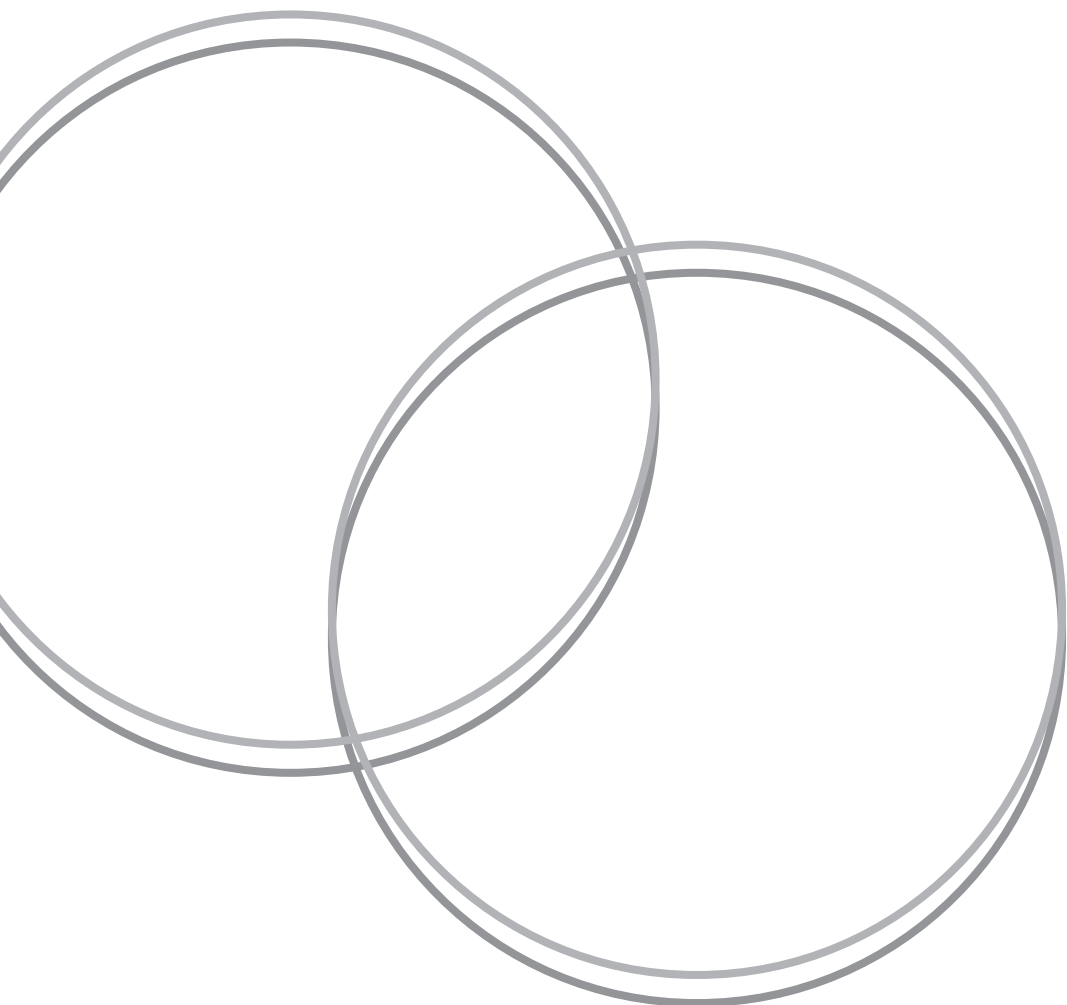




Oxford University Hospitals  
NHS Foundation Trust

# Keratoconus and the Keratoconus Monitoring Clinic

**Information for Patients**



## **The aim of this leaflet is to:**

Tell you about keratoconus, a condition that can affect the front of the eye (the 'Cornea').

Outline why we may need to review you in the Keratoconus Monitoring Clinic for some years after you have been diagnosed with Keratoconus.

# What is Keratoconus?

Keratoconus is a problem with the eye that affects the cornea. The cornea is the clear curved window on the front of your eye. When you have keratoconus, the cornea becomes thinner and it can become misshapen. This can make it difficult to focus your vision properly and can cause poor vision even when wearing glasses.

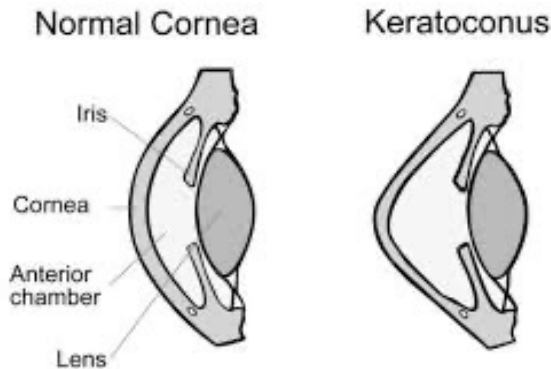


Image credited to <https://commons.wikimedia.org/wiki/User:Madhero88>

## Who gets Keratoconus?

Keratoconus may affect up to one person in 450 people in some ethnic groups, such as those of Asian descent. It is usually diagnosed in young people in their teens or early twenties when changes to the cornea are more likely. If keratoconus is first noticed when a person is in their 30s or older, then the condition is more likely to be mild.

## What causes Keratoconus?

We don't know exactly what causes keratoconus. It is believed that genetics and some other factors, such as vigorous eye rubbing may play a role. It is wise to always avoid rubbing your eyes because this may make the condition worse if you have keratoconus.

## **What treatment is available?**

The best way to improve your vision depends on the how much your cornea is misshapen. If it is only slightly misshapen, vision can be managed with glasses or soft contact lenses. If the cornea becomes thinner and more misshapen, modern hard contact lenses called rigid gas permeable contact lenses (RGPs) are often required to be worn to give good vision. For some people with severely misshapen cornea where contact lenses do not improve the vision, a corneal transplant may be needed.

## **Why do you need to monitor my eyes?**

If you have a new diagnosis of keratoconus, it is important for us to monitor your eyes as we might suggest a treatment for you called corneal cross-linking (CXL) to slow or stop your condition getting worse.

## **What is corneal cross-linking (CXL)?**

CXL is a treatment that can help to prevent keratoconus getting worse. Keratoconus gets worse because the cornea, as it becomes thinner, can weaken. CXL uses a special lamp with ultraviolet light and vitamin B2 (riboflavin) drops to stiffen the cornea. Used together, they cause fibres within the cornea to 'cross-link' or bond more tightly. This procedure is explained in another leaflet.

Research has shown that CXL will stop 90% of patients getting worse with a single outpatient procedure.

## **When might we consider suggesting CXL?**

CXL is only suitable where we can see signs that the corneal shape is continuing to change. Once you are past your mid/late 30s, the cornea often naturally stiffens and CXL is generally not required. Below this age, the cornea is more flexible and changes to the shape of your eye may carry on during this time. It is therefore important that we look for change in the eye shape. We do this in the Keratoconus Monitoring Clinic.

## **Preparing for your visit in the keratoconus monitoring clinic**

In order to take the most reliable measurements of your cornea in the Keratoconus Monitoring Clinic, we ask that you remove your contact lenses 2 weeks before your appointment if you wear hard lenses or RGP contact lenses, and 1 week before your appointment if you wear soft contact lenses. This is important as contact lenses can temporarily affect the shape of the cornea and it is difficult to measure real change in shape if the lenses have not been left out for the necessary time period.

## **What happens in the Keratoconus Monitoring Clinic?**

In this clinic we are measuring your eye regularly to see if collagen cross linking (CXL) is indicated for you.

You will be seen by a member of the Optometry Team. We will examine your eyes and repeat the scan of your cornea. We will compare these results with those from your previous visits.

During monitoring, if any of the results show change, we will discuss the results with the Corneal Consultant. We may then discuss with you the option to be considered for CXL under the NHS at the nearest available provider.

# How long will I have to attend this clinic?

Changes to your eyes caused by Keratoconus can take many years to develop. Age is the most important factor in determining the risk for change because of the natural cross-linking and corneal stiffening that occurs as you get older, therefore we monitor for stability until around 30-35 years of age.

**IMPORTANT:** Please ensure that you do not miss these clinic appointments. If you need to rearrange your appointment please email [optometry.secretary@ouh.nhs.uk](mailto:optometry.secretary@ouh.nhs.uk) to make sure your appointment is rescheduled to a time you can attend.

If you have been advised that you still need ongoing monitoring, do make a note in your diary/phone to ensure that you always have a planned appointment.

## What don't we do in this clinic?

This clinic is solely to monitor Keratoconus. It is important to stress that no extended eye examinations will be performed, and we will not be checking for other eye problems.

## Further information

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

[www.moorfields.nhs.uk/condition/keratoconus](http://www.moorfields.nhs.uk/condition/keratoconus)

If you have any questions please email the Optometry Department [optometry.secretary@ouh.nhs.uk](mailto:optometry.secretary@ouh.nhs.uk) or ring 01865 234567 then select 'Optometry' Monday to Friday between 8.30am and 4.15pm.



## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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Oxford University Hospitals NHS Foundation Trust  
[www.ouh.nhs.uk/information](http://www.ouh.nhs.uk/information)



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