

Instructions for Dry Eye and Blepharitis

1. **Blink!**

Follow the **20-20-20 Rule** for near work: every 20 min take 20 sec to look at something 20 feet away and throw in several normal blinks. 90% of dry eye patients have problems with the oily layer of the tears. Our blink rate can drop to 1/6 the normal rate with computer use and reading. Blinking spreads the tear film AND squeezes the oil glands to release oil into the tears. That helps prevent evaporation and keeps the glands flowing to prevent excess bacteria in the glands.

2. **Drink plenty of water and avoid drafts in the face.**

3. **Use Artificial Tears as needed**

Retaine MGD, Systane Balance and Refresh Optive are preferred for patients with oil layer problems. Those and Genteal, Theratears, Blink and Endura are brands that come in gentle preservative and/or non-preserved formulas. Gels and ointment formulas give better coverage overnight. AVOID products with benzalkonium chloride (BAC or BAK) which can be toxic to the cornea and *increase* dryness.

4. **Daily warm compresses and lid massage** (gets the oil glands flowing and increases circulation)

Microwave a Bruder mask, gel mask or a sock filled with raw rice until warm. Lay the warm compress over closed eyes for 5-10 min. Next, gently massage the lids, working toward the lashes or by gently squeezing in the middle and on each side of the upper and lower lids to help express the oils.

5. **Get a combined total of 1000-2000 mg/day of the Omega 3 oils EPA and DHA**

I recommend a fish oil or algae based Omega 3 supplement unless you are eating free range chicken, 100% grass fed and finished beef or *wild* tuna, salmon, mackerel or sardines 2-3 times per week.

Keep it refrigerated and take it with a meal. Also reduce Omega 6 oils (from grain fed animals and most processed foods). Consult with your physician before taking any supplements if you are taking blood thinners, high dose aspirin or you have other medical conditions.

Blepharitis is an inflammation of the lids where thickened, stagnant oils harbor excess bacteria. The bacteria produce pus that builds up in the corner and dries overnight leaving sandy granules or "sleep" in the morning. They can also secrete toxins that cause redness and irritation. Blepharitis tends to be a chronic problem and, if ignored, can result in scarring or atrophy of the oil glands and severe dry eye.

• **Daily lid cleanser**

After the warm compresses, clean the lids with a lid cleanser like Ocusoft Lid Scrub or TheraTears Sterilid Eyelid Cleanser as directed. Baby shampoo increases inflammation and is NOT recommended.



Also wash your hands frequently and avoid rubbing your eyes to minimize bacteria.

If clogged pores were noted, pull the lower lid away from the eye, look up and *gently* rub along the flat part of the lids 2-3 times with a moistened Q-tip to help open the pores. Do NOT rub along the upper lid margin as it's too easy to scratch the cornea.

• **HypoChlor treatment** (if prescribed)

Use HypoChlor after warm compresses twice a day for 2 weeks. Spray the HypoChlor solution onto a cotton pad, close the eye and gently rub along the lashes, corner-to-corner, 5-6 times on each eye.

• **Maintenance**

Continue with warm compresses and lid cleanser (described above) at least every other day for maintenance.

Biotears is a supplement by Biosyntrx that helps many patients with dry eye and blepharitis by reducing inflammation. If dryness persists after 4-6 wks of supplement with Omega 3s, I generally recommend a trial of Biotears. It also takes 4-6 weeks for full effect but has a 60 day, money back guarantee.

Restasis or steroid drops may be prescribed when inflammation is the primary cause of dry eye but I usually recommend Biotears first because it reduces inflammation systemically, and not just the eyes.

Doxycycline, Minocycline

These antibiotics may be used in low doses for several months at a time for their anti-inflammatory effect on the oil glands. They increased sensitivity to UV, can cause GI upset and alter the microbiome. They may also cause birth defects and decrease the effectiveness of birth control pills so precautions must be taken when used by women of childbearing age.

Azasite is an antibiotic drop with anti-inflammatory properties that can be helpful in patients with dry eye associated with acne rosacea.