Moorfields Eye Hospital NHS Foundation Trust

NHS

Paediatric information: for parents of babies and young children

Your child's contact lenses

This information leaflet is designed to help parents of babies and young children who attend Moorfields contact lens clinic understand how and why contact lenses are used in this age group.

Reasons for fitting contact lenses in children

Moorfields children's contact lens service fits lenses for a wide variety of eye conditions. Many young children have had cataracts removed but we also provide contact lenses for children with other conditions such as very high degrees of short or long sight, nystagmus (wobbly eyes), albinism, keratoconus and also unsightly eyes where we fit coloured contact lenses to improve the appearance. Not all children who come to the department are suitable for lenses. If this is the case, your child will not be fitted.

Contact lenses in children who have had cataract surgery

In a normal eye, the cornea (front window of the eye) and the lens focus objects on the retina for clear vision. The lens should be transparent and able to change its focus for close up or far away vision. In a cataract, the lens is opaque (cloudy) which prevents light from reaching the retina. Surgery removes the opaque lens to allow light to reach the retina. During the operation, the cataract lens may be replaced by an intra-ocular lens (implant) and if this is not possible the focus must be replaced either with thick glasses or contact lenses.

Although glasses can work very well after surgery, thick glasses may be difficult for very small children. This is because a young child has a small head and small bridge to the nose and the lenses may restrict their area of vision. Therefore, contact lenses are often used. A pair of glasses is usually ordered as a back-up when the contact lenses are fitted in case of contact lens problems.

Unlike the normal lens of the eye, contact lenses and implants cannot change focus from near to far so we have to choose where to focus the vision in children after cataract surgery. A baby spends very little time looking in the distance. Most waking hours are spent looking at objects that are nearby (parents' faces, food, toys etc.) and so we provide contact lenses or glasses that focus close up, within a metre. This doesn't mean that your baby can't see

anything beyond a metre but objects in the distance are not as sharp as those that are close. When your baby is older and needs both the distance vision and near vision to be clear, we change the focus to distance and give a pair of bifocal glasses to wear either on their own or over the contact lenses for reading. That may not happen until your child starts school.

Visual development in babies

It is particularly important to stimulate the vision as much as possible in babies with visual or eye conditions. Show your baby brightly coloured toys and black and white shapes and encourage them to follow with their eyes. This will be very slow at first but will gradually become quicker. Build a mobile above the cot that can be seen when your baby is lying awake instead of them staring at a blank ceiling. When glasses or contact lenses are prescribed it is crucial that your baby wears them as much as possible. It may seem that your baby behaves the same with or without them, but if they are not worn all the time while your baby is awake, their vision may not develop and may get worse if there is no focus for any length of time (more than a few days).

Contact lens types

There are different types of contact lenses and they can be made out of different materials. The lens type will be discussed after your child has been examined or at follow-up appointments if the lens type needs to be changed.

Babies and young children usually adapt to contact lenses faster than adults and lenses quickly become comfortable for them.

Soft lenses contain water. If allowed to dry out they become brittle and shrivelled, but they will return to normal if they are replaced in saline (see lens cleaning and disinfection guidance section below). The lenses are made of a special material that can remain in your child's eyes when they sleep. However, if the lenses are slept in every night without being removed to be cleaned and give the eyes a rest, there is a risk of infection or soreness in the eyes. That is why you will be encouraged from the start to remove your child's lenses every night. Please note that it is not necessary to remove the lenses while your child sleeps during the day.

Lens insertion and removal in babies and young children

When you first try to insert or remove a lens from a baby or young child's eyes, it can seem very complicated but once you are actually handling the lenses it becomes easier. You will be taught how to do this in the clinic.

Points to remember:

- Almost all parents are scared of hurting their child's eyes and may find it difficult to deal with the lenses
  at first. With time, you will become more confident.

- Always make sure that your nails are short and smooth when dealing with your baby's eyes.

- Wash and dry your hands before touching the eyes or lenses. Any soap can be used but a highly scented one is not recommended. It also does not need to be anti-bacterial.

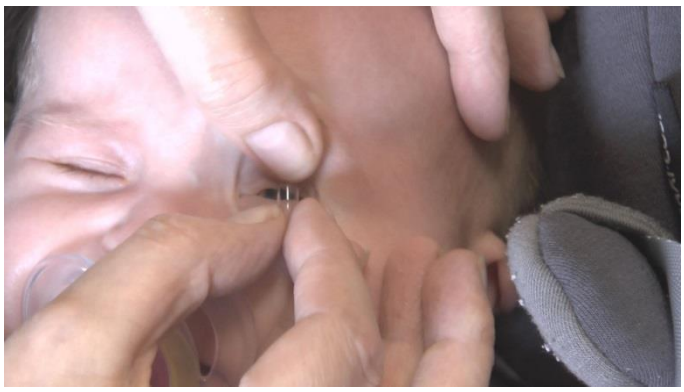
- Inserting or removing lenses should not be painful but a baby may cry in the same way that some babies cry when they are bathed.

The instructions for inserting and removing the lenses in older children are different and you or your child will be taught what to do when attending the clinic.

Insertion instructions:

1. Have someone hold your child, especially his hands. You can wrap an infant in a blanket. It may be easier to remove (and insert) babies' lenses when they are asleep.

2. Remove the lens from its container and hold it gently across the middle between your right thumb and index finger (left for left-handed people), as shown below. There is only one way to hold the lens; it cannot be easily turned inside out nor can it be upside-down.



3. Using your left thumb, pull up the top lid. It is important to place your thumb as near to the lashes as possible and in order to do so you may need to put your thumb right over the whole eye. Make sure that the eyelid is dry and if necessary hold the lid through a clean tissue.

4. Place the edge of the lens under the top lid and using your forefinger gently push the rest of the lens up under the lid until it sits on the eye.

5. Pull down the bottom lid and make sure the lens is in place.

The lens will move to the correct position in the eye unless it has folded, in which case it must be removed and replaced. Only soft lenses can fold, but any lenses can slip underneath the top lid and disappear from view. A folded lens may be uncomfortable and your baby may try to rub it out. Please note that the lens will not do any damage to your child's eye if it

remains there for some time, even overnight. **It is important to remember that a lens cannot get lost behind the eye and will usually move back into place if left for any length of time.** If a second lens is inserted into the eye, it will not do any harm and the first lens will usually fall out.

If you accidentally drop the lens, rinse it with saline (see lens cleaning and disinfection section below) before putting it into your baby's eye. It is not necessary to disinfect the lens each time this happens.

If your child continues to look uncomfortable after a few minutes, or if they won't stop rubbing their eye, remove the lens, check it, rinse it with saline and then reinsert it.

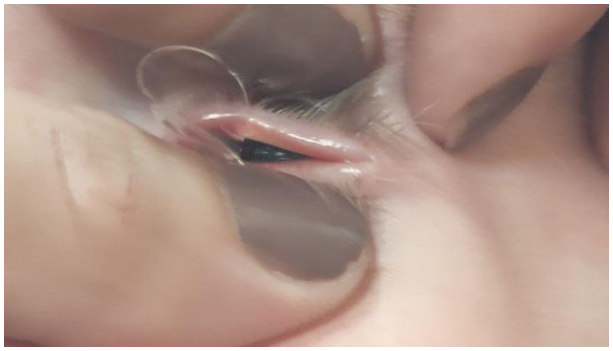
Removal instructions:

1. Have someone hold your child, especially his/her hands, or wrap him/her in a blanket.

2. Place one thumb over the top lid and hold the lid up right at the very edge on the eyelashes, as if you were inserting the lens (see image below). Try to make sure that the lid is pressed gently onto the eye so that the lens cannot slip underneath the top lid.

3. Place the other thumb at the edge of the lower lid and pull it down, again making sure that the lid is turned onto the eye. You should not be able to see the inside of the lid.

4. Gently press on the edge of the lens that should now be visible and move your thumbs together to scoop the lens out (see image below).Turning the lids slightly clockwise or anti-clockwise at the same time helps to remove it. You can touch the lens with your thumbs and put a little bit of pressure on to the eye (this doesn't hurt – try it on yourself!) and the lens will pop out.



Lens cleaning and disinfection

Cleaning contact lenses is extremely important. If the lenses are not cleaned properly, infection can occur, which can be dangerous to the health of your child's eyes.

The lenses are usually cleaned and disinfected overnight. You will be supplied with the necessary cleaning solutions by the hospital but if you run out between visits you can buy further supplies from a local optician or pharmacist. Please note that the following cleaning instructions have been given as an example only and you will be given specific instructions when you come to the clinic. You will also be given different solutions depending on the type of lenses that your child has. From time to time, the method of cleaning the lenses may also be changed.

Lens cleaning instructions

1. Place the lens on the palm of your hand.

2. Put one or two drops of the cleaning solution onto the lens and rub the lens with your forefinger for about 20 seconds.

3. Rinse the cleaning solution off with the saline.

4. Fill the case two-thirds full of disinfecting solution and drop the lens in.

5. Do the same with the other lens. Always make sure that you keep the right and left lenses separate, as they will not necessarily be the same.

6. Screw the lids of the cases on tightly and leave overnight or for at least four hours.

Points to remember:

- Always clean and disinfect the lenses every time they are removed (although it is not necessary if they are only removed for a few minutes) and change the solution in the case every day when the lenses are disinfected.
- Clean the contact lens case regularly, both inside and out, using a baby toothbrush or a cotton bud, together with contact lens cleaning solution. Rinse with saline then leave the lids off and allow it to dry out upside down on a clean tissue. This is because bacteria does not survive as well in dry conditions as it does in wet ones.

- If the lenses are not used for several days or weeks, it is a good idea to replace the disinfecting solution once a

fortnight and clean the lenses as described before inserting them.

Visits to the hospital

In the early stages, your child is likely to have frequent hospital appointments. At these appointments, you may need to see several people so please be prepared to spend a few hours at the hospital. The contact lenses that your child needs are usually not in stock, so the aim of the first visit is to check the eyes and to take measurements for the lenses. At the next appointment, the lenses will be given to you and you will be taught how to insert, remove and clean them. The follow up appointment may be anything between one week and two months later and will vary depending on the type of lenses and the age of your child. Any problems can be discussed and sorted out at this appointment, but you can always contact the department earlier if you are concerned.

At your follow up appointment, both you and your child should ask all the questions that you want. Remember, it is better to ask about something that you think is silly than to go home and worry about it. Please also keep in mind that something which might sound silly to you may actually turn out to be something important.

Potential contact lens wear problems

Although a contact lens is made of a plastic that is compatible with the eye tissues, it is still a foreign material in the eye and can cause problems for some children's eyes. It does this in two ways; first by increasing the risk of infection and second, by reducing the amount of oxygen that normally reaches the cornea. The lack of oxygen is at its worst when the eyes are closed, which is why it is important to remove the lenses at night whenever possible.

Advice when swimming and flying

It is important to remember that lenses absorb whatever liquid they are kept in or whatever liquid splashes on them. It is not necessary to remove the lenses when you are bathing your baby but the lenses should be removed before swimming to avoid any irritation or infection. After swimming, leave the lenses out for at least two hours. Prescription swimming goggles can be made for older children but this is not provided by the hospital.

As aircraft cabins are usually very dry, it may be advisable to remove contact lenses before flying.

Frequently asked questions:

What should I do if my child is having a problem with their contact lens?

If your child's eyes are sore, you must remove the lens; if the eye does not appear to improve after a few hours, take your child to the eye doctor at your local hospital for a check-up. Most general doctors and hospital staff do not know how to remove babies' contact lenses so it is better, if possible, to remove the lens yourself before

seeking medical advice. Do not reinsert the lens(es) without checking with the hospital first. If a baby who normally wears contact lenses in both eyes develops a problem in one eye, remove **both** lenses and then contact Moorfields' A&E department (details are at the end of this leaflet).
If your baby's lenses need to be removed for more than a couple of days, ensure that back-up glasses are worn. You may already have these but if not, the hospital should be able to lend you a pair. This is important, as your baby's sight stops developing when he/she isn't wearing contact lenses or glasses and can get worse if left for too long.

Babies often rub their eyes when they are tired or if their eyes are irritated. Where possible, distract your baby's attention by playing with them or handing them a toy. Try not to make too big a deal of stopping them from rubbing their eyes, or they will soon learn how to attract attention if they feel they are being ignored. If the lenses are frequently rubbed out, it may be a sign that they are no longer fitting your child properly. You should discuss the problem at your next booked visit or if necessary, make an earlier appointment to be seen.

If at any time your child's eyes look uncomfortable, don't insert the lenses. The lenses should also not be worn when your child is unwell.

Which is better–glasses or contact lenses?

Many parents are worried that if their baby cannot have implants or if they change from contact lenses to glasses, their vision will be poor. In fact, for people who have had cataracts removed, vision with strong glasses is better than with contact lenses or intraocular lenses. This is because everything appears magnified and bigger objects are easier to see. That is why many children (and adults) prefer to wear their glasses for school or work instead of contact lenses. However, with glasses, the area that they see (their field of vision) is reduced, which can cause difficulty in some cases.

In a few cases where it is not possible for parents to remove the lenses, or contact lens wear is becoming difficult, we will discuss changing to glasses full time. Your child's vision whilst wearing glasses will develop just as well as in contact lenses and some families find that they are much happier with this. Many older children (over 18 months) change to glasses for several months or years. It is not a final decision: you can always ask to change back into lenses later, provided there is no danger to the health of your child's eyes.

Golden rules of contact lens wear

- If at any time an eye looks red, watery, sticky, half-closed or just "not right", **the lens must be removed within six hours.** Remember: if in doubt leave the lenses out! There is a danger of sight loss if the lens is left in.

- If you see anything unusual or anything that appears to have changed in your child's eyes, let us know straight away and if necessary make an early appointment to be seen.
- Where possible, remove contact lenses first before seeking medical advice.
- Always ask any questions you have and be sure you understand the answers. If you don't understand, ask again; we don't mind!
- In most cases, your child's vision should develop just as well whether they wear glasses or contact lenses.

You **must** keep your appointments at the hospital. If you are unable to attend, make another appointment so that we can check for any sign of problems before they become serious. In an emergency, or if you have urgent questions, please phone the hospital on 020 7253 3411 ext 4619 between 9am and 4.30pm Monday-Friday. If your baby needs to be seen urgently at night or weekends, please go to the Moorfields accident & emergency department for adults in City Road, or call the main switchboard on 020 7253 3411 and ask for A&E.

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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