

CORNEAL ABRASION & EROSION

The cornea is the clear front window of the eye. It covers the iris (colored part of the eye) and the round pupil, much like a watch crystal covers the face of a watch. The cornea is composed of five layers. The outermost layer is called the epithelium.

WHAT IS A CORNEAL ABRASION?

A corneal abrasion is an injury (a scratch, scrape or cut) to the epithelium. Abrasions are commonly caused by fingernail scratches, paper cuts, makeup brushes, scrapes from tree or bush limbs, and rubbing of the eye. Some eye conditions, such as dry eye, increase the chance of an abrasion. You may experience the following symptoms with corneal abrasion:

- the feeling of having something in your eye;
- pain and soreness of the eye;
- redness of the eye;
- sensitivity to light;
- tearing;
- blurred vision.

To detect an abrasion on the cornea, your ophthalmologist will use a special dye, called fluorescein, to illuminate the injury.

HOW IS A CORNEAL ABRASION TREATED?

Treatment may include the following:

- patching the injured eye to prevent eyelid blinking from irritating the injury;
- applying lubricating eyedrops or ointment to the eye to form a soothing layer between the eyelid and the abrasion;
- using antibiotics to prevent infection;
- dilating (widening) the pupil to relieve pain;
- wearing a special contact lens to help healing.

Minor abrasions usually heal within a day or two; larger abrasions may take several days. It is important not to rub the eye while it is healing. Do not wear your contact lenses while the eye is healing. Ask your ophthalmologist when you may start wearing your contact lenses again.

WHAT IS CORNEAL EROSION?

Corneal erosion is a wearing away of the epithelium layer of the cornea, often at the site of an earlier abrasion. It may occur spontaneously, often after awakening in the morning. Corneal erosions may also occur in dry eyes. Symptoms are similar to those of a corneal abrasion: the feeling of something in your eye, pain and soreness of the eye, redness of the eye, sensitivity to light, tearing and blurred vision.

HOW IS CORNEAL EROSION TREATED?

The initial treatment is the same as for corneal abrasions, with the addition of ointment at bedtime. If the corneal erosion keeps occurring, further treatment may be needed, including:

- use of a special contact lens to reduce pain and encourage healing;
- gentle removal of the damaged epithelium;
- removal of a small layer of corneal cells using a laser;
- performing a procedure called anterior stromal puncture, which involves making tiny holes on the surface of the cornea to promote stronger attachments between the top layer of corneal cells and the layer of the cornea underneath.