Microbial Keratitis (for Contact Lens Wearers)

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, 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 and free living amoeba.

Contact lens when worn is closely apposed to the cornea. Wearing contact lens is associated with increased risk of keratitis. 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.





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





To prevent contact lens related microbial keratitis, contact lens wearers should take heed of the health advice below:

- 1 Regularly have your eyes checked by eye care professionals.
- Remove the contact lens whenever you feel discomfort (e.g. redness, pain, tearing or blurred vision) and seek medical advice promptly if symptoms persist despite the contact lenses have been taken off.
- 3 Never share contact lenses.
- 4 When using contact lens solution, follow the manufacturer's instructions for use.
- (5) Keep all accessories used for cleansing and disinfecting contact lenses (e.g. contact lens storage case) clean and replace them regularly.



To know more about contact lenses and tips on using contact lens solution, please refer to the following websites:

https://www.mdd.gov.hk/filemanager/common/information-publication/Know%20More%20 About%20Contact%20Lenses_Eng.pdf and https://www.mdd.gov.hk/filemanager/common/information-publication/Tips%20on%20Use%20 of%20Contact%20Lens%20Solution.pdf



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