At a glance

About:
An ocular foreign body can be present on the cornea, protrude through the cornea or penetrate the eye. Common foreign objects include grass seeds, thorns and splinters.

Symptoms:
- Pain
- Blinking
- Redness
- Rubbing the eye
- Excessive watering

Treatment:
Flushing the object from the surface of the cornea, forceps or in some cases, surgery.

An ocular foreign body is any object (eg, metal, glass, wood, plastic, sand) either superficially adherent to or embedded in the cornea of the eye. Foreign bodies in the eyes are an ocular emergency in cats which require immediate treatment. Dust, sand, grass seeds, splinters, hair, cactus spines, thorns and airgun pellets are most frequently seen.

Classification of ocular foreign bodies:

Extraocular foreign body (EOFB)
- Surface or superficial – The foreign body is on the surface of the cornea or conjunctiva.
- Perforating – The foreign body has perforated the cornea.

Intraocular foreign body (IOFB)
Penetrating – The foreign body had penetrated through the full thickness of the cornea and into the anterior chamber or the globe of the eye.
Extraocular foreign bodies are the most common type of foreign body in the eye and can lead to corneal scratches, corneal ulceration, and eventually rupture the eyeball.

**Symptoms**

Foreign bodies usually affect one eye only (unilateral), and may present as:

- Rubbing or pawing at the eye
- Protrusion of the third eyelid
- Blepharospasm (twitching, blinking or closure of the eyelids)
- Increased tear production (lacrimation)
- Eye discharge
- Corneal edema
- Conjunctivitis
- Visible foreign body on or in the eye
- Bleeding inside the eye (hyphemia)
- Sensitivity to light
- Head shyness
- Bleeding into the white of the eye (subconjunctival haemorrhage)

**Diagnosis**

The veterinarian will perform a thorough general and ophthalmologic examination. This will include the administration of a local anesthetic to numb the eye to enable eversion of the lids to examine the conjunctival pockets as well as beneath the nictitans membrane and look for a foreign body. In some cases, the cat may require sedation or general anesthesia if they are reluctant to have their eye closely examined.

Fluorescein eye stain test. A dark orange die is placed on the outer surface of the eye to look for corneal scratches or ulcers and to determine if the intraocular fluid is leaking around the foreign body (Siedel's test).

**Treatment**

It may be possible to remove some surface foreign bodies from the eye by grasping it with clean fingers and removing it. DO NOT do this if the object has lodged in the cornea or an intraocular foreign body which. Never use tweezers or other sharp objects which can potentially damage the eye if the cat suddenly moves. It is always better to err on the side of caution and see a veterinarian.

The veterinarian will numb the eye with topical anesthetic and flush out surface foreign bodies with a sterile saline solution, ophthalmic forceps or a sterile cotton swab.

Ocular foreign bodies which have lodged in the cornea or penetrated the eye will require **surgery**. The cat will be placed under general anesthesia, eyelids clamped, and the area cleaned, the surgeon carefully extracts the object with forceps. Surgical dissection will be
necessary if it is not possible to remove the object with forceps.

For cats with intraocular foreign bodies (penetrating injuries), the surgeon will create a small incision in the cornea to free the object and surgical repair to seal the wound to prevent the intraocular fluid leaking from the eye.

Additional therapies include topical mydriatics to keep the pupil dilated and topical antibiotics.

**Prognosis**

The prognosis is good for cats who receive prompt veterinary attention. Potential complications include corneal scarring, cataracts and glaucoma.