

Microbial Keratitis

If you require this information in an alternative language or format (such as Braille, audiotape or large print), please ask the staff who are looking after you.

What is microbial keratitis?

Microbial keratitis is an infection of the cornea, the dome-shaped clear window at the front of the eye. Infections can range from mild to severe. Microbial keratitis can become a serious condition very quickly if not treated urgently. It can cause long-term visual loss and may leave a scar in the cornea, even with correct treatment.

What are the symptoms of microbial keratitis?

- A feeling there is something in the eye, a foreign body sensation
- Worsening eye pain
- Eye redness
- Blurred vision
- Sensitivity to light
- Watery eye
- Sometimes you can see a visible white spot on the cornea

What are the risk factors?

The biggest risk factor for developing microbial keratitis is contact lens wear. Even with correct contact lens wear, microbial keratitis may develop. Risk factors such as incorrect contact lens cleaning or storage, incorrect use of disposable lenses, wearing contact lenses overnight or contaminating your lenses with tap water all increase your risk of developing this condition.

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Microbial keratitis can occur in the absence of contact lens wear, for example if you sustain a scratch on the cornea which becomes infected or if you have a condition known as blepharitis which increases the bacterial load on your eyelids (see separate information leaflet).

Other conditions which increase your risk are:

- Previous eye infections (for example, the cold sore virus or shingles)
- Previous corneal surgery or laser treatment to the cornea
- Pre-existing eye disease: poor corneal sensation, corneal graft, eyelid abnormalities
- Diabetes mellitus and other causes of a weakened immune system

What tests are required?

In some cases a sample from the infected part of the cornea is required. This helps us to find out which bacteria are causing the infection and ensures the bacteria will respond to the antibiotic treatment. Results usually take 48 hours to come back but this may be longer depending on the type of bacteria we are testing for.

To perform the procedure the eye is numbed using anaesthetic drops and then a number of samples are taken from the cornea.

What is the treatment?

1. Antibiotic drops

You will at first need to apply the antibiotic drops very frequently. This can be up to every hour. If the infection is moderate to severe we will ask you to continue hourly application through the night. It can be quite difficult to take eye drops through the night during the first few days, but it's very important to try and stick to the regime outlined by the doctor as best as you can. Setting an alarm and using an eyedrop chart can help. Once the infection is seen to be responding, usually at 48 hours, the frequency of the drops can be reduced. If there is no sign of improvement after several days, or the corneal sample shows another drop would be more effective, your antibiotic drops may be changed.

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It is very important you administer your drops as prescribed as these types of infections can get worse very quickly if not treated properly (see information leaflet “how to instill eye drops”).

2. Dilating eye drops

We may give you drops to enlarge your pupil as this can help to ease pain. These eye drops will temporarily blur your vision and may increase sensitivity to light. These side effects will resolve after you stop these drops.

3. Avoid contact lens wear

Please do not wear contact lenses whilst your infection is being treated and for a few weeks after the infection has cleared, as this can lead to a serious deterioration in your condition. After the infection has fully recovered, we advise you to visit your optician for a contact lens fit and use check.

Further check ups

In some cases you will be asked to return in a few days to see if the infection is responding to treatment. Some infections can be caused by rare organisms such as the herpes virus, fungi or acanthamoeba (an amoeba). If this is suspected or response to treatment is poor we may need to take further samples and change the treatment.

In cases where the infection is very mild, you will be asked to return only if your symptoms do not improve or get worse.

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General advice for contact lens wearers

Contact lens wearers should follow the rules below to minimise the risk of a contact lens related eye infection:

- Always wash, rinse and thoroughly dry your hands before handling your contact lenses
- Never bring your contact lenses into contact with tap water
- Do not re-use the lenses beyond their expiry date and **never** re-use daily disposable lenses
- Do not use damaged contact lenses
- Do not use contact lens solution past its expiry date
- Do not wear contact lenses if your eyes are red and sore
- Do not wear contact lenses while you are having a shower or a bath, going swimming or using a hot tub
- Never sleep in your contact lenses
- For non-daily disposable lenses, clean your lenses as advised, keep containers clean, and regularly change your containers and solutions as advised.

When to seek advice

- Vision becomes more blurred
- Eye becomes more red and painful
- Visible white spot is getting bigger

How do I contact the hospital?

If you require advice please telephone the Ophthalmic Outpatient Department between 9am – 5pm Monday to Friday on 01423 542217.

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Further Information

Other sources of useful information can be found at:

NHS www.nhs.co.uk

Harrogate and District NHS Foundation Trust website www.hdft.nhs.uk

National Eye Institute <http://www.nei.nih.gov/health/>

Feedback

If you have a concern, complaint or compliment, or would like to provide feedback regarding your experience of the Ophthalmology Service / clinic, please contact the Patient Experience Team via the following:

Patient Experience helpline 01423 555499 (Monday – Friday 9.30am – 4pm)

E-mail: hdft.patientexperience@nhs.net

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