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Hordeolum: Acute abscess within an eyelid sebaceous gland

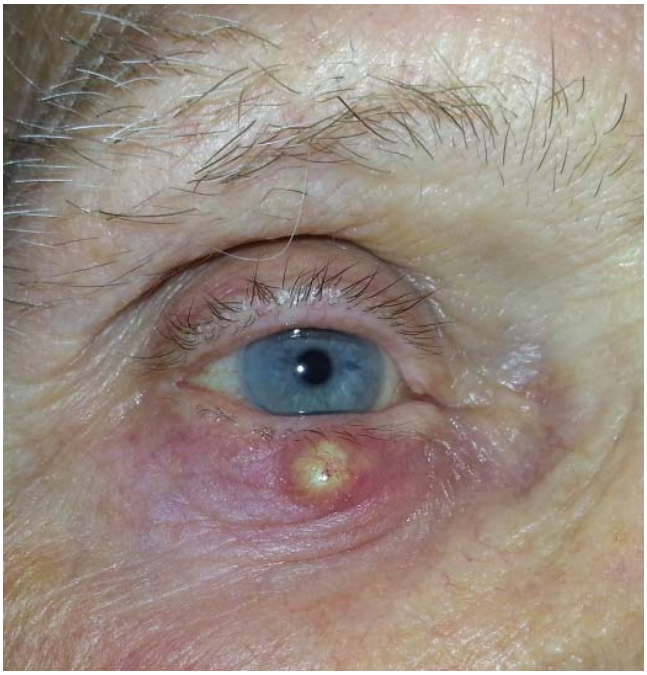

FIGURE 1.

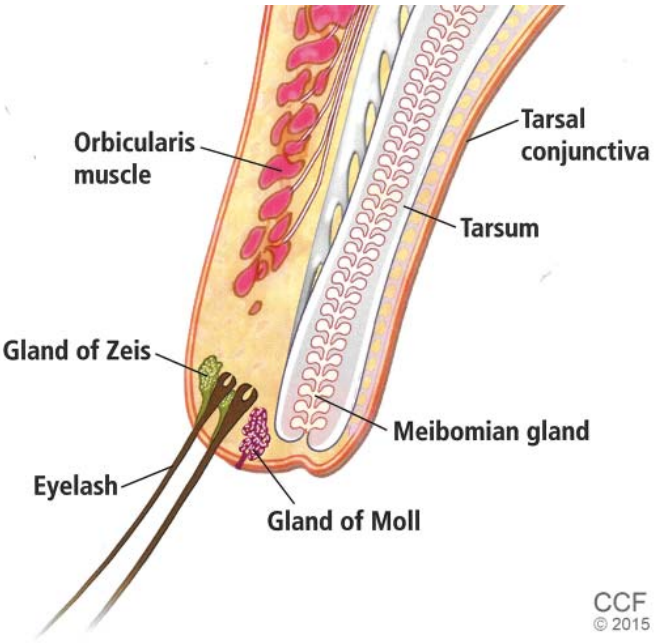

FIGURE 2.

An 89-year-old man presented complaining of a tender, painful lump in the right lower eyelid that spontaneously appeared 3 days previously. There was no discharge, bleeding, or reduced vision. He had a history of hypertension and macular degeneration. There was no history of a pre-existing eyelid lesion, ocular malignancy, rosacea, or seborrheic dermatitis. Examination of the right lower lid revealed a roundish raised abscess with surrounding erythema (**Figure 1**). The raised area was tender on palpation; there was no discharge. The palpebral conjunctiva was normal. A diagnosis of a hordeolum was made, and conservative treatment was prescribed, ie, warm compresses and massage for 10 minutes four times a day. The lesion improved gradually and resolved over 3 weeks.

doi:10.3949/ccjm.83a.15012

A hordeolum is an acute abscess within an eyelid gland, usually staphylococcal in origin. When it involves a meibomian gland it is termed an internal hordeolum, and when it involves the gland of Zeis or Moll it is termed an external hordeolum (**Figure 2**).[1] Hordeola may be associated with diabetes, blepharitis, seborrheic dermatitis, rosacea, and high levels of serum lipids. Treatment is with warm compresses and massage. A hordeolum with preseptal cellulitis, signs of bacteremia, or tender preauricular lymph nodes requires systemic antibiotics (eg, flucloxacillin 250–500 mg four times a day for 1 week).

Preseptal cellulitis is an infection of the subcutaneous tissues anterior to the orbital septum. The orbital septum is a sheet of fibrous tissue that originates in the orbital periosteum and inserts in the palpebral tissues

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TABLE 1

Differences between chalazion and hordeolum

	Chalazion	Hordeolum
Description	Chronic lipogranuloma due to leakage of sebum from an obstructed meibomian gland	Acute abscess within an eyelid gland, usually staphylococcal in origin. Subdivided into internal (meibomian gland) and external (gland of Zeis or Moll)
Risk factors and associations	Blepharitis, seborrheic dermatitis, acne rosacea	Diabetes, blepharitis, seborrheic dermatitis, acne rosacea, high serum lipids
Presentation	Any age, gradually enlarging painless lesion	Any age, acute painful lesion
Signs	Nontender, variable size, roundish, firm lesion within the tarsal plate	Internal: tender, painful swelling within the tarsal plate; may enlarge and discharge anteriorly (through the skin) or posteriorly (through the conjunctiva) External: tender, painful swelling in the eyelid margin pointing anteriorly through the skin
Treatment options	Warm compresses and massage Corticosteroid injection Incision and curettage	Internal: Warm compresses and massage Oral antibiotics (if associated with preseptal cellulitis) Incision and curettage External: Warm compresses and massage Oral antibiotics (if associated with preseptal cellulitis) Epilation of infected follicle
When to refer to an ophthalmologist	No improvement or resolution with conservative measures Interferes with vision Recurrent nodules Suspected cancer	No improvement or resolution with conservative measures Signs of preseptal or orbital cellulitis Suspected cancer

Hordeolum typically resolves within several weeks with warm compresses and massage

along the tarsal plates of the eyelid. The orbital septum provides a barrier against the spread of periorbital infection into the orbit (orbital cellulitis). The causes of preseptal cellulitis include skin trauma (eg, lacerations, insect bites), spread from local infections (eg, hordeolum, dacryocystitis), or systemic infections (eg, upper respiratory tract, middle ear). Clinical features include malaise, fever, and painful eyelid with periorbital edema. Any sign of proptosis, chemosis, painful restricted eye movements, diplopia, lagophthalmos, or optic

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nerve dysfunction warrants further investigation. Chronic or large hordeola may require incision and curettage.

A recent Cochrane review concluded that there was no evidence of the effectiveness of nonsurgical interventions (including hot or warm compresses, lid scrubs, antibiotics, and steroids) for hordeolum, and controlled clinical trials would be useful.[2]

Chalazion and hordeolum are similar in appearance and often confused (**Table 1**). A chalazion is a chronic lipogranuloma due to leakage of sebum from an obstructed meibomian gland. It may develop from an internal hordeolum. Small chalazia usually resolve with time without any intervention, and hot compresses can be effective at encouraging drainage. Persistent lesions may be surgically removed by incision and curettage. Recurrence warrants biopsy and histologic study to rule out sebaceous gland carcinoma.[3]

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