The condition known as Recurrent Corneal Erosion (RCE) causes patients to experience symptoms of severe eye pain. The pain is typically present upon awakening, manifesting in one eye and only rarely in both eyes. The pain may last for a couple of hours or up to several days with a recurrence several times per year.

The cornea is the clear, dome-shaped covering of the eye. RCEs occur when the outer layer of the cornea, known as the epithelium, loosens or peels off. Normally the epithelium is tightly adhered to the layer of the cornea beneath it. The eye becomes very painful with RCE since the cornea is very sensitive to any disruption of cells. The pain frequently is worse upon awakening. When the eyelids are closed during sleep, the reduced oxygen supply causes mild swelling of the epithelium. This swelling can cause the epithelium to bubble and become stuck to the under surface of the eyelid. Upon awakening, this loose tissue peels off when opening the eyelids resulting in severe pain.

What causes RCEs? Most cases of RCEs are associated with prior corneal trauma. Other cases are associated with underlying epithelial dystrophies. As mentioned earlier, normally the epithelium is tightly adhered to the underlying layer with “glue” that is secreted by the cells. Sometimes after an injury there is insufficient or defective glue to anchor the epithelium leaving the epithelium susceptible to peeling. Patients who have an underlying corneal dystrophy naturally have loose epithelium. This is usually present at birth but does not manifest itself until early adulthood. It is important to note that patients rarely experience permanent vision loss from a RCE.

Treatment of RCEs involves patching the affected eye with a bandage contact lens along with the use of antibiotic and anti-inflammatory eye drops. Artificial tear drops are also used to lubricate the eye. Depending on the severity of the RCEs, topical ointments are sometimes used in the eye while sleeping to reduce the chance of the epithelium peeling off in the morning. In some cases patients experience repeated episodes of erosions. Treatment would involve either a bandage contact lens for several months or possible surgical options in extreme cases. Where corneal trauma has occurred, it is important to have the eye treated properly by an optometrist or ophthalmologist to reduce the chance of experiencing a RCE.

RCEs can be a very painful and frustrating eye condition for some patients. Frequently the symptoms of a RCE are often ignored. An optometrist or ophthalmologist should be consulted to properly diagnose and treat a recurrent corneal erosion to minimize the discomfort experienced.
A regular eye exam is a key part of good vision health. Use our find an optometrist directory to find an eye doctor near you and to schedule an appointment.