CONDITION

Eye - foreign object in

A foreign object in the eye is material trapped on or inside the eye

WHAT IT IS
Material trapped on or inside the eye

BODY SYSTEM
Eyes and vision

MAIN SYMPTOMS
Gritty feeling, pain, watering, redness

WHAT CAUSES IT
Dust, grit, metal, plant matter, or other debris

HOW IT IS DIAGNOSED
Eye examination, fluorescein dye, sometimes imaging

MAIN TREATMENT
Irrigation or professional removal, then surface-injury care

CAN IT BE CURED?
Yes, removal usually allows surface healing

IS IT AN EMERGENCY?
Sometimes, with embedding, high-speed injury, or vision loss

LONG-TERM OUTLOOK
Most surface injuries heal without lasting problems

Overview

A foreign object in the eye is material trapped on the eye's surface, under an eyelid, or inside the eyeball. Examples include dust, eyelashes, sand, sawdust, plant material, glass, and metal.

Most foreign objects affect the conjunctiva, the clear covering over the white of the eye, or the cornea, the clear front window. Both are sensitive, so even a tiny speck can cause significant discomfort.

A surface object may wash out with tears or rinsing but leave a corneal abrasion, or scratch. This can continue to feel like something is in the eye after the object has gone.

An object travelling at high speed can enter the eyeball. This is called an intraocular foreign body and may cause serious damage even if the object is tiny or the eye looks normal. Injuries involving drilling, grinding, hammering metal, explosions, or shattered glass need urgent

assessment.

Symptoms

Symptoms usually begin suddenly in one eye and may include:

Discomfort may increase during blinking. Material beneath the upper eyelid can repeatedly scratch the cornea.

Warning signs of a penetrating injury include sudden vision loss, blood inside the eye, a misshapen pupil, or an object sticking out. The external wound may be very small.

Contact lens wearers need particular care because a painful, red eye may be caused by a corneal infection rather than a simple foreign object. Infection can worsen quickly and threaten vision.

- A gritty, scratchy, or "something in my eye" feeling
- Pain, burning, redness, or watering
- Sensitivity to light
- Blurred or reduced vision
- Difficulty keeping the eye open
- Swelling around the eye

Causes and risk factors

Loose particles can enter the eye during everyday activities, outdoor work, sport, or windy weather. Dust, sand, insects, makeup, and eyelashes usually remain on the surface.

More forceful injuries often happen during work or home projects. Grinding, drilling, cutting, or striking metal can produce high-speed fragments. Woodworking and gardening may send sawdust, thorns, or plant matter toward the eye.

Risk is higher when you:

Organic material may carry bacteria or fungi. Metal left on the cornea can form a rust ring that may require removal.

A chemical splash is not simply a foreign object injury. It requires immediate, prolonged rinsing and emergency medical assessment.

- Use power tools or work near flying debris without eye protection

- Hammer, grind, drill, weld, or cut metal
- Work with wood, stone, glass, soil, or plants
- Wear contact lenses in dusty conditions
- Stand near someone doing hazardous work

Diagnosis

A healthcare professional will ask what happened, what material was involved, and whether it struck the eye at high speed. Mention tool use, metal-on-metal work, broken glass, or an explosion even if symptoms seem mild.

Vision is usually checked in each eye. The eye is examined with a bright light or slit lamp, and the upper eyelid may be gently turned over to look for trapped material.

Fluorescein dye may be used. It temporarily stains damaged areas of the cornea and glows under blue light, revealing scratches and some leaking wounds.

If penetration is possible, imaging may be needed. A CT scan is commonly used. MRI is generally avoided when metal might be present because the scanner's magnetic field could move it.

Treatment and management

For a loose surface particle, wash your hands and rinse the open eye with plenty of clean, lukewarm water or sterile saline. Gentle blinking may help tears move it out. Remove contact lenses if they come out easily, and do not replace them while the eye is painful or red.

Do not rub the eye or scrape it with tweezers, needles, cotton buds, or other tools. If an object is embedded, protruding, or associated with a high-speed injury, do not remove it or press on the eye.

A healthcare professional may use numbing drops and remove a surface object with irrigation or sterile instruments. Do not use leftover or borrowed anaesthetic eye drops unless specifically instructed. Repeated use can delay healing and hide worsening symptoms.

After removal, treatment may include lubricating drops or ointment, pain relief, and sometimes antibiotic eye medicine. Contact lens wearers may need additional infection precautions.

Metal can leave rust in the cornea within hours. An eye professional may remove it immediately or arrange follow-up. Deep, central, or penetrating objects require specialist care

and sometimes surgery.

Eye patches are not routinely helpful for uncomplicated corneal abrasions. If an object has entered the eye, however, a rigid shield may be placed over it without pressure while urgent treatment is arranged.

Complications

Possible complications include:

An object that penetrates the eyeball can damage the lens, retina, or other internal structures. It may cause bleeding, retinal detachment, infection inside the eye, or permanent vision loss.

Risk is higher with delayed removal, dirty or organic material, contact lens use, central corneal injury, or high-speed debris. Increasing pain, discharge, or worsening vision after treatment may indicate a complication.

- A corneal abrasion
- Corneal infection, called keratitis
- A corneal ulcer
- Rust staining from metal
- Corneal scarring and lasting blurred vision
- Recurrent corneal erosion, when the healed surface later breaks down again

Prevention

Wear properly fitting safety glasses with side protection when drilling, grinding, cutting, hammering, gardening, or working around flying particles. Some tasks require sealed goggles or a face shield as well. Prescription glasses and sunglasses do not provide equivalent protection.

Keep bystanders, including children, away from flying debris. Follow tool and machinery instructions, and check guards and screens before starting work.

Wash your hands before handling contact lenses or touching your eyes. Avoid wearing lenses in dusty settings unless you also use suitable eye protection.

Living with it and what to expect

Irritation may continue after removal because the cornea has been scratched. Small, uncomplicated abrasions often improve noticeably within one or two days, although larger injuries take longer. Redness, tearing, and light sensitivity should gradually improve.

Avoid contact lenses until the eye has healed and prescribed treatment is complete. Reusing the same lenses, case, or eye makeup may reintroduce debris or germs. Follow the replacement advice given after assessment.

Follow-up may be needed for metal or plant material, a rust ring, a large or central abrasion, contact lens use, reduced vision, or an uncertain examination. This confirms that the cornea is healing and no material remains.

Most simple surface injuries cause no lasting changes. Central scarring or deeper injury can affect vision. Penetrating injuries may require surgery, repeated examinations, or treatment for later problems such as cataract or retinal damage.

When to get medical help

Seek emergency care now if:

For a chemical splash, begin rinsing immediately with plenty of clean water and continue while emergency help is arranged. For an embedded or penetrating object, do not remove it, press on the eye, or apply a patch that touches it.

Arrange urgent same-day assessment if pain, light sensitivity, or blurred vision continues after rinsing; you cannot keep the eye open; the object will not wash out; or symptoms are worsening. Contact lens wearers with a painful red eye also need prompt assessment.

After treatment, get urgent advice if pain or redness increases, vision worsens, discharge develops, or symptoms do not improve as expected.

Routine follow-up may be enough after a healthcare professional removes a simple surface object when vision is normal and symptoms are steadily improving. Brief irritation that completely clears after rinsing usually needs no ongoing care.

- An object is embedded in or sticking out of the eye
- The injury involved high-speed metal, drilling, grinding, hammering, an explosion, or shattered glass
- Vision is suddenly reduced or lost
- The pupil looks misshapen, or blood or fluid is coming from the eye
- The eye has been cut or punctured

- A chemical entered the eye

Common questions

How do I know if something is still in my eye?

Persistent grittiness may mean material remains, but a corneal scratch can feel the same. If rinsing does not help, or you have pain, light sensitivity, or blurred vision, arrange an eye examination.

Can I remove an object from my eye myself?

You can rinse out a loose particle with clean water or sterile saline. Do not use tools or remove anything stuck to the eye. Embedded objects and high-speed injuries need urgent professional care.

Why does my eye still hurt after the object came out?

The object may have scratched the sensitive cornea. Pain should improve as the surface heals; persistent or worsening pain needs reassessment.

Can a tiny piece of metal damage my eye?

Yes. It may scratch the cornea, leave rust, or enter the eyeball through a tiny wound. Always mention grinding, drilling, or striking metal when seeking care.

When can I wear contact lenses again?

Wait until discomfort and redness have cleared and treatment is complete. Follow any advice given during your assessment, as restarting too soon increases irritation and infection risk.

Will my vision return to normal?

Vision usually returns to normal after an uncomplicated surface injury heals. Infection, scarring, central corneal damage, or an object inside the eye can cause lasting changes. Reduced or worsening vision needs urgent assessment.

Sources

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