BLEPHARITIS

BLEPHARITIS is a common and persistent condition that can be managed but seldom eradicated forever. Blepharitis means "inflammation of the eyelid margin". Blepharitis may have several causes, such as infection, allergy, or excess oil production.

A complete medical eye examination is necessary to diagnose the type or cause of blepharitis to determine the most effective treatment. Please understand, however, that some types of blepharitis are chronic; that is, they can be treated and can be improved but they tend to smolder along recurrently and to require long-term attention and repeated care.

Types of blepharitis. Bacteria reside on the surface of everyone's skin, but, in some individuals, they thrive in the oil glands at the base of the eyelashes at the lid margins. Some patients with either acute or chronic blepharitis may have a bacterial infection of the oil glands of the eyelashes, usually caused by common skin bacteria like staphylococci ("staph") or streptococci ("strep"). One typical change of 'staph' blepharitis is scaly flakes (much like dandruff) along the eyelid margins. For some people, the scales or the bacteria associated with the blepharitis produce only minor irritation and itching; for others, they cause a gritty sensation, redness, stinging, burning, or light sensitivity. For some, the crusting causes the eyelashes to stick together, for example on arising in the morning, and can even alter the growth of the eyelashes.

The other common type of blepharitis is caused by improper function of the oil glands located along the eyelid margins. These oil glands are called "Meibomian" (pronounced "MY-BOW-ME-AN") glands. This form of blepharitis is technically called "Meibomian gland dysfunction". Blurred vision and eye redness are common symptoms. Excess oil production can also lead to roughened eyelids and to mucous debris that accumulates during sleep. Sometimes a stye, also called a hordeolum and later a chalazion, results from an infected oil gland. Some people with Meibomian gland dysfunction also have dandruff, acne, or other skin conditions of the scalp or face called seborrhea or acne rosacea, that may require its own therapy.

RECOMMENDATIONS FOR TREATMENT

Eyelid cleansing. Among the ways to improve the



symptoms and features of blepharitis is to clean the eyelids carefully of accumulated crusting or oily debris. To begin, place a small towel or thick face cloth into hot water, as hot as reasonable, obviously without burning the skin. Wring out the cloth so that it is hot and damp, but not dripping. Place this over the eyelids of both eyes for two or three minutes. As it cools, reheat it in the water, wring it out, and reapply it, so that moist heat is applied to the lids for at least 8 to 10 minutes. This moist heat softens the crust and the oil.

To clean excessive crust and matter from the eyelids, a mild, nonirritating shampoo, usually a baby shampoo, is useful. After the moist heat (above), place the damp clean face cloth over your index finger and then apply a few drops of shampoo. To avoid getting shampoo in the eye, scrub back and forth along the eyelashes of both the upper and lower eyelid margins. After this gentle scrub, be sure to rinse with plain tap water to remove all soapy material. When first starting out, it is important to spend about 5 minutes on each eye, once or twice daily. After 7 to 10 days, eyelid cleansing may be done only two or three times a week.

Several commercial "over-the-counter" products are now available to clean the eyelids. These are marketed either as



bottles of lid scrub or as pre-moistened pads; these are used in the same way as the baby shampoo technique. One of these, NovaBay i-Lid Cleanser, requires a prescription. Both eyelids of each eye are scrubbed gently with a back-andforth motion. These solutions are also helpful to remove eye cosmetics.

General hygiene. If you have oily skin and scalp, take special care in routine cleansing. A special ("dandruff") shampoo may help some scalp conditions. (Do not use these shampoos to scrub the lashes; they are very irritating to the eye.) You should continue eating balanced meals; no special diet is needed. Any eye irritation from cosmetics to air pollution can prolong the symptoms of blepharitis. Minimize the use of mascara and eyelid liner. Women should also consider a change of brand of eye cosmetics, since some individuals may develop a sensitivity or reaction to selected cosmetics.

Eve medications. Antibiotic eve drops or ointments are sometimes needed to control infectious blepharitis. These medicines can be put directly onto the eye or applied directly to the eyelid margin as a lotion. Although you may need to obtain a prescription for these ointments or eye drops from your ophthalmologist or personal physician, avoid the use of "combination" antibiotics [especially those that include neomycin antibiotic] and corticosteroids [that may reduce inflammation but may increase the risks for cataracts and for glaucoma]. For infectious blepharitis affecting the eyelashes, put a small amount (about 1/4 inch) on a clean (freshly washed) fingertip and gently rub it into and along the base of the eyelashes where they arise from the skin. Any ointment that accidentally enters the tear film may temporarily blur vision until it dissolves.

As with any medication, some people have a small risk to develop a sensitivity, an allergic reaction, or other side effect. If you feel that this happens, please discontinue the medication immediately. Be sure to follow the recommended dosage printed by the pharmacy or provided by the manufacturer.

Medications taken by mouth. For certain types of blepharitis, medications taken by mouth are useful. Most of these medicines are antibiotics. However, the favorable effect of antibiotics on blepharitis is probably not due solely to their germ-killing actions. These medications have a



secondary action by improving the oil composition of the eyelid Meibomian glands. Thus, lowdose minocycline (50 mg or 100 mg twice a day), doxycycline, and other similar antibiotics alleviate the eye features of infectious (bacterial) blepharitis.

When taken properly, doxycycline is a safe antibiotic drug for the treatment of infectious blepharitis, similar to its use by dermatologists in the treatment of acne. Mild side effects may occur in some individuals, generally an upset stomach with slight nausea or loss of appetite. Less frequently, a persistent skin rash, which is a significant adverse reaction, may require stopping this treatment.

The optimal dosage of doxycycline varies from person to person. The initial treatment usually is one capsule (100 mg.) two or three times daily, but this can be reduced gradually as improvement occurs. The medication should be taken at least one hour before or two hours after meals to ensure adequate absorption from the intestines. While taking doxycycline, you should avoid multivitamins, iron tablets, and antacids, since these could interfere with adequate absorption. Milk and dairy products can also reduce the absorption of doxycycline and thus minimize its efficacy. Minocycline and doxycycline are equally effective for the treatment of chronic blepharitis; they are more expensive than tetracycline that is no longer available. Since each of these is a derivative of tetracycline, intense sun exposure should be avoided to minimize the possibility of sunburn; both drugs are avoided in pregnancy and in children because chronic use stains developing teeth permanently yellow. A newer antibiotic is azithromycin, which may also have an antiinflammatory as well as an antibacterial effect.

COMPLICATIONS OF BLEPHARITIS

A stye or hordeolum can appear on the eyelid margin as the result of an infection of and then the obstruction of a small oil gland. This should not be squeezed because the infection could spread into the adjacent delicate eyelid tissues. Instead, hot compresses may encourage it to drain so that healing can occur. Either use either hot tap water or moisten a clean washcloth and place it onto the eyelid, reheating it every two or three minutes as it cools. Continue this for 8-10 minutes at a time, three or four times a day. A stye will often drain on its own within a few days and heal without problems, although it may take several weeks. If it persists for several months, you may need to return to the office for further treatment. If a "lump" in the lid (chalazion) persists a month or more after the original stye, a common mode of therapy is injection of a corticosteroid (synthetic cortisone) into eyelid near the chalazion. Although generally safe, steroid injections are associated rarely with temporary or even permanent loss of pigment in the skin near the injection site. This depigmentation (if it occurs) is, of course, more noticeable in the skin of darkly pigmented individuals.

RESULTS OF TREATMENT

Often times, blepharitis is a chronic condition. With treatment, your signs and symptoms will be controlled so not to interfere with your day-to-day activities. You may require several weeks to achieve benefit from the course of therapy recommended for you. Please do not be discouraged. Fortunately, blepharitis tends to disappear gradually on its own, even though it may take several years. Different eye drop and pill medications may be needed, and a prolonged treatment program is sometimes necessary, such as continuing the lid hygiene once or twice a week to maintain control of the excessive oil that allows bacterial ingrowth from the skin. Please contact the office if you have additional questions or if you develop any new condition or reaction.

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The content of this document is for informational purposes only. Questions regarding specific patient issues should be directed to the appropriate professionals for resolution.

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