Children's ophthalmology department

Lazy eye (amblyopia) and occlusion therapy

Information for patients, relatives and carers

Introduction

This leaflet provides information about **lazy eye (amblyopia)** and **occlusion therapy.** We hope it will answer some of the questions that you may have at this time. This leaflet is not meant to replace the discussion between you and your medical team but aims to help you understand more about what is discussed. If you have any questions about the information below, please contact us using the details on page 4 of this leaflet.

What is lazy eye?

Lazy eye is where the vision does not develop normally. It usually happens in one eye and more rarely in both eyes. This is due to the disruption of normal development in early childhood.

What causes lazy eye?

A child's visual system develops from birth until about 7 to 8 years of age. Conditions which may result in a lazy eye are:

- one eye turning in a different direction (strabismus or squint). The brain may ignore vision from the eye with the squint, affecting visual development
- a difference in the glasses' prescription between the two eyes. The weaker eye will see a blurred image, and this may affect visual development
- an obstacle blocking visual stimulation to the eye. This could be a droopy eyelid or cloudy lens (cataract). The lazy eye might continue even after the obstacle has been removed

What is the treatment for lazy eye

The first step in treating lazy eye is to check if the child needs glasses. If glasses are prescribed, they should be worn full-time.

More treatment is needed if your child does not need glasses, or if their vision is still reduced after they've got used to wearing glasses≥

This treatment is called occlusion. It involves

- wearing an eye patch over the eye with better vision, or
- putting an eye drop into the eye with better vision

This encourages use of the eye with poorer vision. The aim is to make the ‘lazy eye’ work harder to try to catch up on the development it has missed.

When should my child start occlusion treatment?

Most cases of lazy eye are treatable. But the success of treatment depends on:

- the level of vision in your child’s weaker eye when they start treatment
- their age
- the level of co-operation with treatment

If it is not treated, the vision in the weaker eye will be permanently impaired. So, occlusion should start as soon as possible.

The younger the child, the more quickly the vision improves. Lazy eye is most successfully treated before seven years of age. After this time, the eyes and brain become too mature to change. Later attempts to treat are difficult and may not be successful.

Occlusion explained: ‘patching’ – covering the stronger eye with a patch

How long should my child wear the patch each day?

This will depend on the level of the vision in the weaker eye and your child’s age. Your orthoptist will advise you on the number of hours needed per day.

When should the patch be taken off?

Running around with the patch on creates a risk of accidents, especially outside. Your child will not be able to see as well as usual.

Can they wear the patch at school?

Many children tolerate the patch better at school than at home. But some children prefer not to wear the patch at school. You and your orthoptist will decide what is best for your child.

If the patch is being worn at school, speak to the teacher before starting the patching, to:

- explain that your child may find schoolwork more difficult while wearing the patch
- ensure that their progress is carefully monitored
- discuss if the patch can be kept on at break times

How can I encourage my child to wear the patch?

We know that children do not always understand why they need to cover their better seeing eye – treatment can be difficult. Some children tolerate patching well while others find it difficult. Your support is vital in helping your child to accept the patching.

In older children, explain the reason for the patching. For younger children, try to make the patching into a game and try to keep your child occupied when wearing the patch.

Use a reward system (such a star chart) to track the numbers of hours completed and motivate your child. You can also search online or in your app store for games designed to help children with lazy eye.

Occlusion explained: atropine eye drops – an alternative to eye patches

How often are the drops used?

Atropine sulphate 1% is used twice a week to relax the focusing muscles of your child's stronger eye. It makes the black part of that eye (pupil) get bigger (dilation). This blurs the vision in the good eye, particularly for close-up work. So, this encourages use of the weaker eye.

Atropine is most often used because a child finds it difficult to cope with patching. But parents may choose atropine as the first line of treatment.

How long do the effects of atropine last?

Your child's vision may remain blurred for several days. The pupil can remain dilated for up to 14 days.

Are there any side effects of atropine?

Side effects are rare. But if your child does experience any redness or swelling around the eye, fever, or sickness, stop the treatment and contact the orthoptic department. Or contact your GP or local health provider outside of clinic hours.

Please see separate *Atropine occlusion for children* leaflet for more details.

How long will my child need occlusion treatment?

The length of treatment depends on your child's age, how well they comply with the treatment and the level of vision.

Your orthoptist will check the vision regularly during the treatment period. They will tell you when the patching or atropine occlusion can be reduced or stopped. Treatment may be needed for many months.

Should my child wear their glasses during occlusion treatment?

Yes. If your child has glasses, they should be worn full time. This ensures that the eye can see as clearly as possible. It gives the occlusion treatment the best chance of improving the vision.

Will occlusion treatment help my child's squint?

Occlusion will only treat the poor sight in the eye, it will not stop the eye from turning.

Who can I contact for more information?

St Mary's Hospital

Children's outpatients: call 020 3312 7683 (08.30 – 16.30, Monday to Friday, except public holidays).

Western Eye Hospital

Orthoptic department: call 020 3312 3256 (08.30 – 16.30 Monday to Friday, except public holidays).

Ophthalmic emergency department: call 020 3312 3247 (08:00 – 22:00, Monday to Friday).

How do I make a comment about my visit?

We aim to provide the best possible service, and staff will be happy to answer any of the questions you may have. If you have any suggestions or comments about your visit, please either speak to a member of staff or contact the patient advice and liaison service (PALS) on 020 3312 7777 (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

Ophthalmology department
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