

Information for Patients

Microbial Keratitis

What is microbial keratitis?

Microbial keratitis is an infection on the cornea – the clear window on the front of the eye. It is often related to contact lens wear or, less commonly, due to a scratch on the surface of the eye or a pre-existing eye condition. Infection is more likely with incorrect contact lens cleaning or storage, over-wearing lenses, incorrect use of disposable lenses or wearing lenses overnight. Microbial keratitis can be a serious condition if not treated and can sometimes affect your vision permanently by leaving a scar, even with the correct treatment.

What are the symptoms of microbial keratitis?

Microbial keratitis causes a painful red eye and sometimes blurred vision. At first, it feels as though there is something in your eye. Your eye becomes increasingly painful due to the development of an ulcer on the surface of the cornea. Sometimes, you can see this ulcer, which looks like a small white spot on the cornea over the coloured part of your eye.

What tests are required?

In some cases, after using local anaesthetic drops to numb your eye, we take a sample from the ulcer to allow us to find out which organisms are causing the infection so we can plan the most appropriate treatment. Results can sometimes take several days to come back depending on the organisms we are testing for.

What is the treatment?

Frequent antibiotic eye drops are usually used in the first instance, together with drops to help alleviate the pain. The antibiotic drops may have to be put in your eye every hour and sometimes you will need to continue through the night if the infection is severe. The frequency of the drops is then reduced once the ulcer is seen to be reducing in size. Sometimes, your antibiotics may be changed if there is no sign of improvement after several days, or if the corneal sample results show another drop would be more appropriate. It is very important that you put your drops in regularly as these types of infections can get much worse if not treated properly.

If you are advised to use a drop to help alleviate the pain this often results in blurring of vision, especially for reading, and your pupil will appear larger. These side effects will resolve once you stop these drops.

Please do not wear contact lenses while the infection is present and for a few weeks after the infection clears, as this can lead to a serious deterioration in your condition. After the infection is fully recovered, please return to your contact lens practitioner to check your contact lens fit and use.

Further check-ups

In some cases, you will be asked to return in a few days to see if the infection is improving with the treatment. However, if the infection is mild, then you may be asked to return only if your symptoms get worse.

General advice for contact lens wearers

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

- Always wash, rinse, and dry your hands thoroughly before handling your lenses.
- Do not re-use the lenses beyond their use time and never re-use daily disposable lenses.
- Do not wear contact lenses when your eyes are red and sore.
- Do not wear contact lenses while you are having a shower or a bath or going swimming.
- Do not wear contact lenses while sleeping.
- Do not bring your lenses into contact with tap water.
- For non-daily disposable lenses, clean your lenses as advised, keep containers clean, and regularly change your containers and lens solutions.

When to seek advice

If your eyesight becomes more blurred, if your eye becomes more red or painful rather than improving, or if you can see a white spot getting bigger on the cornea you should telephone first for advice on (0161) 701 0249 (for existing MREH patients and those who have attended the Emergency Eye Department in the last 7 days).

For all other enquiries you should telephone NHS111 or attend your local Accident and Emergency Department.