



## corneal abrasion and erosion

### a closer look

#### WHAT IS THE CORNEA?

The cornea is the clear front window of the eye. It covers the iris (colored portion 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**.

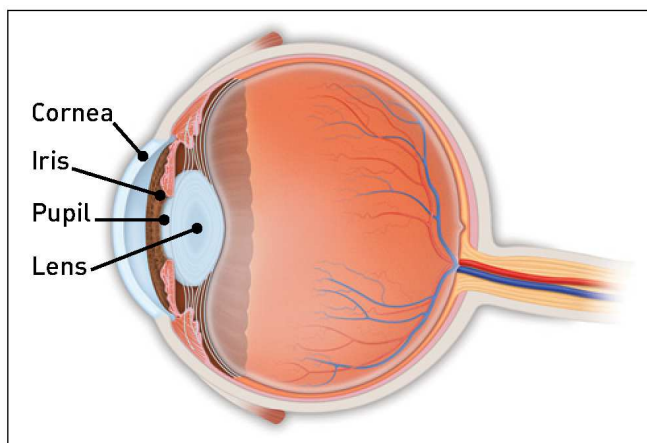
#### WHAT IS A CORNEAL ABRASION?

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 the eye. Some eye conditions, such as dry eye, increase the chance of an abrasion.

#### WHAT ARE THE SYMPTOMS OF A CORNEAL 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.



#### HOW IS A CORNEAL ABRASION DIAGNOSED?

To detect an abrasion on the cornea, your ophthalmologist (Eye M.D.) will use a special dye called **fluorescein** (pronounced FLOR-uh-seen) to illuminate the injury. A slit lamp or microscope is usually used to examine the cornea and eye.

#### 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 usually take about a week. It is important not to rub the eye while it is healing. Do not wear your usual contact lenses while the eye is healing. Ask your ophthalmologist when you may start wearing your lenses again.

### WHAT IS CORNEAL EROSION?

Corneal erosion is caused by a loose attachment of the surface layer of the cornea (epithelium) to the underlying tissue. This often occurs at the site of an earlier abrasion. It may occur spontaneously, often after awakening in the morning. Erosion may also occur in dry eyes or other corneal diseases.

### WHAT ARE THE SYMPTOMS OF CORNEAL EROSION?

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;
- Blurred vision.

These symptoms are often noted upon waking and tend to reoccur.

### HOW IS CORNEAL EROSION TREATED?

Treatment is the same as for corneal abrasion, with the addition of salt solution eyedrops or ointment. 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.

### HOW CAN CORNEAL ABRASION AND EROSION BE PREVENTED?

For maximum protection:

- Use proper eyewear when using power tools, mowing the lawn and performing other yard work, playing sports, and while working around wood and steel;
- Regularly clip your infant's or young child's fingernails;
- Follow your ophthalmologist's instructions on how to care for and wear your contact lenses.

Recurrent corneal erosions can often be prevented by lubricating the eye at bedtime.

## NOTES

### COMPLIMENTS OF:

The Eye Center of Central Pa.  
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