Corneal Ulcer

The cornea is a clear layer of tissue that covers the front of the eye in a way that is analogous to the crystal of a watch. Corneal clarity and smoothness are extremely important allowing light to be focused in the back of the eye and onto the retina (“film” of the eye).

Corneal ulceration refers to the breakdown of the corneal surface, with accompanying tissue loss or inflammation. A corneal ulcer is a serious condition which is usually caused by an infection from bacteria, virus, or fungus. This infection may be spread rapidly (over hours or days), resulting in permanent loss of vision or even loss of an eye.

Corneal ulcers often occur after corneal trauma (a fingernail injury or a piece of metal) or in certain ocular conditions such as dry eyes, eyelid abnormalities, and misdirected eyelashes. Problems with contact lens wear may also be associated with corneal ulcers.

Corneal ulcers are usually very painful, with red, light sensitive eyes. Rapid diagnosis is important. Treatment starts with stopping the cause (for example, discontinue wearing contact lenses) and then starting antibiotic drops quickly.

Patients need to be examined frequently until evidence of healing occurs. Sometimes, the infection may be spread inside the eye, resulting in permanent damage or even loss of the eye. Fortunately, most corneal ulcers are cured. A scar may remain following healing of the ulcer that may result in varying degrees of visual loss; depending on the size, location, and density of the scarring. If a corneal ulcer is small, or in the periphery of the cornea, intensive treatment often results in rapid healing and full recovery of vision.