**MEIBOMIAN GLAND DYSFUNCTION**

**Meibomian Gland Dysfunction** is very common. In the early stages, it is often asymptomatic, but if left untreated, it can commonly be the cause of irritated dry, gritty eyes and redness and inflammation in the eye and eyelids and in more advanced stage even infections (conjunctivitis, blepharitis) as well as styes (hordeoleums).

Meibomian ("my-BOH-mee-an") glands are the tiny oil glands which line the margin of the eyelids (the edges which touch when the eyelids are closed). There are about 25 to 40 meibomian glands in the upper eyelid and 20 to 30 in the lower eyelid. The function of these glands is to secrete oils onto the surface of the eye. These oils help keep the tears from evaporating too quickly. The tear film lubricates and keeps the surface of our eyes healthy; it also affects how clearly we see.

Meibomian glands in the eyelids.

**Meibomian gland dysfunction** (MGD) refers to the condition where the glands are not secreting enough oil or when the oil they secrete is of poor quality. Often, the oil gland openings get plugged-up with thicker secretions so that less oil comes out of the glands. The oil that does make it out of the glands can be granular (crusty) or otherwise abnormal, and can cause irritation.

MGD is very common. In the early stages, patients are often asymptomatic, but if left untreated, MGD can cause or exacerbate dry eye symptoms and eyelid inflammation. The oil glands become blocked with thickened secretions. Chronically clogged glands eventually become unable to secrete oil which results in permanent changes in the tear film and dry eyes.
MGD Symptoms include:
Dryness
Burning
Itching
Stickiness/ Crustiness
Watering
Light Sensitivity
Red Eyes
Foreign Body Sensation
Chalazion/ Styes
Intermittent Blurry Vision

Treatment of Meibomian Gland Dysfunction consists of eyelid/eyelash hygiene to clear off the dead skin, oil and bacterial which build up. The eyelid skin is extremely delicate, so please be gentle.

1) WARM COMPRESSES and LID MASSAGE
Heating the eyelid margin will increase oil production and melt the “crusty” oil that has solidified in the glands. Use a Bruder Eye Hydrating Mask heated in the Microwave

These are placed in the microwave for 20-30 seconds (See instructions with Mask- depending on the power of the microwave). The mask is then placed over the closed eyes and left for 10 minutes. This provides both the heat and massage. This should be done once a day when there are active symptoms, and once every 2-3 days for maintenance.

2) LID SCRUBS
Helps remove oil, bacteria and debris which block the oil gland openings. Lid scrubs should be done once a day. There a variety of formulations that can be used. It is best to speak to our Optometrists depending on the severity of the condition.

3) OMEGA- 3 FATTY ACID: FLAX SEED and FISH OIL
In addition to the above, some people benefit from supplementing their diets with omega-3 fats. Omega-3 fatty acids improve the quality and consistency of the oil produced by the Meibomian glands.
Flax seed oil and fish oil are excellent sources of omega-3 fatty acids. For flax seed oil try 1 teaspoon/day for toddlers or 1 tablespoon/day for older children. Mix with juice, smoothies, or hot cereal. Do not take with blood-thinning medication or blood-sugar lowering medication. There are tablets/capsules which may be easier (Thera Tears Nutrition, Lacritec). We have these in stock if required.