

COMMON CORNEAL AND EXTERNAL DISORDERS ENCOUNTERED BY PHYSICIANS

LSU Medical Student Ophthalmology Series - 2005
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BLEPHARITIS/BLEPHAROCONJUNCTIVITIS

Symptoms

"Itchy-burnies"

Signs

Flakes and scales (collarettes) around cilia

Red eyelid margin

Papillary conjunctivitis

Peripheral (immune) corneal infiltrates

Pannus (superficial corneal blood vessels)

Dilated blood vessels on the eyelid margin

Loss of lashes (madarosis)

White lashes (poliosis)

Trichiasis (inturned lashes)

(NOTE: Sebaceous carcinoma may masquerade as chronic blepharitis.)

Treatment

Warm compresses and baby shampoo scrubs

Topical antibiotic ointment (erythromycin)

Topical corticosteroids in severe cases (to be used **only** under the supervision of an ophthalmologist)

MEIBOMIANITIS

Symptoms

"Itchy-burnies"

Signs

Oily lid margins with inspissation of meibomian gland secretions

Treatment

Warm compresses and baby shampoo scrubs

Systemic tetracycline in severe chronic cases

STY (HORDEOLUM)

Symptoms

Acute swelling and tenderness of eyelid margin

Signs

Red, indurated area on eyelid margin

Treatment

Warm compresses

Incision and drainage

Systemic antibiotic

(Topical antibiotic ointment)

CHALAZION

Symptoms

Swelling (and tenderness) of eyelid

Signs

Firm swelling of eyelid

(**NOTE:** A chalazion is a chronic sterile granulomatous inflammation, **not** an infection.)

Treatment

Warm compresses and baby shampoo scrubs

Incision and drainage

(Antibiotics **not** necessary.)

DRY EYES

Symptoms

Heaviness of eyelids

Blurred and fluctuating vision

Excess ropy mucus

"Itchy-burnies"

Scratchiness/foreign body sensation

Tearing

Pain

Signs

Decreased tear meniscus

Excess debris in tear film

Mucous strands

Filaments

Conjunctival and corneal drying (fluorescein and rose bengal staining)

Corneal ulceration/perforation

Decreased Schirmer test (paper strips used to measure the amount of tears produced over a given time interval)

Increased tear osmolarity

Decreased tear film break-up time

Treatment

Treatment of underlying conditions (e.g., connective tissue diseases)

Modify environment

Artificial tears (Prefer no preservatives)

Artificial ointments (Prefer no preservatives)

Artificial tear inserts

Punctal occlusion

Moist chambers (swim goggles)

CONJUNCTIVITIS

Symptoms

Foreign body sensation/pain

Redness

Discharge (Bacterial is usually purulent, some allergic and viral are usually watery, and some allergic and chlamydial are usually mucoid.)

Signs

Redness
Discharge (should be examined and cultured)
Conjunctival papillae (bacterial) or follicles (allergic, viral, or chlamydial)

Treatment

Treatment depends on etiology. Topical antibiotics for bacteria, antiviral for herpes simplex, systemic antibiotics for chlamydia and other sexually transmitted diseases, and topical cromolyn sodium (Crolom) or olopatadine (Patanol) for allergic.
Refer to ophthalmologist if not responding to treatment

CORNEAL EPITHELIAL DEFECT (CORNEAL EROSION OR ABRASION)

Symptoms

Foreign body sensation/pain
Tearing
Decreased vision

Signs

Corneal epithelial defect with no underlying infiltrate

Treatment

Antibiotic ointment
(Dilation with one drop of scopolamine or homatropine if anterior chamber inflammation is present)
Semipressure patch
Examination Q24 hours
NEVER prescribe a topical anesthetic
Refer to ophthalmologist if not responding or develops infiltrate
Contact lens
Collagen shield
Tarsorrhaphy
Hypertonic ointment (5% NaCl) for recurrent erosions

CORNEAL FOREIGN BODY

Symptoms

Foreign body sensation/pain
Tearing
Decreased vision

Signs

Corneal foreign body seen on slit lamp examination

Treatment

Removal of foreign body with wet cotton applicator or 25 gauge needle
(Removal of rust ring)
Treatment as above for corneal epithelial defect
Refer to ophthalmologist

CORNEAL ULCER

Symptoms

- Foreign body sensation/pain
- Discharge
- Decreased vision

Signs

- Corneal epithelial defect with underlying infiltrate
(Certain corneal infections, such as fungal and amoebic infections, do not always produce an epithelial defect)

Treatment

- Refer to ophthalmologist
- Corneal scrapings
- Corneal cultures
(Corneal biopsy)
- Broad spectrum antibiotics while awaiting laboratory results.
Antibiotics should **not** be started until cultures have been taken.
- Fungal and amoebic infections are **not** treated presumptively. Many herpes simplex infections present such a pathognomonic clinical picture that they are treated presumptively with antiviral medication (Viroptic).
- Corticosteroids are **never** to be used by a non-ophthalmologist.

CHEMICAL BURNS

Symptoms

- Pain
- Decreased vision

Signs

- Conjunctival hyperemia or blanching
- Corneal epithelial defect (with accompanying infiltrate)
- Cataract

Treatment

- Irrigation, irrigation, irrigation
- Refer to ophthalmologist