

Microbial Keratitis (for Contact Lens Wearers)



衛生署

Department of Health

Keratitis is an inflammation of the cornea, which is the transparent front part of the eye. Microbial keratitis can be caused by bacteria, viruses and fungi and parasites, resulting in serious infection that potentially leads to permanent visual impairment or blindness. For example, *Fusarium* keratitis is a fungal infection of the cornea, while *Acanthamoeba* keratitis is caused by microscopic, free living amoeba.

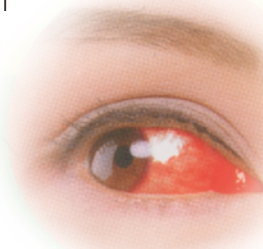
Contact lens when worn is closely apposed to the cornea. Wearing contact lens is associated with increased risk of keratitis. The incidence of microbial keratitis is estimated to range from 0.4 to 20 per 10,000 contact lens wearers per year. The risk of microbial keratitis is increased by five to ten-fold among those who wear lens overnight and for prolonged period of time. Other important risk factors include poor compliance with lens care instructions and dirty storage cases. Smoking also increases the risk of microbial keratitis.

Clinical features

Microbial keratitis may present with eye pain, eye redness, blurred vision, sensitivity to light, foreign body sensation in the eye, excessive tearing or other eye symptoms. Untreated infection can affect visual acuity or even cause loss of vision, which requires corneal transplantation to recover the vision.

Management

Early diagnosis is essential for effective treatment of contact lens related microbial keratitis. If you have symptoms of keratitis, seek medical advice immediately.



Prevention

To prevent contact lens related microbial keratitis, contact lens wearers are advised to:

ALWAYS

- Wash hands properly with soap and water and dry them before handling contact lens, contact lens solutions or related accessories.
- Cleanse and disinfect your contact lens properly according to instruction.
- Have regular check-ups by your optometrist or ophthalmologist.
- Follow the professional advice from your optometrist or ophthalmologist.
- Take off the contact lens whenever you feel discomfort or redness and seek your optometrist's or ophthalmologist's advice.
- Seek medical advice from your doctor promptly if symptoms (redness, pain, blurring of vision or photophobia) persist despite removal of contact lens.

NEVER

- Wet your lens with saliva, tap water or bottled water.
- Wear your lens while swimming, taking shower, using hot tub or sauna.
- Sleep with your lens on.
- Wear them beyond the recommended period.



Remember

The following important points on:

DISINFECTION

- Irrespective of the type of lens care solution, both sides of the lenses must be rubbed with fingertip for 20 seconds and rinsed thoroughly BEFORE soaking for disinfection.
- The multi-purpose solution in the lens storage case must be changed every day even if the lenses are not used daily. Never reuse or top up old disinfection solution.
- Close all bottles of contact lens solution properly after use.
- Discard contact lens solutions one month after opening.



CARE OF LENS CASE

- Cleanse, rinse and dry the storage case after every use to prevent the breeding of micro-organism.
- Store contact lenses, solutions and accessories in a cool dry place.
- Disinfect the case weekly by soaking into just-boiled water for 10 minutes.
- Replace case every three months.

LENS

- Disposable contact lenses must not be used beyond their recommended disposal period.
- Follow your optometrist's or ophthalmologist's advice to replace the lens at the intervals specified.

For more health information, members of the public may visit or contact

Centre for Health Protection Website

www.chp.gov.hk

24-Hour Health Education Hotline of
the Department of Health

2833 0111