

Susannah Longmuir MD
593 Stewarts Ferry Pike
Nashville, TN 37214
615-885-4900

TREATING BLEPHARITIS and OCULAR SURFACE DISEASE IN CHILDREN with and without CHALAZION OR STYES

Blepharitis (blef-uh-RI-tis) is inflammation that affects the eyelids. Chronic inflammation of the eyelids can be associated with chalazion and irritated or red eyes and in some cases children can also develop dry eyes. Blepharitis usually involves the part of the eyelid where the eyelashes grow. Blepharitis commonly occurs when tiny oil glands located near the base of the eyelashes malfunction. This leads to inflamed, irritated and itchy eyelids. Several disease processes and conditions can cause blepharitis, including bacteria, viruses and irritation from overpopulation of demodex mites in susceptible people. Blepharitis is often a chronic condition that is difficult to treat. Blepharitis can be uncomfortable and may be unattractive, but it usually doesn't cause permanent damage to your eyesight. Blepharitis is the most common cause of chronic low grade eye redness and discomfort, especially upon waking. Getting at the root of the inflammation is key to preventing the worsening of this condition. Blepharitis can lead to evaporative dry eye, frequent bumps or styes/chalazion on the eyelids and chronic eye pain and/or blurry vision.

THERAPIES FOR OCULAR SURFACE DISEASE

EYELASH/EYELID CLEANSING: The eyelashes can be cleaned using a self-made dilute solution of water and Johnson's Baby shampoo. Birdie's soap is a spray that can also be used that has a mixture of baby shampoo and emollients for dry eye and is available at our office for \$20. This can be easy for some children to do because it does not require washing the eyelids, but only closing the eyes and spraying on the eyelids. Alternatively, there are a number of excellent lid hygiene wipes that are commercially available. *Ocusoft* lid scrubs (they usually cost \$15.00 dollars for a box of 30) and are available in Allergy form, Demodex form and Plus form. The regular Ocusoft wipe has to be washed off afterwards, but the other previously listed ones do not. Ocusoft also has a spray called Hypochlor which is hypochlorous acid which can destroy bacteria and microbes. It costs \$20-25.00. *Cliradex* is one option which includes essential oils derived from tea tree oil. It is helpful in acne, blepharitis, ocular rosacea, dry eye and conjunctivitis. Cliradex has antiseptic, antifungal and antibacterial properties. It costs 40.00 for a box of 24 pads.

WARM COMPRESSES: They need to be applied with mild pressure and massage to the upper and lower eyelids of both eyes for at least 1-2 minutes. A clean wash cloth can be used for this purpose, but it is more effective to use dry heat. Commercially available hot compresses can make this easier and can be heated in the microwave and then applied to one or both eyes. Be sure to test the hot compress on your hand before placing it on your child. When there is a chalazion present try to do the warm compresses twice a day.

FISH OILS: Omega-3- fatty acids in the diet or via supplements is effective in improving the quality of the oil glands in the eyelids. Note: Fish oils can cause increased bleeding response if you have a cut or surgery. Make sure to stop these prior to surgeries. A few brands of fish oils with good absorption are *PRN* or *Nordic naturals*. For children, we recommend gummy omega 3s for mild disease and Barleans creamy orange flavored liquid for more aggressive cases of ocular surface disease. Barleans can be bought on amazon.

ANTIBACTERIAL/ANTIBIOTICS: Sometimes it is necessary to use eye drops and oral antibiotics to control Blepharitis. Azasite is a brand name pharmaceutical eye drop that is used once a day. It is very effective in blepharitis because it is an antibacterial as well as a anti-inflammatory. A less expensive option is erythromycin ointment but this can also be less appealing secondary oily eyelids after application. The use of these therapies should be monitored closely by your ophthalmologist. Sometimes we use oral azithromycin for children and treating with oral antibiotics can reduce the frequency of the stye or chalazion formation.

EYELID WASH or MICROBLEPHAROEXFOLIATION: This technique is extremely effective at removing the biofilm on the eyelids and eyelashes to improve itching and burning of the eyelids. It is done in the office. The eyelashes and eyelid margins are cleaned with a surgical cellulose sponge. This is similar to Blephex. Dr. Longmuir has designed her own instrument and technique and it has been used over 1000s times with no complications. It is one of the best ways to help prevent demodex mites from flourishing on your eyelids. Also it has been associated with improved sinus symptoms due to decreased overpopulation of bacteria on the eyelids. If your child would like to try it we can try it in the office during your office visit.