

Children's ophthalmology department

Amblyopia and occlusion therapy

Information for patients, relatives and carers

Introduction

This leaflet provides information about **amblyopia (lazy eye)** 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 the back page of this leaflet.

What is amblyopia?

Amblyopia or 'lazy eye' is where the vision does not develop normally. It occurs in 1 or, more rarely, both eyes due to disruption of normal development in early childhood.

What causes amblyopia?

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

- 1 eye turning in a different direction (strabismus or squint). The vision from the eye with the squint may be ignored, 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, such as a droopy eyelid or cataract (cloudy lens); the amblyopia might continue even after the obstacle has been removed

Treating amblyopia

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

If your child doesn't need glasses, or their vision is still reduced after a period of adapting to wearing glasses, further treatment is needed. This treatment is called occlusion and consists of wearing an eye patch, or instilling 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 amblyopia are treatable, but the success of treatment depends on your child's initial level of vision in their weaker eye, their age, and the level of co-operation with treatment. If it is not treated, the vision in that eye will be permanently impaired; therefore, occlusion should start as soon as possible. The younger the child, the more quickly the vision improves. Amblyopia is most successfully treated before seven years of age. After this age, the eyes and brain become too mature to change. Later attempts to treat are more difficult and may not be as successful.

Occlusion

1. Patching (covering the stronger eye)

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 not to patch

Running around, particularly outside, should be avoided when patching, due to the risk of accidents, as 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. However, some children prefer not to wear the patch at school and you and your orthoptist will decide what is best for your child. If the patch is being worn at school you should speak to the teacher before starting the patching to explain that your child may find schoolwork more difficult whilst wearing the patch, and to ensure that their progress is carefully monitored. You should also discuss whether 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 and treatment can be difficult. Some children tolerate patching well whilst others find it difficult. Your support is vital in helping your child to accept the patching.

For older children, explain the reason for the patching, and 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, or app such as 'Patching Pirate') to track the numbers of hours completed and motivate your child.

2. Atropine (Eye drops – an alternative treatment to patching)

How often are the drops instilled?

Atropine Sulphate 1% is used twice a week to relax the focusing muscles of the eye, resulting in pupil dilation (getting bigger). This blurs the vision in the good eye, particularly for close-up work, therefore encouraging the use of the weaker eye. Atropine is typically used if compliance with patching is difficult. However, 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 and the pupil can remain dilated for up to 14 days.

Are there any side effects of Atropine?

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

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

How long will the occlusion treatment last?

This will depend on compliance with treatment, the level of vision and your child's age. Your orthoptist will check the vision regularly during the treatment period and will advise you when the patching or Atropine occlusion can be reduced or stopped. Treatment may be needed for several months.

Should the glasses be worn alongside 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 and 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: Telephone **020 3312 7683** (08.30 – 16.30 Monday to Friday, except public holidays).

Western Eye Hospital

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

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