

Corneal Abrasions

Eye injuries are common in children, especially boys. Scratches (abrasions) of the cornea and foreign bodies in the eye are among the most common injuries. They are usually not serious but may still require medical care. Some important steps can reduce your child's risk of serious eye injuries.

What are corneal abrasions?

The cornea is the clear layer of the eye that covers the iris (colored part of the eye) and pupil. It works to help direct light into the eye. Scratches of the cornea are a very common injury.

Corneal abrasions can be caused by a scratch from a fingernail, tree branch, or other object. They may occur when very small foreign bodies, such as sand or grit, get into the eye. Corneal scratches often occur when your child rubs his or her eyes after a foreign body makes its way into the eye. If at all possible, keep your child from rubbing the eyes to avoid further damage.

If your child has a foreign body in the eye that cannot be removed easily, seek medical attention. Corneal abrasions are generally minor but can be very painful. They are treated with antibiotic eyedrops and usually heal quickly.

Children are also at risk of other, more serious eye injuries. Common causes include playing sports, using fireworks, and exposure to projectiles such as sticks and stones. BB gun injuries and chemical burns can cause particularly serious damage to the eye.

! *If your child has any penetrating injury or chemical injury of the eye, get medical help immediately.*

What do they look like?

- Foreign bodies and corneal abrasions usually cause sudden, sometimes intense eye pain.
- Tears may flow.
- Eyes are sensitive to light. Your child may refuse to open the injured eye to let you look at it.
- Your child may experience decreased vision.
- You may or may not see any foreign object in the eye.
- You probably won't see any scratch or abrasion. The injuries usually aren't visible without using a special dye and examining light.

What are some possible complications of corneal abrasions?

- Usually none. Minor corneal scratches generally heal within a few days. However, it's important to get treatment to prevent the cornea from becoming infected.
- If there is a foreign body that is not removed, it may cause further damage.

Can eye injuries be prevented?

Certain activities commonly lead to eye injuries:

- Make sure your child is very cautious around BB guns and fireworks.
- Make sure your child wears appropriate eye protection during sports (such as racquetball).
- Safety goggles should be worn during any activity that could lead to small objects flying into the eye, for example, mowing the lawn, using power tools.

How are corneal abrasions diagnosed and treated?

- The doctor can use a special green dye and blue light to detect corneal scratches that can't otherwise be seen. These may be used along with an instrument called an ophthalmoscope, which provides light and magnification. Special equipment may be needed to detect foreign bodies in the eye.
- For corneal abrasions, antibiotic drops or ointment will be prescribed. Place these medicines in the eye a few times a day until the scratch has healed—usually by 24 to 48 hours. We probably won't recommend placing a patch over the eye as it doesn't help the injury heal any faster.
- Give your child acetaminophen or ibuprofen for pain. Anesthetic eyedrops are usually not recommended because they may delay healing or increase the risk of further injury.
- If there is a foreign object in the eye, the doctor will attempt to remove it. If there is any problem finding or removing the foreign object or any sign of penetrating injury, we will probably recommend a visit to the eye doctor (ophthalmologist).

174 ■ Corneal Abrasions

 **When should I call your office?**

- Corneal abrasions should heal within a few days. If your child is still having eye pain or other symptoms (tearing, light sensitivity, feeling of “something in the eye”) after 48 hours, call our office.
- If your child has other types of eye injuries—such as cuts or tears of the eyelid, any kind of penetrating injury or burn, blood in the eye, or hard trauma to the area around the eye (such as occurs in playing sports, a fight, or auto accident)—seek immediate medical attention.