, the more hours each day the patch will need to be worn.

**Good compliance is essential** to ensure treatment is effective. Generally, the most improvement of vision in the amblyopic eye happens within the first few months (depending on the type of amblyopia), and then there is a gradual improvement until six to eight months. Amblyopia treatment will need to be continued until your child's vision is considered no longer at risk.

Unfortunately, children do not always understand why they need to patch their good eye and so the treatment can sometimes be difficult. Give lots of praise and incentives when the patch is worn well to prevent the patch being removed.

## **Atropine treatment**

Occasionally atropine drops/ointment may be used in the good eye instead. This blurs the vision in the good eye and encourages the vision in the weaker eye to develop. This treatment is usually only used if patching fails. The orthoptist will advise you whether this is an option for your child and a separate leaflet is available for further information.

## **Risks/complications**

Children can occasionally have an allergic reaction to the adhesive patches. If the skin around the eye becomes sore, you should mention this to your orthoptist, who will be able to suggest other types of patches (please see the contact numbers below).

In older children there is a very small risk of them developing double vision when the patch is removed. If this happens, you should discontinue using the patch and contact the orthoptic department immediately. The orthoptist will monitor the risk of this happening and will stop any treatment if the risk becomes too high.

Vision may reduce once the treatment has stopped, in some cases. In these circumstances, patching may be restarted.

## **Activities and patching**

Doing detailed work is good for your child whilst wearing the patch. Activities could include reading, drawing, colouring, dot-to-dots or any other fun activity that requires focus and concentration. In school-age children, it can often be a good idea for your child to wear the patch at school. Parents usually find that teachers are very supportive of our treatment but you would need to discuss this with your child's teacher.

Fabric patches are usually introduced once patching is progressing well. It is important that the child does not peep around the patch.

When one eye is patched, the child has no 3D vision, may struggle to judge distances and will have a reduced field of vision.

It is important to remember that your child is relying on the poorer eye to see. Care should be taken for situations where a child may not be closely supervised by an adult

If you have any questions or concerns regarding the treatment, or have run out of patches, please contact the orthoptic department on the numbers below.

## Contacts/further information

Please contact any of the following between 08:30 to 16:45, Monday to Friday:

- **Orthoptists:** 01223 216528 or [orthoptics@addenbrookes.nhs.uk](mailto:orthoptics@addenbrookes.nhs.uk)  
**Clinical nurse specialist for paediatric ophthalmology:** 01223 596414 or [paedophth@addenbrookes.nhs.uk](mailto:paedophth@addenbrookes.nhs.uk) the above has a 24-hour answer machine service.
- **Clinic 3:** 01223 256691

## References/ sources of evidence

Royal College of Ophthalmology and British and Irish Orthoptic Society guidelines for the treatment of amblyopia.



We are a smoke-free site: smoking will not be allowed anywhere on the hospital site.

For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

## Other formats:



If you would like this information in another language or audio, please contact Interpreting services on telephone:

01223 256998, or email: [interpreting@addenbrookes.nhs.uk](mailto:interpreting@addenbrookes.nhs.uk)

For Large Print information please contact the patient information team:

[patient.information@addenbrookes.nhs.uk](mailto:patient.information@addenbrookes.nhs.uk)



## Document history

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Contact number	01223 256691
Publish/Review date	June 2018/June 2021
File name	Amblyopia_in_children.doc
Version number/Ref	V3/PIN3055/25029