CONDITION

Blocked tear duct

Learn how a blocked tear duct causes watery or sticky eyes in babies and adults, how it is diagnosed, and when treatment or urgent care may be needed.

WHAT IT IS
Blockage preventing normal tear drainage

BODY SYSTEM
Eyes and tear drainage

MAIN SYMPTOMS
Watery eyes, sticky discharge, eyelids sticking, blurred vision

WHAT CAUSES IT
Incomplete opening or acquired narrowing

HOW IT IS DIAGNOSED
Fluorescein drainage testing, flushing or probing

MAIN TREATMENT
Conservative care or drainage procedures

CAN IT BE CURED?
Sometimes, spontaneous opening or successful procedure

IS IT AN EMERGENCY?
Sometimes, with vision loss or rapidly spreading swelling

LONG-TERM OUTLOOK
Often resolves in infants but may persist or repeatedly infect

Overview

A blocked tear duct occurs when tears cannot drain normally from the eye into the nose. The medical name is nasolacrimal duct obstruction .

Tears normally move through tiny openings at the inner corners of the eyelids. They then pass through small channels into the tear sac, which sits beside the nose, and down the nasolacrimal duct into the nasal cavity. A narrowing or blockage anywhere along this pathway can make tears collect on the eye or spill onto the cheek.

Blocked tear ducts are especially common in babies. A thin membrane at the lower end of the drainage pathway may not have opened fully before birth. Many congenital blockages open as the tear system matures.

Adults can develop a blockage because of age-related narrowing, inflammation, infection, injury, previous surgery, or another problem affecting the eyelids, nose, or tear drainage system. Rarely, an abnormal growth may obstruct the pathway.

A blocked duct is often uncomfortable rather than dangerous. However, trapped tears can allow bacteria to grow and may lead to infection of the tear sac. Persistent tearing can also interfere with reading, driving, wearing contact lenses, or other daily activities.

Symptoms

Symptoms may affect one eye or both eyes. They can be constant or become more noticeable during a cold, in windy weather, or when tears increase.

Possible symptoms include:

In babies, symptoms often begin during the first weeks of life, once tear production increases. The white part of the eye may remain mostly white even when mucus is present. This can help distinguish a blocked duct from some forms of conjunctivitis, although a clinician may need to examine the eye to tell the difference.

Tearing does not always mean that a tear duct is blocked. Dry eye can cause reflex tearing, and allergies, eyelid inflammation, turned-in eyelashes, or eyelid position problems can produce similar symptoms.

An infant with strong light sensitivity, a cloudy-looking cornea, or an eye that appears unusually large needs prompt examination. These findings are not typical of a simple blocked tear duct and can occur with childhood glaucoma.

- Tears collecting on the eye or running down the cheek
- A wet or shiny appearance around the lower eyelid
- Mucus or yellowish discharge at the inner corner of the eye
- Eyelids or eyelashes sticking together, especially after sleep
- Repeated eye irritation or redness
- Blurred vision that clears after blinking or wiping away tears
- Tender swelling near the inner corner of the eye if infection develops

Causes and risk factors

In infants, the usual cause is incomplete opening of the nasolacrimal duct. Less often, the

drainage channels may be unusually narrow or may not have formed normally. Some newborns develop a fluid-filled swelling called a dacryocystocele near the inner corner of the eye. If it extends into the nose, it can interfere with breathing, particularly during feeding.

In adults, the drainage pathway may gradually narrow without one clear cause. This becomes more likely with age. Other possible causes include:

Some people have a partial blockage. Tears may drain adequately most of the time but overflow when the eye produces extra tears. Swelling during a respiratory infection can temporarily make symptoms worse.

New tearing that affects only one eye in an adult should be assessed if it persists. Bloody tears, a firm mass near the tear sac, unexplained nosebleeds, or symptoms that steadily worsen deserve prompt evaluation because they are not typical of an uncomplicated blockage.

- Long-term inflammation inside the nose or sinuses
- Previous infection of the tear drainage system
- Facial injury or fractures involving the nose or eye socket
- Surgery involving the eyelids, tear system, nose, or sinuses
- Scarring from certain inflammatory or autoimmune conditions
- Eyelid changes that prevent tears from entering the drainage openings
- Medicines or cancer treatments that scar the tear drainage pathway
- Nasal polyps, stones within the tear system, or, rarely, a tumor

Diagnosis

A clinician will ask when the tearing began, whether it affects one or both eyes, and whether there is pain, discharge, bleeding, or a history of injury or surgery. In a child, they may ask whether symptoms have been present since early infancy.

The examination usually includes the eyelids, the surface of the eye, and the small tear-drainage openings. Gentle pressure over the tear sac may cause fluid to come back through these openings. This can support the diagnosis but should not be repeatedly attempted at home when the area is painful or inflamed.

An eye specialist may place a harmless dye called fluorescein into the eye and watch how quickly it drains. In adults or children who need a procedure, the specialist may gently pass fluid or a thin instrument through the drainage pathway to locate the obstruction.

Imaging is not needed for every blocked tear duct. A clinician may order a scan or examine the

inside of the nose when symptoms are unusual, follow an injury, do not improve after treatment, or raise concern about a mass or another structural problem.

The examination also helps rule out other causes of tearing, such as dry eye, allergy, infection of the eye surface, corneal injury, eyelid malposition, or glaucoma.

Treatment and management

Treatment depends on the person's age, the cause and location of the blockage, the severity of symptoms, and whether infection is present.

Care in babies

Many congenital blockages open without surgery during the first year of life. A clinician may recommend observation if the eye is otherwise healthy.

Discharge can be gently cleaned from the eyelids with clean hands and a soft cloth or cotton pad moistened with warm water. Use a separate clean area of the cloth for each wipe and avoid sharing towels.

A pediatrician or eye specialist may teach parents a tear-sac massage technique, sometimes called Crigler massage. It uses controlled downward pressure beside the nose to help move fluid through the duct. Proper hand position matters, so caregivers should ask for a demonstration rather than pressing directly on the eye.

Antibiotic eye drops or ointment may be used when there is substantial bacterial discharge or another sign of infection. Antibiotics like amoxicillin or doxycycline can control infection, but they do not open the blocked duct. Repeated or prolonged use should be guided by a clinician.

If the blockage persists, causes significant symptoms, or leads to repeated infections, an ophthalmologist may recommend probing . During this procedure, a thin instrument is passed through the drainage pathway to open the obstruction. Depending on the child's age and circumstances, this may be done with local anesthetic or under general anesthesia.

If probing is unsuccessful or the anatomy is more complex, options may include balloon dilation or placement of a temporary silicone tube to keep the drainage pathway open.

Treatment in adults

Adult treatment focuses on the underlying cause. Eyelid inflammation, nasal disease, or another contributing condition may need separate care. A partial narrowing may sometimes be treated by flushing or widening the drainage pathway, although the benefit depends on where and why it is blocked.

A complete or persistent obstruction often requires a procedure called

dacryocystorhinostomy , or DCR. This operation creates a new passage between the tear sac and the inside of the nose, bypassing the blocked duct. It may be performed through a small skin incision beside the nose or through the nasal cavity with an endoscope, which is a thin viewing instrument.

A temporary tube may be placed during DCR to support the new opening while it heals. The choice of procedure depends on the anatomy, previous treatment, the surgeon's assessment, and patient preferences.

An infected tear sac, called dacryocystitis , usually requires prompt medical treatment with antibiotics. A collection of pus may need drainage. Definitive surgery to improve tear drainage is often considered after the active infection is controlled.

Complications

Tears and mucus that remain in the drainage system can promote bacterial growth. This may cause repeated conjunctivitis or dacryocystitis.

Dacryocystitis commonly causes painful redness and swelling between the inner corner of the eye and the side of the nose. Fever may occur. Without treatment, infection can occasionally spread into the surrounding skin or tissues of the eye socket.

Long-term overflow of tears can irritate the eyelid skin. Frequent wiping may add to redness, cracking, or soreness. Persistent blurred vision from the tear film may interfere with daily activities even when the eye itself is healthy.

Procedures are generally intended to improve drainage, but they can have risks such as bleeding, infection, scarring, tube displacement, or continued blockage. The treating specialist can explain the risks and expected recovery for a specific procedure.

Follow up

Routine follow-up is appropriate when tearing or discharge continues, keeps returning, affects vision or daily activities, or has not improved as expected. Babies with ongoing symptoms should be reviewed by their pediatrician or eye specialist so that the need and timing of a procedure can be discussed.

After probing, tube placement, or DCR, follow the surgical team's instructions for eye or nasal care. Attend planned visits so the clinician can check healing and remove a temporary tube if one was used. Contact the team earlier if symptoms worsen rather than improve.

Seek same-day medical care for painful swelling near the inner corner of the eye, spreading redness, pus, or fever. A young infant with fever or a newborn with a bluish swelling beside the nose should also be assessed promptly.

Seek emergency care for:

These symptoms are not expected with a routine uncomplicated blockage and may indicate infection spreading around the eye or another urgent condition.

- New loss of vision or a major change in vision
- Severe eye pain or pain when moving the eye
- An eye that appears pushed forward
- Rapidly spreading swelling around the eye
- Severe headache, vomiting, confusion, or marked illness with eye swelling
- Breathing difficulty in a newborn with swelling near the tear duct or inside the nose

Sources

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