

Paediatric information for parents: pharmacy

Atropine treatment for amblyopia (lazy eye)

Amblyopia (pronounced amb-lee-oh-pee- ah) or 'lazy eye' develops in childhood and leads to reduced vision in one eye. It happens when one eye is used less than the other between birth and seven years of age. This leads the brain to prefer the better eye and therefore the other eye becomes 'lazy'.

Frequently asked questions (FAQ's):

What causes amblyopia?

- a turn in the eye (strabismus or squint).
- a difference in the glasses prescription between the two eyes.
- an obstacle blocking the visual stimulation to the eye, such as a droopy eyelid or cataract (cloudy lens). The amblyopia may still continue after the obstacle has been removed.

Treatment of amblyopia

Glasses can help your child's amblyopia and should be worn all the time if prescribed. There are two treatment options for encouraging the vision in the weaker eye and both involve temporarily reducing the use of the good eye:

1. **Patch** to cover the good eye.

If glasses are worn, until your child is used to wearing the patch, it should be placed under their glasses (on the skin) to prevent them peeping. Once your child is used to the patch and their vision has started to improve, the patch may be worn on their glasses. This should only be done following orthoptic advice.

2. **Eye drops** (1% atropine sulphate) to blur the vision in the good eye.

The drops need to be used twice a week- for example on Wednesday and Sunday. The treatment will continue until either the vision in each eye is equal or if we notice there is no further improvement in your child's vision on two consecutive visits.

How do the drops work?

The drops relax the focusing muscles of the eye, which blurs vision in the good eye during the treatment. The drops also relax the muscles of the eye responsible for dilating (enlarging) the pupil (the pupil is the central black area in the middle of the iris which is the coloured part of the eye –(see figure 1 below).



Figure 1

Important information:

- Wash and dry your hands before and after giving drops.
- Only place one drop in your child's eye.
- Inform your child's school about their use of atropine and enlarged pupil.
- Store atropine in a safe place out of the reach and sight of children.
- Store atropine at room temperature (less than 25°C).
- Do not use the drops after the expiry date written on the packaging has passed.
- Do not re-use single dose unit preparations ("minims"). Use once then throw away.

What should I tell the pharmacist, orthoptist or doctor?

Tell the pharmacist, orthoptist or doctor if your child is allergic to any medication or if your child has any other eye condition, particularly glaucoma.

What are the side effects of atropine?

The main side effect caused by using atropine is blurred vision which can last up to two weeks after finishing

treatment. Your child's eye may also be more sensitive to light.

If your child has a turn in the eye (squint) you may notice the squint will appear in the other eye whilst using atropine. Do not worry about this, as when the squint swaps from side to side it often means the lazy eye is starting to see better.

In rare cases, once the vision has improved in the lazy eye, the previously 'good' eye may then become lazy and need treatment. However, with careful monitoring by the orthoptist this is very unlikely to happen.

As with most medicines, there may be some other side effects when using atropine drops.

These include mild stinging and redness of the eye after putting the drops in and an allergic reaction to the drops (when the eye becomes very red and itchy).

In rare cases, the use of atropine can lead to increased eye pressure.

However, this usually only happens if there is already a problem with the health of that eye.

General side effects not related to the eye are rare and happen when small amounts of the medicine are absorbed into the body from the eyes. These include: dry mouth and skin, redness of the cheeks, irritability and difficulty sleeping, high

temperature, difficulty passing urine, constipation and an increased heartbeat.

To help prevent any medicine being absorbed into the body from the eyes, press on the tear ducts on the inner side of the eyelids for a minute during and after putting in the drops (see figure 2).

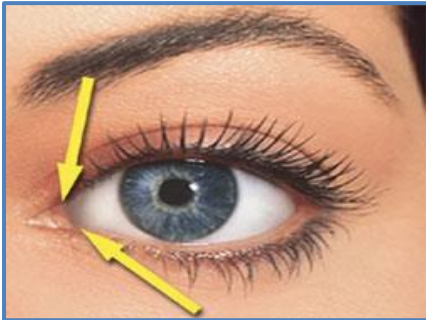


Figure 2

If your child experiences symptoms not listed here that you think are due to the atropine, stop giving them the drops and contact your pharmacist or doctor.

Will the treatment cure my child's amblyopia?

Most cases of amblyopia are treatable but the success of the treatment depends on your child's vision at the start of treatment, their age and if the treatment is used as instructed. It is important to treat amblyopia as early as possible for your child to end up with the best possible vision. Amblyopia is best treated before seven years of age and later attempts to treat might not be successful.

If amblyopia is not treated, the vision in that eye will be permanently damaged.

It is therefore very important that you follow the instructions given by your child's doctor or orthoptist as closely as possible.

Your child will have regular appointments whilst being treated. As their vision improves, the use of atropine may be changed or replaced with a patch. This will be done under the instruction of the orthoptist. We know that children do not always understand why they need drops and therefore treatment at home can be difficult. Your orthoptist is very experienced in dealing with children who have amblyopia and can advise you about carrying out the treatment as effectively as possible.

If you need to speak to the orthoptist, please contact the Moorfields' service where your child is being seen:

Moorfields Eye Hospital, City Road
Phone: 020 7566 2161 (Monday to Friday)

Moorfields at St George's
Phone: 020 8266 6120 (Monday to Friday)

Moorfields at Ealing
Phone: 020 8967 5766 (Tuesday and Wednesday, ask for the orthoptist)

Moorfields at Northwick Park
Phone: 020 8869 3160 (Tuesday and Friday, ask for the orthoptist)

Moorfields at Homerton



Phone: 020 8510 5018 (Friday, ask for the orthoptist)

Moorfields at Potters Bar

Phone: 01707 653 286 (Wednesday)

Moorfields at Bedford

Phone: 01234 792 290 (Monday to Friday)

Moorfields at Croydon

Phone: 020 8401 3485 (Monday to Friday)

Moorfields at Darent Valley Hospital

Phone: 01322 428 100 ext. 4646 (Monday and Wednesday)

Stratford Ludwig Guttman Health Centre

Phone: 0207 253 2020 (Tuesday only)

Information online:

www.orthoaptics.org.uk

www.3M.com/uk/opticlude

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Moorfields Eye Hospital NHS Foundation Trust

City Road, London EC1V 2PD

Phone: 020 7253 3411

www.moorfields.nhs.uk

Moorfields Direct telephone helpline

Phone: 020 7566 2345

Monday-Friday, 8.30am-9pm

Saturday, 9am-5pm

Information and advice on eye conditions and treatments from experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)

Phone: 020 7566 2324/ 020 7566 2325

Email: moorfields.pals@nhs.net

Moorfields' PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs

