

Ocular Inflammation and Infection

Jonathon P. Deibel, MD^{a,b,*}, Kathleen Cowling, DO, MS^{a,b}

KEYWORDS

- Conjunctivitis • Hordeolum • Chalazion • Blepharitis • Scleritis • Episcleritis
- Keratitis • Iritis

KEY POINTS

- Blepharitis is treated with warm compresses and washes with mild soap; antibiotics should be considered for severe cases.
- Episcleritis is usually mild and self-limited; Scleritis can be severe and has an association with numerous systemic diseases.
- Chlamydia trachomatis presents initially as a watery discharge and progresses to a purulent discharge. Marked chemosis and eyelid swelling are present. Concurrent chlamydial pneumonia should be considered. Infected infants should be treated with oral erythromycin.
- Iritis presents with pain, blurred vision, and consensual photophobia. Concurrent systemic disease should be considered. Treatment consists of long-acting cycloplegics and oral analgesia.
- Corneal ulcers require frequent antibiotic dosing. Coverage of *Pseudomonas aeruginosa* should be provided to contact lens users. In addition to oral analgesics, a long-acting cycloplegic may provide some pain relief. Eye patching is not recommended for corneal abrasions or corneal ulcers.

Ocular inflammation and infection can occur in any part of the eye and surrounding tissue. The most common and most serious conditions seen in the emergency department are discussed here. It is important for an emergency physician to consider other sight-threatening conditions that can cause a painful acute red eye when considering the disposition and potential referral. Key signs and symptoms, common pathogens, and appropriate treatment and follow-up are discussed.

HORDEOLUM

A hordeolum (**Fig. 1**) is a pustular swelling of the lid margin, which is usually caused by *Staphylococcus aureus*. An internal hordeolum is a meibomian gland obstruction with

No funding support provided. No financial disclosures.

^a Department of Emergency Medicine, Synergy Medical Education Alliance, 1000 Houghton Avenue, Saginaw, MI 48602, USA; ^b Michigan State University College of Human Medicine, 965 Fee Road, Room A-110, East Lansing, MI 48824, USA

* Corresponding author.

E-mail address: Jonathon.Deibel@cmich.edu

Emerg Med Clin N Am 31 (2013) 387–397
<http://dx.doi.org/10.1016/j.emc.2013.01.006>

emed.theclinics.com

0733-8627/13/\$ – see front matter © 2013 Elsevier Inc. All rights reserved.



Fig. 1. Hordeolum. (From Seidel HM. *Mosby's Guide to Physical Examination*. Philadelphia: Elsevier Mosby, 2003; with permission.)

infection. An external hordeolum (synonymous with a sty) originates from a hair follicle or tear gland on the lid margin. Both forms usually resolve in about 1 week. Treatment consists of warm compresses. Although data on effectiveness are limited, antibiotic ophthalmic ointment may be considered. A hordeolum may develop into a chalazion and ultimately may require incision and drainage by an ophthalmologist.

CHALAZION

A chalazion is a nodular, granulomatous swelling of the eyelid caused by an obstruction of a meibomian gland or a gland of Zeis. It is usually not painful. The presentation is usually subacute or chronic, but it can be acute. A chalazion may develop from a hordeolum. Distinguishing the 2 may be impossible in the acute care setting. Treatment consists of warm compresses. Because a chalazion is often chronic, time to resolution is likely longer than with a hordeolum. Referral to an ophthalmologist for follow-up is appropriate, as steroid injection or incision and drainage may be indicated.

BLEPHARITIS

Blepharitis is chronic eyelid irritation and inflammation. Its cause is complex and still not entirely understood. Factors generally thought to contribute to this condition include microbial organisms (*S epidermidis* being primary), abnormal lid margin secretions, and abnormalities of the tear film.¹ Blepharitis has an association with atopic dermatitis, rosacea, and eczema.² Symptoms are multiple and varied, including irritation, tearing, pruritis, and flaking or crusting of the eyelid. The primary treatment of blepharitis is eyelid hygiene: warm massage with a moist washcloth about 20 minutes 4 times a day.³ A cotton swab may be used with a mild baby shampoo to clean the lid margins twice a day. General consensus is in favor of topical or systemic antibiotics and topical steroids if the inflammation is severe.¹

SCLERITIS AND EPISCLERITIS

Scleritis is inflammation of the sclera, whereas episcleritis is inflammation of the lining of the sclera, or episclera. Both have symptoms of blurred vision, photophobia, tearing, and severe pain, which tend to be worse at night. Episcleritis is usually mild

Download English Version:

<https://daneshyari.com/en/article/3236917>

Download Persian Version:

<https://daneshyari.com/article/3236917>

[Daneshyari.com](https://daneshyari.com)