Fluorescein Stain

- Fluorescein stain can be applied to the eye to detect injuries involving the cornea.
- Corneal scratches, ulcers, or other defects can be diagnosed using fluorescein staining.
- Performing a fluorescein stain takes only a few minutes and is not painful for your pet.

What Is a Fluorescein Stain?
A fluorescein test is a test that can help detect injuries to the cornea, which is the clear, thin layer of tissue that covers the front of the eye. The cornea must remain transparent to support vision, but this transparency makes detecting scratches or other injuries on the cornea very difficult because they are invisible.

Fluorescein is a green-tinted dye that fluoresces (glows) under blue light. A small amount of this dye applied to the surface of the eye (on top of the cornea) can be used to detect corneal injuries.

How Is a Fluorescein Stain Performed?
Fluorescein dye is available in several formulations, including a small paper strip that can be placed directly onto the eye and a liquid solution that can be applied into the eye.

Corneal injuries may be invisible, but they tend to be very painful. Animals with these injuries may have red, swollen, watery eyes, or may squint or rub their eyes. If your veterinarian suspects your pet may have an injury on the cornea, a small amount of fluorescein dye is applied to the surface of the cornea. If the corneal surface is intact, the fluorescein dye will not stick to the eye. However, if there is a scratch, ulcer, or defect on the cornea, the dye sticks to the injured area and can show your veterinarian where and how serious the injury is.

Performing a fluorescein stain takes only a few minutes and is not painful for your pet.

What Does a Fluorescein Stain Tell Your Veterinarian?
Fluorescein staining can tell your veterinarian if your pet has a scratch, ulcer, or other defect on the surface of the cornea. If there is an injury, the results of this test can show your veterinarian where and how serious the injury is.

Because the tear ducts in the eye normally drain through the nostrils, the fluorescein stain test can also help determine if your pet’s tear ducts are clogged. If the tear duct system is functioning normally, the green-colored dye is visible at the nostrils within a few minutes after being applied to the eye. If the dye is not visible at one or both nostrils, this could indicate clogging or other problems with the tear ducts.

Fluorescein staining is not painful and can provide valuable information about the condition of your pet’s eye and tear duct system.