

## Information for Patients

# Contact Lenses for Keratoconus

### What is Keratoconus?

Keratoconus is an eye condition affecting the cornea, the clear window on the front of the eye. The cornea normally has a regular curved shape, which helps to focus light onto the back of the eye (retina) and form a clear image. In keratoconus, the cornea becomes conical or irregular in shape which distorts vision.

### Why do I need contact lenses to see?

In the early stage of Keratoconus glasses can be used to give a good standard of vision. However, as the condition progresses the cornea becomes more irregular in shape and glasses no longer work. Contact lenses give better vision as they help correct the distortion caused by the corneal irregularities.

### What will happen on my first visit?

On your first visit we will look at the health of your eyes and might take measurements of the shape of your eyes. We will explain the fitting process and the options available. We will probably try some lenses in your eye(s) to establish the best lens to order for you.

Contact lens fitting for keratoconus is done by our specially trained optometrists and needs great patience from both the optometrist and patient. It is a team effort and everyone has an important part to play. It is very important to realise that, unlike contact lenses to correct long or short sight, the fit might not be right first time. In keratoconus, everyone's contact lens fit is different and can change over time. If the fit is not right another set of lenses will have to be ordered.

## What types of lenses are most likely to be used?

In the majority of cases we use hard lenses made of a material which allows oxygen to pass through it; these are called Rigid Gas Permeable (RGP) lenses. These generally give the best standard of vision, are easy to put in and take out and are relatively easy to look after. All contact lens wear increases the risk of an eye infection but this risk is less with RGP lens type. RGP lenses are often a little uncomfortable at first but this becomes less as time goes by. A small number of people find they cannot adapt to these lenses or find that discomfort appears after a period of successful wear. If the lenses become intolerable we can consider other types of contact lens.

## What other lens types can be used?

**Piggyback** – a soft contact lens can be provided which sits on the eye and then the RGP lens is placed on top. Vision could be reduced a little and the system is more complicated (and possibly more expensive) as there are 2 lenses in one eye.

**Thick soft lenses** – these are usually more comfortable than RGP lenses but often vision is not as good. Many patients find the standard of vision is not acceptable.

**Hybrid** – in theory this should offer the best of both worlds. The centre of the lens is hard to offer best vision and the outer part of the lens is soft to offer better comfort. However, in practice we have found these lenses to be difficult to fit and many patients find them very difficult to put in and take out.

**Scleral** – These are large RGP lenses which can be used in some more advanced cases.

## Will I have to pay for my contact lenses?

If you are entitled to a voucher, you might be exempt from charges, so lenses can be provided without any cost. If you are not entitled to a voucher, you will be asked to pay a charge for the lenses. This is often only a fraction of the true cost of such complex, individually made lenses. You will need to show proof of benefit or pay for the lens on every occasion prior to ordering. (This charge increases each year and is currently around £60 per year).

## **How will I care for my contact lenses?**

You will be taught how to care for your contact lenses and it is important that you follow those instructions. Always wash your hands before inserting and removing your contact lens. You must always use the solutions as advised. Always use fresh solution every day; discard old solution. Keep the case clean. Do not wear contact lenses whilst swimming, in the shower, Jacuzzi etc.

## **Should I wear my contact lenses when I attend contact lens appointments?**

Yes. If your appointment is with the Optometry Department (module G) please arrive wearing your lenses. Please bring your contact lens case, care solutions and any eye drops you are using.

## **What if I have an emergency out of hours with my contact lens?**

If you have an emergency, for instance if your eye becomes red and painful, please remove the contact lens and report to the Emergency Eye Department open from 8.30 am – 8.15 pm everyday on (0161) 276 5597. If the Emergency Eye Department is closed or you are unable to get an answer, please ring Ward 55 available 24 hours every day on (0161) 276 5512.

## **Further information**

[www.keratoconus-group.org.uk](http://www.keratoconus-group.org.uk)

[www.rnib.org.uk](http://www.rnib.org.uk)

[contact.lens@cmft.nhs.uk](mailto:contact.lens@cmft.nhs.uk) – for ordering contact lenses at MREH

Telephone: Optometry Department – (0161) 276 5535 Monday – Friday 8.30 am – 5.00 pm.