

Patient information factsheet

Lazy eye in children

We have given you this factsheet because your child has been diagnosed with a lazy eye. We hope that it answers some of the questions you may have. If you have any further questions, please ask your orthoptist or eye doctor.

What is a lazy eye?

Amblyopia, or 'lazy eye' is a childhood condition where the vision does not develop properly in one eye.

The term 'lazy eye' is sometimes confusing. You may hear it used to describe a droopy eyelid or an eye that turns. These conditions are not medically known as a lazy eye. We have separate information leaflets on droopy eyelid (ptosis) and eyes that turn (squint).

What causes a lazy eye?

A child's visual system develops from birth until about eight years of age. During this time, the eyes learn to communicate with the brain and the optic nerves need to be stimulated by clear images from the eyes. Any eye problems in this time can lead to a lazy eye.

There are two common causes of a lazy eye:

Long or short sight

If one eye is more long-sighted or more short-sighted than the other, the weaker eye will send a blurred image to the brain. This may affect the connection between the weak eye and the brain, causing a lazy eye.

Squint

A squint is when one eye turns in a different direction to the other eye. The child's brain may ignore the image from the eye with the squint, which will affect the development of the connection between the eye and the brain. Squints and lazy eyes are often found together.

How is a lazy eye treated?

The main ways to treat a lazy eye are glasses and eye patching or atropine occlusion (eye drops). In some cases, glasses will improve the vision in the lazy eye and your child may not need further treatment.

If glasses do not improve the vision in the lazy eye, or if your child does not need glasses, then eye patching may be required. We will show you how to put a patch over the eye with the better vision to encourage use of the lazy eye. An alternative treatment is atropine occlusion (eye drops). This involves blurring the vision in the better eye by instilling a drop that enlarges (dilates) the pupil twice a week. The aim of eye patching and atropine is to make the lazy eye work harder to try to catch up on the development it has missed.

Patching

If we are treating your child's lazy eye with eye patching, you should start this as soon as possible. The younger the child, the quicker their vision improves. The visual system is fully developed at around eight years old and further treatment does not usually improve the vision.

There are several different types of eye patch. Some are like plasters that stick over the eye, and some fit onto the glasses. The orthoptist will discuss the best type of patch for your child with you and show you how to use them. Most children need to wear the patch for several hours each day. Your orthoptist will advise you on this and when you can stop using them. If your child usually wears glasses, they should continue to wear them whilst patching. This ensures that the eye can see as clearly as possible and gives the patching the best chance of strengthening the vision.

What should my child do when they are wearing the patch?

Detailed visual tasks with the patch on help improve the vision. If your child is old enough, encourage them to read, write, draw, use the computer or watch television while wearing the patch. Your child will not be able to see as well as usual when wearing the patch, so you will need to take extra care to avoid accidents. They should avoid running around, particularly outside. It is best to take the patch off for sports.

Many children tolerate the patch better at school and the detailed schoolwork can help improve the vision. However, some children prefer not to wear the patch at school. You can discuss the best options with your orthoptist. Speak to the teacher before starting the patching to explain that your child may find schoolwork more difficult with the patch on and to ensure that their progress is carefully monitored. You should also discuss whether the patch could be kept on at break times.

How can I encourage my child to wear the patch?

Some children tolerate patching better than others. Your support is vital in helping your child to accept the patching. For older children, explain why they need to wear a patch. For younger children, make the patching into a game. There are a variety of websites with tips to help patching, and games to play with the patch on. A list of these websites is available in the orthoptic department.

Try to keep your child occupied when wearing the patch. Consider patching at nursery or school rather than at home. The orthoptic department has charts for you to take home to record the days when your child wears the patch. We also have sheets for colouring and drawing.

Will the patching help my child's squint?

Patching will only treat the reduced sight in the lazy eye. It will not stop the eye from squinting. We can treat some squints with glasses or an operation on the muscles that move the eye. If your child needs an operation for a squint, we will use patching to improve the vision as much as possible first.

Will the lazy eye return after we stop patching?

In many children, the improvement will last, but for some children the lazy eye will return. The orthoptist will monitor your child's vision and advise you if you need to start patching again. Most children will need to continue wearing their glasses after they stop patching.

Atropine occlusion (eye drops)

What do atropine eye drops do?

Atropine drops temporarily dilate (widen) the pupil and stop the eye from focusing. You should use the drops to blur the vision in the better eye so that your child is encouraged to use the weaker eye.

Do not give your child atropine eye drops if they have a fever or are allergic to atropine sulphate. If they have an existing heart condition, please speak to your eye doctor before using the eye drops.

Where do I get the drops?

The eye doctor will write a prescription for the first four weekends' supply of atropine. You can take this to any pharmacy. We will write to your GP and ask them to give you further prescriptions for atropine. Please contact us if you have any problems getting the drops.

When do we use the drops?

You should only use the drops on weekends. Put one drop into the better eye once on Saturdays and once on Sundays.

How long should my child use the drops for?

It usually takes several months of using the drops at weekends to treat the vision in the lazy eye. The orthoptist will monitor your child's vision carefully, and discuss when you should stop using the drops.

How long do the effects last for?

It can take up to two weeks for the effect of the drops to wear off completely. Your child will have blurred vision in one eye while using them.

How often will my child be seen in hospital?

The orthoptist will review your child one month after they start the drops and then every two months after this. You can contact us between appointments if you have any concerns.

How do I use the drops?

The drops come in small, single-use plastic bottles called minimis. You should have two bottles (one for Saturday and one for Sunday) for each weekend that you are using the drops.

1. Before you start, double check which eye you should be putting the drop into.
2. Wash your hands.
3. Ask your child to lie down, or to sit on another adult's lap with their head tilted back onto the adult's arm.
4. Shake the minim bottle and take the cap off.
5. Gently open the eyelid and put one drop in the centre of the inside of the lower eyelid. Do not let the bottle touch the eye.
6. If it is difficult to open the eye, you can leave the lids closed and place the drop where the upper and lower eyelids meet in the centre of the eye. Keep your child lying down and open their eye. The drop should trickle into the eye.
7. Close the eye and gently press your finger against the inner corner of the eye for at least one minute. This blocks the duct that runs from the eye into the nose and helps to keep the drop in the eye. Even if you suspect that the drop did not get into the eye, do not give your child an additional drop, but wait until the next drop is due.
8. Wipe away any excess from the face with a clean tissue.
9. Wash your hands afterwards.
10. Replace the lid on the minim bottle and throw away the minim, even if you have not used all the drops in it. Dispose of it in the outside rubbish bin, so that children cannot get hold of it. Do not throw the drops in the rubbish bin in the house or down the toilet.
11. Wash your hands again.

Once you have finished the course of atropine eye drops, please return any unused minimis bottles to the pharmacy.

Storing the drops

Do:

- store the drops safely out of the reach of children
- store the drops at a temperature less than 25°C (room temperature), in a dry place away from strong light

Do not place the drops near food or drink.

Can my child continue normal activities while using the drops?

Yes, but they will have blurred vision. You should inform your child's school or nursery and other carers about these effects. Detailed visual activities (such as reading, writing, computer, or watching TV) help stimulate use of the lazy eye.

You will need to take extra care to avoid accidents. Each child is different, but it is usually best to avoid sports while the vision is blurred. Your child may find it helpful to wear a hat or sunglasses outside in bright weather.

Side effects

Stop the drops immediately and contact the orthoptic department if your child has:

- itchy or swollen eyelids
- red, watering eyes
- fewer tears
- a feeling of pressure inside the eye
- dryness of the skin or mouth
- skin rashes
- difficulty swallowing
- a fever
- flushing of the face
- restlessness, excitement or irritability
- an irregular heartbeat

Contact eye casualty if you have difficulty getting through to the orthoptic department, or if it is out of hours.

Please note that atropine is poisonous if swallowed. Make sure that you only use the eye drops as prescribed and keep them out of the reach of children.

Useful links

For further information on lazy eyes, you can visit the squint clinic website.

www.squintclinic.com

Contact us

Orthoptic department

Telephone: **023 8120 4789**

Monday to Friday (8.30am to 5pm)

Eye Casualty

Telephone: **023 8120 6592**

Southampton General Hospital pharmacy

Telephone: **023 8120 4161**

Opening hours:

Monday, Tuesday, Thursday and Friday: 9am to 5pm

Wednesday: 9.30am to 5pm

Saturday and Sunday: 9am to 12 noon

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Using atropine eye drops

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One drop into theeye, once on Saturday and once on Sunday.

You should put only one drop into the eye, and immediately wipe away any excess with a clean tissue.

If you suspect that the drop did not get into the eye, do not give an additional drop, but wait until the next drop is due.

For a translation of this document, or a version in another format such as easy read, large print, Braille or audio, please telephone **0800 484 0135** or email **patientsupporthub@uhs.nhs.uk**

For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit **www.uhs.nhs.uk/additionalsupport**