Contact Lenses and the Risk for Infections

Contact lenses offer a convenient alternative to glasses or refractive surgery. There are two main classes of contact lenses: soft and rigid contact lenses. Soft lenses are most common. There are also different types of lenses, such as spherical, bifocal, or toric lenses. Lenses may be replaced daily or more often (weekly–monthly or annually). Some lenses can also be worn overnight, but this increases the risk of infection.

Contact lenses are medical devices. Only your eye doctor can prescribe the correct type of lens for you. Wearing contact lenses, especially soft contact lenses, can put you at higher risk for eye infections. When you receive your new lenses, it is very important that you ask your eye doctor how to care for and clean your contacts.

Two infections of growing concern are Fusarium keratitis and Acanthamoeba keratitis.

What is Fusarium keratitis?

Fusarium keratitis is an infection that can affect the cornea or front surface of the eye. The infection is caused by a fungus and can lead to corneal scarring or blindness. Therefore, the sooner treatment begins, the better. Keeping a routine schedule with your eye doctor and disposing of contacts when instructed, as well as maintaining proper lens hygiene, are very important steps toward preventing these infections.

What is Acanthamoeba keratitis?

Acanthamoeba keratitis is also an infection of the cornea that can cause corneal scarring and even blindness. The infection is believed to be caused through exposure of the eye to water contaminated with the amoeba Acanthamoeba, a free-living organism. Individuals who wear contact lens are believed to be at the highest risk for contracting the infection. Acanthamoeba keratitis is very rare, but can cause severe pain and be very harmful to the health of the eye.
What steps can be taken to prevent Acanthamoeba keratitis?

- Remove contact lenses before swimming or using a hot tub, taking a shower or bath, or any other activity in which water can get in your eyes.
- If water comes into contact with your eyes while wearing contact lenses you may consider disposal of the lenses and begin using a new pair. However, your eye doctor may also be able to recommend a lens solution designed to kill organisms such as Acanthamoeba keratitis.

Signs and symptoms of a possible Acanthamoeba keratitis or Fusarium keratitis eye infection include:

- Blurry vision
- Pain in your eye
- Sensation of something in your eye
- Sensitivity to light (photosensitivity)
- Discharge

How are these infections treated?

Treatment is most successful if the infection is caught early. There are specific medicines that may heal the infection. If the infection does not respond to drugs, surgery may be the next step. If you suspect you have one of these infections, make an appointment with your eye doctor right away.

If you have consulted a doctor and the treatment for your eye infection is not working—be persistent. Make a return appointment for your eye doctor to explain what you are experiencing. Infections can react differently to treatment for each individual.