

Department of Ophthalmology

Paediatric Ophthalmology

Advice regarding glasses for children

Parent information

How does my child's specialist know that they need to wear glasses?

Children need glasses for a number of different reasons. These include an underlying medical condition, or to alter a squint or to correct a refractive error (to enable the eyes to focus clearly).

In clinic today some eye drops were put into your child's eyes to dilate (enlarge) their pupils. This allows the doctors to shine enough light into your child's eyes to enable them to get a good view of the back of your child's eyes. By moving a line of light across the back of your child's eye it is possible to measure what strength glasses are needed. This is called refraction. Your child's Ophthalmologist (doctor) or Optometrist (optician) will prescribe a pair of glasses specifically for your child to enable them to achieve the best possible vision.

Why does my child need to wear glasses?

Normal vision

Light, from everyday objects, enters the eye and is bent by the lens at the front of the eye. Light is then focused on the retina at the back of the eye giving a clear image (diagram A).

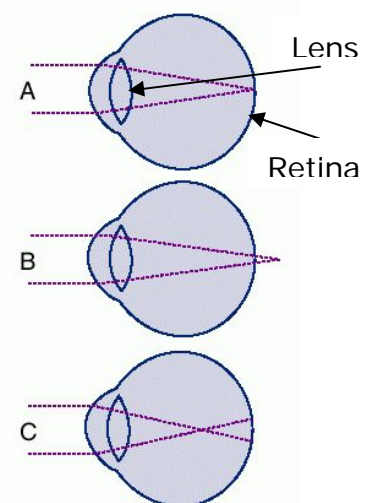
What are refractive errors?

A refractive error means that the shape of the eye does not bend the light into focus on the back of the eye. The image that is seen is blurred.

Hypermetropia – long sight

This occurs when the rays of light entering the eye are focused behind the retina (back of the eye) instead of directly on it (diagram B). This is usually because the eyeball is too short/small.

Objects at all distances appear blurred unless the eyes make an extra effort to focus. In some children this extra focusing effort may result in a squint. A convex lens is needed to focus the light clearly onto the retina. Most infants have some long sight while their eyes are growing and developing.



Myopia – short sight

This occurs when the rays of light entering the eye are focused in front of the retina (back of the eye) instead of directly on it (diagram C). This is usually because the eyeball is larger. Objects in the distance are blurred. A concave lens is needed to focus the light clearly onto the retina.

Astigmatism

This occurs when the cornea (the front surface of the eye) curves more in one direction than the other and may be described as being more like a rugby ball than a football. In this instance vision is blurred for objects both near and in the distance. It is often combined with long or short sight and a cylindrical lens is needed to focus the light clearly onto the retina.

Anisometropia

This occurs when there is a difference in the refractive error of each eye, resulting in blurred vision, especially in the eye with the greatest refractive error. In these instances wearing glasses alone does not always correct the vision. A patch may be required, covering the good eye, to encourage the vision in the weaker eye to develop.

Should my child wear glasses all day?

In children eight years and younger glasses should be worn full-time unless you have been advised otherwise by your Ophthalmologist or Optometrist. This is because there is a critical period for visual development. If refractive errors are not corrected, or compliance with the treatment is poor, then a permanent reduction in vision may occur. Glasses may be removed at bath time and bedtime.

Wearing glasses because of a squint

If a young child is long sighted, the effort to focus and see clearly at close range (such as reading) may make one eye turn in towards the nose (this is called a squint). This happens because the muscles needed to focus the lens in the eye are linked to the muscles that turn the eye in towards the nose. Wearing the correct glasses allows the eye muscles to relax and the eye should "straighten". When both eyes are seeing clearly, the child's vision can develop normally.

Wearing glasses to relieve symptoms such as eye strain and headaches

Children often say that they can see as well without their glasses as with them. This may well be true. Young children can over-exert the muscles in the eye and see clearly, but this puts a lot of stress on these muscles and can lead to eyestrain or headaches. Wearing glasses allows the muscles to relax and enables both eyes to see clearly so that the child's vision can develop normally.

How do I find out about my child's eyesight?

Your child's Ophthalmologist, Optometrist or Orthoptist (allied health professional) will be able to advise you on your child's individual case.

NHS vouchers for children's glasses

All children under 16 years of age in need of glasses are issued with a glasses prescription voucher (HESP form). This entitles you to help towards the cost of the glasses. Your Optometrist will be able to tell you the exact amount you are entitled to. If the glasses you choose cost more than the value of the voucher, then you will need to pay the difference.

What should I do with the voucher?

The voucher may be taken to any registered Optometrist, who will make up the glasses for you. You have the freedom to choose where you go. Our department has its own dispensing optician who is very experienced in fitting children's glasses. He has an extensive range of specially sourced frames, so is able to provide fashionable frames which are designed to ensure a good fit for babies and young children. Please ask a member of staff for the days and times that the dispensing optician is available (or ring the number in the contacts section of this leaflet).

It is important that you take your child with you, both when you go to choose and collect the glasses so that the glasses can be measured and fitted accurately.

Choosing the correct fit of glasses

Children's glasses often get broken or damaged. Expensive frames do not necessarily last longer than cheaper ones!

Be sure not to choose a frame that is too narrow as this will allow your child to look over the top of their glasses. Also ensure that the arms of the glasses loop behind the ears. This will assist in 'anchoring' the glasses in place and prevent them from sliding down your child's nose.

It is important that the frames are always well maintained, that they fit comfortably and are positioned correctly so that your child is looking through the optical centre of the lenses.

Glasses for infants have many special adaptations available such as curly ear pieces, special nose pads and head bands to help to achieve a comfortable, snug fit. Ask your Optometrist about these.

If glasses are too tight or too loose, your child will be reluctant to wear them. Return to the Optometrist that supplied them, or pop along to see our department's dispensing optician to get the glasses adjusted to fit comfortably.

With very young children and more active older children, adjustments are often necessary and required frequently. Don't be embarrassed to keep asking your optometrist to adjust the glasses – they are very used to it!

What happens if the glasses get broken or lost?

Should the glasses get damaged or the lenses get scratched you should return them to the Optometrist who supplied the original pair. They may be able to repair, re-glaze or replace the glasses free of charge. The Optometrist does not need another voucher from the hospital to do this as they are able to reclaim their costs by filling in an NHS repair and replacement form (GOS4 optical voucher).

Extra/spare pairs of glasses

Each child is entitled to one voucher per prescription. Vouchers for spare pairs of glasses are normally only supplied under exceptional circumstances, for example, a complex prescription, or glasses needing a tint such as prescription sunglasses required due to an additional underlying medical condition. In most circumstances the cost of extra or spare pairs of glasses, prescription sunglasses or swimming goggles etc has to be covered by the parents/carer.

Will my child always need glasses?

This depends on the reason for wearing them. A small amount of long sight will need correcting while the eyes are developing but, after around the age of 10 years old, it may be possible for your child to manage without glasses.

Myopia (short sight) tends to increase with age. This means a child will usually continue to wear glasses.

Astigmatism can only be corrected by wearing glasses.

Glasses may also continue to be needed where children have squints that are improved by wearing glasses or where surgery is not an option. Children usually have repeat refraction tests annually in order to ensure that the prescription is correct and adjusted for growth and visual development.

My child says that he/she can see better without the glasses/my child does not like wearing the glasses

This is a regular occurrence when children are given their first pair of glasses. Your child's brain and eyes have got to learn to work together with the help of the glasses and this can take several weeks. It is very important to persevere in trying to encourage your child to wear their glasses. You may find that your child responds well to reward charts or is motivated by other reward systems.

Contacts/further information

Please do not hesitate to contact any of the following between 09:00 – 17:00
Monday to Friday:

Orthoptists: (01223) 216528

Dispensing Optician: 07809 721879 (Contactable any time)

Clinical Nurse Specialist for Paediatric Ophthalmology: (01223) 596414

Clinic 3: (01223) 216401

All of the above have a 24 hour answer machine service.



We are currently working towards a smoke free site. Smoking is only permitted in the designated smoking areas.

For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169

Help with this leaflet:



If you would like this information in another language, large print or audio format, please ask the department to contact Patient Information: 01223 216032 or

patient.information@addenbrookes.nhs.uk



Document history

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Contact number	01223 245151
Publish/Review date	September 2011/September 2014
File name	Advice_regarding_children's_glasses
Version number/Ref	1/PIN2827