Infection of the eye with Chlamydia causes inflammation of the conjunctiva of the upper eyelid. Repeated infections lead to scarring and contraction of the conjunctiva, which pulls the eyelashes against the surface of the eye. Inturned eyelashes scratch the surface of the eye. Infection and scarring of the eye surface may follow. If damage to the eye surface is severe, vision is lost.

Progression of trachoma

1. Infection of the eye with Chlamydia causes inflammation of the conjunctiva of the upper eyelid.
2. Repeated infections lead to scarring and contraction of the conjunctiva, which pulls the eyelashes against the surface of the eye.
3. In-turned eyelashes scratch the surface of the eye. Infection and scarring of the eye surface may follow. If damage to the eye surface is severe, vision is lost.

Trachoma

Trachoma, a disease caused by bacteria called Chlamydia trachomatis, affects more than 80 million individuals worldwide, and 8 million persons are blind because of this infection. Inflammation of the conjunctiva (lining of the eye surface) causes irritation and scarring, leading to blindness if trachoma is not treated. Trachoma is a serious public health problem in developing countries. Better sanitation and improved clean water supplies are ways to decrease the prevalence of trachoma and reduce trachoma-related blindness. Trachoma occurs in children as well as adults in all parts of the world. Women are much more likely than men to develop trachoma or become blind from trachoma. In the United States, blindness due to trachoma has been eliminated because of widespread prevention and treatment efforts. Since trachoma is a contagious disease, it can occur in family groups or in persons who live in close quarters. The bacteria are spread by secretions from the eye or the nose and pass from person to person. Flies can also pass on the bacteria, especially in areas that have poor sanitation. The September 2, 2009, issue of JAMA includes an article about the effects of mass distribution of an antibiotic for treatment and prevention of trachoma.

For More Information

- Centers for Disease Control and Prevention
  www.cdc.gov
- World Health Organization
  www.who.int
- Lighthouse International
  www.lighthouse.org

In Inform Yourself

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA’s Web site at www.jama.com. Many are available in English and Spanish. A Patient Page on causes of visual impairment was published in the October 15, 2003, issue.

Sources: Centers for Disease Control and Prevention, World Health Organization, National Eye Institute, Lighthouse International, American Academy of Ophthalmology

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