

Meibomian Gland Dysfunction and Treatment

What are Meibomian (Oil) Glands?

Meibomian glands are the tiny oil glands which line the margin of the eyelids (the edges which touch when the eyelids are closed). These glands secrete oil which coats the surface of our eyes and keeps the water component of our tears from evaporating (drying out). Together, the water and the oil layer make up the tear film.

The tear film lubricates and keeps the surface of our eyes healthy; it also affects how clearly we see. If either the water or oil layer is decreased, or is of poor quality, we may have symptoms of irritation and/or blurred vision.

What is Meibomian Gland Dysfunction (MGD)?

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 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.

Symptoms include:

- Dryness
- Burning
- Itching
- Stickiness/ Crustiness
- Watering
- Light Sensitivity
- Red Eyes
- Foreign Body Sensation
- [Chalazion](#)/Styes
- Intermittent Blurry Vision

What is the treatment of MGD?

Treatment 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

Heating the eyelid margin will increase oil production and melt the “crusty” oil that has solidified in the glands. Use a warm (not too hot) wet washcloth to apply heat on the eyelids for four minutes or more. This warms the oil, allowing it to flow more freely, and helps soften lash debris. This should be done twice a day when there are active symptoms, and once a day for maintenance.

2) MASSAGE

This can be done while applying the warm compress. Apply light pressure with your finger tips to the lid margin just above the eyelashes. Roll the finger upward on the lower lid while looking up, then roll the finger downward on the upper lid while looking down. Excessive manipulation of the lids can cause additional irritation, so please be careful.

3) LID SCRUBS

This helps remove oil, bacteria and debris which block the oil gland openings. Use a Q-tip, your fingers, or a warm washcloth on the tips of your fingers to gently scrub along the lash line on the top and bottom eyelids. Use a mild soap like cetaphil or CeraVe or dilute baby shampoo (a few drops in a small cup of water)- something which will not burn or irritate the eyes. Ask your doctor if you have questions about what to use. Lid scrubs should be done once a day.

4) 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 several companies which make “kid friendly” fish oil and flax seed oil suspensions and gummies (Nordic Naturals and Barleans are two examples). If your child can take pills, there are tablets/capsules which can be taken instead (ex Thera Tears Nutrition). Please talk to your child’s pediatrician if there are any health concerns regarding diet supplementation.

Updated 04/2016