



## Ocular Surface Dysfunction

### Dry Eye Syndrome, Blepharitis, Rosacea and Dysfunctional Tearing Syndrome

#### SYMPTOMS

Burning, chronic eye redness, dryness, mildly to moderately decreased vision, excess tearing, itching, foreign body sensation (sandy), or crusting around eyes. Often made worse by smoke, wind, heat, low humidity, or prolonged use of the eye (commonly when working on a computer or book reading), and worse later in the day or when awakening. Symptoms are usually in both eyes and are present for several months (although patients sometimes are seen with recent onset in one eye).

#### Causes

- Usually Unknown: Unfortunately, we usually don't know the cause. Commonly found in menopausal and postmenopausal women.
- Connective tissue diseases: e.g., Sjögren syndrome, rheumatoid arthritis, systemic lupus erythematosus.
- Conjunctival scarring: from long-standing blepharitis or autoimmune disease.
- Drugs: e.g., oral contraceptives, antihistamines, beta-blockers, phenothiazines, atropine.
- Vitamin A deficiency: from malnutrition, intestinal malabsorption, or bariatric surgery.
- After LASIK: Likely secondary to disruption of corneal nerves and interference with normal reflex tearing.

#### Treatment

Please see reverse side for your specific treatment plan. The good news: Ocular Surface Dysfunction (OSD) is treatable, though it may take months for it to be brought under control. If we are recommending iLASIK or Advanced Technology Cataract Surgery™, we will start OSD treatment first and you will more than likely need to continue OSD treatment even after iLASIK or Advanced Technology Cataract Surgery™. Treatment may last for several months and we will update your treatment plan regularly.



\_\_\_\_\_ 1.) Drink more water. Goal of eight 8 oz glasses a day.

\_\_\_\_\_ 2.) Hot compresses. Fill a new, cotton sock with a handful of white rice and tie sock closed. Heat in microwave for 30 seconds. Place heated, rice-filled sock(s) over closed eye(s) for 15-20 minutes, twice daily. Once complete, massage the eyelids to help express the oils. Do this routinely until you are symptom free, then as needed. This is very important! It dissolves the hard oils stuck inside your eyelids which blocks healthy tears. Change rice weekly.

\_\_\_\_\_ 3.) Baby Shampoo lid wash or Ocusoft®. Apply a hot, moist wash cloth to eyes for 30 sec. Press on the eyelids to express the glands on both upper and lower lids. Use the cleaning pad, soapy cotton ball or clean finger tips by swiping the lids about 10 times while the eyes are closed. Use this product for \_\_\_\_\_ months, once daily, then routinely as needed.

\_\_\_\_\_ 4.) Artificial Tears (preserved): Systane, Refresh, Optive. Use no more than 4 preserved tear drops per eye each day.

\_\_\_\_\_ 5.) Preservative-Free Artificial Tears used \_\_\_\_\_ times per day (e.g., Refresh Plus, TheraTears, Systane, Soothe. It must say "Preservative-Free").

\_\_\_\_\_ 6.) Omega 3 supplements. 2000-4000 mg/day max dose as tolerated. Very important. Dietary (flax seed, fish) or over-the-counter (e.g. Nordic Naturals or Carlson).

\_\_\_\_\_ 7.) Antibiotic Ointment. This is thick, and it will temporarily blur your vision slightly after its use. Apply 1/2 inch and smear over the lids \_\_\_\_\_ times per day for \_\_\_ weeks.

\_\_\_\_\_ 8.) Steroid/Antibiotic drop. \_\_\_\_\_ times per day for \_\_\_ weeks.

\_\_\_\_\_ 9.) Muro 128 ointment/drops \_\_\_\_\_ times per day for \_\_\_ weeks.

\_\_\_\_\_ 10.) Restasis. Used \_\_\_\_\_ per day for \_\_\_ months. It may sting with its use, so you may need to put in an artificial tear first. It may also be used with the steroid if prescribed.

\_\_\_\_\_ 11.) Tear Saver plugs or permanent, surgical closure.

\_\_\_\_\_ 12.) Doxycycline, Minocycline or Azithromycin pills or capsules, \_\_\_\_\_ . Ask your pharmacist about possible GI upset. You may sunburn easily with this!