

What Is Corneal Erosion?

Corneal erosion affects the cornea, the clear dome covering the front of the eye. The cornea is composed of five layers. The outermost layer is the epithelium. When the epithelium does not stay attached correctly to the corneal tissue below, including the layer called the Bowman's layer or the basement membrane, this can cause a condition called corneal erosion. If the problem occurs repeatedly, it is called recurrent corneal erosion.

Corneal Erosion Symptoms

The most common symptom of corneal erosion is mild to severe pain. The pain may be particularly uncomfortable in the morning upon awakening because the eyes naturally get dry at night, and the eyelid can stick slightly to the epithelium. If the epithelium is not firmly attached, sometimes opening the lids can cause the epithelium to tear off. Without treatment, your eyes may continue to experience this erosion.

Other symptoms include:

- Feeling of something in the eye;
- Light sensitivity;
- Blurred vision;
- Watery eyes (particularly on awakening);
- Dryness.

Who Is At Risk for Corneal Erosion?

Corneal erosion can occur spontaneously and happen to anyone. Certain factors increase your risk for corneal erosion:

- Having a history of [eye injury](#);
- Having a corneal disease, such as corneal dystrophy;
- Having had an eye ulcer, such as from a [herpes simplex infection](#);
- Wearing [contact lenses](#) including lenses that are improperly fitted or not properly cared for.

Corneal Erosion Diagnosis

If your [ophthalmologist \(Eye M.D.\)](#) thinks you have corneal erosion, he or she will conduct an examination with a slit lamp, an instrument that shines a thin, bright sheet of light into your eye. This allows your Eye M.D. to examine the front portion of your eye thoroughly. Your Eye M.D. may also put fluorescein stain, a yellow dye, in your eye to reveal areas of the cornea experiencing erosion.

Corneal Erosion Treatment

Your ophthalmologist may advise using a lubricating ointment at bedtime to prevent the eyelid from sticking to the epithelium. Artificial tears may also be recommended during the day to keep your eyes moist. Your eye may be patched or you may be fitted with a special type of contact lens that acts as a bandage for your eye. You may also be given antibiotics for a few days until the epithelium has healed.

If corneal erosions continue to recur despite nighttime lubrication and use of artificial tears during the day, and the patient is still getting recurrent erosions, your Eye M.D. may recommend surgery to promote healing of the epithelium. One type of surgery, called anterior stromal puncture, works by creating tiny scars just at the base of the epithelium with a very fine needle. This scarring is believed to act as an anchor for the epithelium to adhere better to the corneal layer beneath it.