QUICK REFERENCE GUIDE

Care of the Patient with Blepharitis

American Optometric Association

A. DESCRIPTION AND CLASSIFICATION

Blepharitis, an inflammatory process (dermatitis or eczema) affecting the lid margins, the lash follicles, or the openings of the meibomian glands, can occur as either an acute or a chronic condition. It can affect vision by disrupting the surface of the cornea and the bulbar conjunctiva and may influence tear film composition.

I. Staphylococcal Blepharitis

- ❑ Usually caused by *staphylococcus aureus* or *staphylococcus epidermidis* organisms, it produces a moderately acute inflammation of relatively short duration; more prevalent in warmer climates and often occurs in middle-aged females. Related hordeolum and chalazion may also occur.

2. Seborrheic Blepharitis

- ❑ Part of a dermatologic condition that includes the scalp, face, and eyebrows; also called squamous blepharitis. Clinical signs include greasy, scaly lashes. Inflammation is usually minimal.

3. Seborrheic/Staphylococcal Blepharitis

- ❑ Also referred to as ulcerative or mixed blepharitis, it is the least common form of blepharitis and is characterized by secondary keratoconjunctivitis, papillary and follicular hypertrophy, conjunctival injection, and mixed crusting.

4. Meibomian Seborrheic Blepharitis

- ❑ Can be identified by the presence of increased meibomian and seborrheic secretions without acute inflammation. Altered meibomian secretions may lead to bulbar injection.

5. Seborrheic Blepharitis with Secondary Meibomianitis

- ❑ Similar to seborrheic blepharitis, it has sporadic episodes of inflammation and meibomianitis that result in clogged meibomian glands and anterior seborrhea, producing an unstable preocular tear film (POTF).

6. Meibomian Keratoconjunctivitis

- ❑ The most severe lid margin inflammation, which typically occurs in persons in their fifties, is more common in colder climates, is frequently associated with acne rosacea, and is part of a generalized sebaceous gland dysfunction which clogs the meibomian openings.

7. Angular Blepharitis

- ❑ Both the staphylococcal and the moraxella forms of angular blepharitis are located on the lid at the outer canthus.

8. Demodicosis

- ❑ An inflammatory reaction to two common species of mites present in most persons over age 50 (i.e., *Demodex folliculorum*, present in hair and eyelash follicles and *Demodex brevis*, present in sebaceous and meibomian glands).

NOTE: This Quick Reference Guide should be used in conjunction with the Optometric Clinical Practice Guideline on Care of the Patient with Ocular Surface Disorders (November 8, 2002). It provides summary information and is not intended to stand alone in assisting the clinician in making patient care decisions.

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B. RISK FACTORS FOR BLEPHARITIS

- ❑ Underlying systemic causes (e.g., viral infections)
- ❑ Seborrheic dermatitis
- ❑ Acne rosacea
- ❑ Atopic dermatitis and psoriasis
- ❑ Keratoconjunctivitis sicca

C. SIGNS, SYMPTOMS, AND COMPLICATIONS

- ❑ The signs, symptoms, and complications of blepharitis vary with the degree of inflammation (See Table 1).

D. EARLY DETECTION AND PREVENTION

Steps to prevent blepharitis are aimed toward controlling the severity of the inflammation and preventing secondary complications. In the event of exacerbation, early diagnosis and treatment can help minimize the degree of inflammation and infection.

E. EVALUATION

Includes the elements of a comprehensive eye and vision examination with particular emphasis on the following areas:

I. Patient History

- ❑ Onset and course of condition
- ❑ Thorough medical history
- ❑ Effects of previous treatments and the patient's compliance in following recommendations

2. Ocular Examination

- ❑ External examination of the eye, including lid structure, skin texture, and eyelash appearance
- ❑ Comparison of the eyes helps determine the severity of the inflammation
- ❑ Biomicroscopic examination of the lid margins, the base of the lashes, and the meibomian gland orifices and their contents
- ❑ Examination of the tear film for lipid layer abnormalities
- ❑ Evaluation of the palpebral and bulbar conjunctiva

F. MANAGEMENT

Table 2 provides an overview of the evaluation, management, and followup of patients with blepharitis.

1. Basis for Treatment

- ❑ Treatment of acute forms includes lid hygiene and appropriate anti-infective drugs. There is no complete cure for chronic blepharitis; aggressive therapy, as in acute forms, followed by variable amounts of continuing treatment is necessary to maintain control.

2. Available Treatment Options

- ❑ Lid hygiene (e.g., warm, moist compresses, commercial lid scrub)
- ❑ Scalp and eyebrow hygiene (selenium antidandruff shampoo)
- ❑ Tear supplements to alleviate symptoms and re-establish ocular surface integrity
- ❑ Antibiotic eyedrops or ointment (e.g., erythromycin, bacitracin, polymyxin-bacitracin, gentamicin, tobramycin) to control infection
- ❑ Massage/expression of meibomian glands
- ❑ Topical antibiotic/steroid ointment or oral tetracycline/doxycycline for meibomianitis

3. Patient Education

- ❑ Discuss causes, rationale for treatment, and expected results
- ❑ Stress importance of active participation in treatment of chronic forms
- ❑ Encourage patient compliance
- ❑ Give specific instructions and realistic expectations
- ❑ Reinforce importance of followup schedule

4. Prognosis and Followup

- ❑ Followup visits may be as frequent as every few days, then tapering off to once or twice a year after stabilization has occurred
- ❑ First acute staphylococcal episode can be expected to resolve completely in absence of other lid or systemic abnormalities
- ❑ Chronic forms may be controlled with daily hygiene and topical medication, and, if indicated, courses of systemic medication

TABLE 1

Common Signs, Symptoms, and Complications of Blepharitis

Condition	Symptoms	Signs	Complications
Staphylococcal Blepharitis	Ocular irritation/itching; Foreign body sensation; Lids sticking together	Lid swelling; Erythema of lid margins; Scaly collarets at base of lashes; Staining, erosion, and infiltrates in lower third of cornea	Bacterial conjunctivitis; Hordeolum; Chalazion; Trichiasis; Madarosis; Ectropion; Entropion
Seborrheic Blepharitis	Mild forms often symptom free; Possible burning, stinging, itching	Greasy, foamy scales at base of cilia; Hyperemia of anterior lid margins	Tear film instability; Periods of exacerbation
Seborrheic/ Staphylococcal Blepharitis	Mild to moderate inflammation of lids	Papillary and follicular hypertrophy; Conjunctival injection; Mixed lid crusting	Secondary keratoconjunctivitis; Frequent exacerbation
Meibomian Seborrheic Blepharitis	Itching, tearing, burning sensation	Sudsy, foamy tears; Dilated meibomian gland openings and increased secretions with acute inflammation; Conjunctival injection	Tear film instability
Seborrheic Blepharitis with Secondary Meibomianitis	Dry eye symptoms	Blocked, inflamed meibomian glands; Lipid secretions of toothpaste consistency; Unstable tear film	Anterior seborrhea
Meibomian Keratoconjunctivitis	Severe inflammation of lid margin	Blocked meibomian gland openings; Unstable tear film	Acne rosacea
Angular Blepharitis	Inflammation of lids at outer canthus	Lids dry and scaly, or whitish frothy discharge	Tear film instability
Demodicosis	Often symptom free; Possible burning, itching, crusting of lid margin; Loss of lashes	Cuffing at base of lashes; Microscopic presence of mites	Granulomas in eyelid

TABLE 2*

Frequency and Composition of Evaluation and Management Visits for Blepharitis

		Composition of Followup Evaluations		
Type of Patient	**Frequency of Evaluation**	**History**	**Slit Lamp Biomicroscopy**	**Management Plan**
Staphylococcal Blepharitis	Twice a week until cleared, then as necessary	Yes	Yes	Antibiotic or antibiotic/steroid ung. h.s. to t.i.d., tear supplements p.r.n., steroid gtt. or ung. if infiltrates; lid hygiene t.i.d. until improved, then q.d.; Patient counseling and education
Seborrheic Blepharitis	Weekly until stable, then as necessary	Yes	Yes	Lid hygiene t.i.d. until improved, then daily; Patient counseling and education
Seborrheic/ Staphylococcal Blepharitis	Twice a week until controlled, then every 6 mo or as necessary	Yes	Yes	Antibiotic or antibiotic/steroid ung. h.s. to t.i.d., lid hygiene q.d. to t.i.d. for control; Patient counseling and education
Meibomian Seborrheic Blepharitis	Twice a week until stable, then as part of preventive care	Yes	Yes	Lid hygiene up to t.i.d., scalp shampoo q.d., meibomian express q.d., antibiotic or antibiotic/steroid ung. h.s. to t.i.d.; Patient counseling and education
Seborrheic Blepharitis with Secondary Meibomianitis	Twice a week until stable (up to 8 wks), then as part of preventive care	Yes	Yes	Lid hygiene up to t.i.d., antibiotic or antibiotic/steroid ung. h.s. to t.i.d., oral tetracycline or doxycycline (taper); Patient counseling and education
Meibomian Keratoconjunctivitis	Twice a week until stable (up to 2 wks), then as part of preventive care	Yes	Yes	Lid hygiene, antibiotic or antibiotic/steroid ung. h.s. to t.i.d., oral tetracycline or doxycycline (taper); Patient counseling and education

* Adapted from Figure 3 in the Optometric Clinical Practice Guideline of the Patient with Ocular Surface Disorders.

Legend:

gtt	Drops	t.i.d.	Three times per day
h.s.	Bedtime	ung.	Ointment
p.r.n.	As necessary		
q.d.	Daily		