CONDITION

Meibomianitis

Meibomianitis is inflammation and blockage of the eyelid oil glands that can irritate the eyes and disrupt tears.

WHAT IT IS
Inflamed or blocked oil glands along the eyelids

BODY SYSTEM
Eyes and eyelids

MAIN SYMPTOMS
Burning, gritty eyes, eyelid redness, fluctuating vision

WHAT CAUSES IT
Gland blockage with inflammation

HOW IT IS DIAGNOSED
Eyelid examination, gland expression, and tear-film assessment

MAIN TREATMENT
Eyelid care, lubricants, and anti-inflammatory treatment

CAN IT BE CURED?
Sometimes - inflammation settles but may recur

IS IT AN EMERGENCY?
Sometimes - sudden vision loss or severe eye pain

LONG-TERM OUTLOOK
Usually manageable, though symptoms may return

Overview

Meibomianitis is inflammation of the meibomian glands. These tiny glands sit inside the upper and lower eyelids and open along the eyelid edges. They release an oily substance called meibum.

Meibum forms the outer layer of your tears. It slows tear evaporation and helps keep the surface of the eye smooth and comfortable. When gland openings become blocked or their oil becomes too thick, the tears may evaporate too quickly. The glands and surrounding eyelid tissue can then become irritated.

Meibomianitis is closely related to meibomian gland dysfunction, or MGD. The terms are sometimes used together, although MGD can involve blockage or poor gland function without obvious inflammation. Meibomianitis is also considered a common form of posterior

blepharitis, meaning inflammation along the inner part of the eyelid edge.

The condition can affect one or both eyes. It is not usually dangerous, but it may cause ongoing discomfort, dry-eye symptoms, and blurred or changing vision. It can also contribute to recurring styes or chalazia, which are lumps caused by blocked eyelid glands.

Symptoms

Symptoms may come and go. They are often worse after long periods of reading, driving, or screen use because people blink less during these activities.

Possible symptoms include:

Some people notice frothy tears or small plugs at the gland openings. Others have few visible eyelid changes even when the glands are not releasing oil normally.

Vision may fluctuate because an uneven tear film does not create a consistently smooth optical surface. Persistent loss of vision is not a typical symptom and needs separate assessment.

- Burning, stinging, or gritty-feeling eyes
- Red or swollen eyelid edges
- Dryness, watering, or sensitivity to wind
- Crusting or oily debris around the eyelashes
- Eyelids that feel sore, itchy, or heavy
- Blurred vision that improves after blinking
- Difficulty wearing contact lenses comfortably
- Repeated styes or chalazia

Causes and risk factors

Meibomianitis develops when the glands do not release healthy oil normally. Their openings may narrow or become plugged, and the meibum may become thicker. Trapped material can stretch the glands and promote inflammation.

Bacteria normally live on the eyelids. In some people, substances produced by these bacteria alter the gland oil and add to irritation. This does not usually mean that the eye has a contagious bacterial infection.

Factors associated with meibomian gland problems include:

Eyelash-mite overgrowth, known as Demodex infestation, can cause another form of blepharitis and may occur alongside meibomian gland disease.

Not everyone has a clear trigger. Meibomianitis is not caused simply by poor hygiene, and it is not usually something you catch from another person.

- Rosacea, especially when it affects the face or eyes
- Seborrhoeic dermatitis, which causes greasy, flaky skin
- Increasing age
- Long periods of screen use and reduced blinking
- Contact lens wear
- Previous eyelid inflammation
- Some eye surgery or injury
- Certain medicines, including isotretinoin
- Dry or air-conditioned environments

Diagnosis

Diagnosis is usually based on an eye and eyelid examination. An optometrist, ophthalmologist, or other qualified eye professional may examine the gland openings, eyelashes, tear film, and surface of the eye with a microscope called a slit lamp.

Gentle pressure may be placed on the eyelids to see whether the glands release clear oil, thick material, or no material. This is called gland expression. It may cause brief discomfort if the glands are tender or blocked.

The examination may also look for:

Special tests may measure how quickly tears break up or image the glands inside the eyelid. Gland imaging is called meibography. These tests can help assess severity, but they are not required in every case.

Other conditions can cause similar symptoms, including allergy, conjunctivitis, corneal problems, and other forms of dry eye. An examination helps separate these possibilities.

- Redness or irregularity along the eyelid edge
- Plugged gland openings

- Rapid tear evaporation
- Damage or staining on the eye surface
- Styes, chalazia, rosacea, or Demodex-related debris

Treatment and management

Treatment aims to improve oil flow, calm inflammation, support the tear film, and manage contributing conditions. The right approach reflects the severity of symptoms and what is found during an eye examination.

Warm compresses can soften thick gland material. The compress needs to be comfortably warm rather than hot, since eyelid skin can burn. Gentle eyelid massage may then help move oil toward the gland openings. An eye professional can demonstrate a safe technique.

Cleaning the eyelid edges may remove crusts and debris. Products made for eyelid care are often less irritating than ordinary soap or shampoo. Scrubbing hard can make inflammation worse.

Lubricating eye drops, sometimes called artificial tears, may ease dryness and fluctuating vision. Preservative-free products may be preferred when drops are needed frequently or preservatives cause irritation. Drops replace moisture but do not by themselves clear blocked glands.

If basic eyelid care is not enough, treatment may include:

Some anti-inflammatory eye medicines require monitoring because long-term or incorrect use can harm the eye. Oral antibiotics used for their anti-inflammatory effect can also cause side effects and are not suitable for everyone. These treatments should be chosen after an assessment rather than started from leftover medication.

Thermal pulsation devices apply controlled heat and pressure to the glands. Intense pulsed light is another procedure used in some clinics, particularly when facial rosacea is involved. Results are not identical for everyone, and access, evidence, and cost differ between procedures.

Contact lenses may feel uncomfortable during a flare. Temporarily reducing wear or reviewing the lens type and care routine may help, but sudden pain or redness in a contact lens wearer needs prompt assessment.

- Prescription antibiotic treatment when bacterial overgrowth or related inflammation is suspected

- Anti-inflammatory eye drops or ointments for selected cases
- Oral medicines that change gland secretions and reduce inflammation
- Treatment for rosacea, dermatitis, allergy, or Demodex infestation
- In-office warming and gland-expression procedures

Complications

Meibomianitis most often causes discomfort rather than permanent harm. However, continuing gland blockage can affect both the eyelids and the eye surface.

Possible complications include recurrent styes and chalazia. A chalazion is a firm eyelid lump caused by inflammation around a blocked gland. It is not usually an active infection.

Long-standing gland dysfunction may lead to persistent evaporative dry eye. Over time, some glands can shrink or stop working. This loss may not be fully reversible, although remaining glands can often be supported.

More severe inflammation can damage the clear front surface of the eye, called the cornea. This may cause marked pain, light sensitivity, or vision changes and needs prompt care.

A lump that repeatedly returns in the same place, changes the shape of the eyelid, or causes loss of eyelashes should be examined. Most eyelid lumps are benign, but an unusual or persistent lump may need further investigation.

Prevention

Meibomianitis cannot always be prevented. Age, skin conditions, gland structure, and medication effects may contribute even when you take good care of your eyes.

If you are prone to recurrences, regular eyelid care may help keep gland oil moving. Taking screen breaks and blinking fully can also reduce tear evaporation. Avoid directing fans, heaters, or air conditioning toward your face when these make symptoms worse.

Remove eye makeup gently and replace products according to their instructions. Avoid sharing eye makeup. Stop using a product if it repeatedly irritates the eyelid edges.

Managing rosacea or seborrhoeic dermatitis may reduce associated eyelid inflammation. Do not stop a prescribed medicine because of possible eye effects without discussing the benefits and alternatives with the prescriber.

Living with it and what to expect

Meibomianitis often behaves as a long-term or recurring condition. A flare may settle over days or weeks, but gland blockage and dry-eye symptoms can return. Heat, low humidity, prolonged screen use, skin-condition flares, and contact lens wear may influence symptoms.

Many people control the condition with a simple eyelid-care routine and occasional additional treatment. Others need ongoing dry-eye care or repeated review, particularly when gland loss or rosacea is present.

Improvement may be gradual because gland material takes time to soften and flow more normally. Comfort may improve before the eyelids look completely normal. Fluctuating vision often improves when the tear film becomes more stable.

Routine follow-up is useful if symptoms continue, treatment causes irritation, or repeated lumps develop. An eye professional can check the cornea, assess whether glands are being lost, and adjust management. The condition does not usually stop people from working, reading, driving, or exercising once symptoms are controlled.

When to get medical help

Arrange a routine eye assessment if symptoms are persistent, keep returning, interfere with contact lens wear, or do not improve with gentle eyelid care. You should also arrange an assessment for a recurring or long-lasting eyelid lump.

Seek prompt, same-day medical help for:

Sudden vision loss, severe eye pain, or swelling that affects eye movement requires emergency assessment. These symptoms are not typical of uncomplicated meibomianitis and may point to another eye problem.

- Increasing eye pain rather than mild eyelid soreness
- Strong sensitivity to light
- A marked drop in vision
- Redness spreading beyond the eyelid
- Significant swelling, fever, or feeling unwell
- A painful red eye while wearing contact lenses
- An eye injury or chemical exposure

Common questions

Is meibomianitis the same as blepharitis?

It is a type of blepharitis. Blepharitis means eyelid-edge inflammation. Meibomianitis mainly affects the oil glands along the inner eyelid edge, while other forms may mainly affect the eyelashes and nearby skin. Both forms can occur together.

Is meibomianitis contagious?

It is not usually contagious. Although normal eyelid bacteria may contribute to inflammation, meibomianitis is mainly related to blocked or poorly functioning glands rather than an infection that spreads between people.

Can meibomianitis go away completely?

A flare can settle completely, especially when a trigger is temporary. However, gland dysfunction often has a recurring course. Regular management may reduce symptoms and help prevent repeated blockages, but it cannot restore glands that have already been permanently lost.

Can I wear eye makeup or contact lenses?

You may need to reduce makeup or contact lens use during a flare if they increase irritation. Avoid applying makeup directly over inflamed gland openings. Pain, marked redness, light sensitivity, or reduced vision during contact lens wear should be assessed promptly.

Do warm compresses really help?

Warmth can soften thick meibomian gland oil and make it easier to release. The compress must be comfortably warm, used consistently, and followed by gentle care. Excessive heat or forceful squeezing can injure the eyelid and should be avoided.

Why does my vision clear when I blink?

Blinking spreads fresh oil and fluid across the eye. When the oil layer is unstable, the tear surface becomes uneven between blinks and vision may blur. If blurred vision does not clear with blinking or is getting worse, arrange an eye assessment.

Sources

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