

Meibomian Gland Dysfunction (MGD)

(Evaporative Dry Eye)

The meibomian glands are located on the edge of your eyelids and they produce a clear oily liquid called meibom. Your eyelids spread the meibom over the surface of your eye to form a thin protective layer. Being oily it does not evaporate quickly and the layer is refreshed with each blink.

If there is a problem with the glands and the protective oily layer is reduced or absent, then the surface of the eye dries quickly and becomes uncomfortable. This results in the eye producing the conventional watery tears that result from irritation or emotion. These evaporate quickly and so the surface of the eye remains uncomfortable.

This results in the perverse situation in which a “dry eye” is wet, because the absence of the oily protective layer causes over-production of the watery tears. For this reason “dry eye” is often referred to as “tear dysfunction”.

Why do the meibomian glands stop working?

The oily secretion can become thicker and eventually solidify in the gland as a plug of solid matter. This prevents the meibom from oozing out of the gland and lubricating the eye.

Massaging the edges of the eyelids can help squeeze the solid secretions out of the gland and unblock them. This works more effectively by applying some heat to the gland first as the heat will soften and melt the solid plug.

Applying heat.

You can apply heat in a number of ways, but it needs to be maintained a bit above body heat for at least 5 minutes. A face cloth with warm water can be used, but you must be very careful not to use water that is too hot and scald yourself. Test it on your hand or cheek before applying to the eyes. Wet face cloths cool very quickly, so you will need to keep re-heating it.

An easier alternative are eye heat bags. These are like a small mask-shaped bean bag and usually contain something like flax seeds. They can be heated in the microwave according to the instructions with the particular product. Again, always test against hand and cheek before applying to the eyes. Leave in place for 5-10 minutes and then massage the eyelids.

Massaging the eyelids

Close your eyes and use the pad of a finger to sweep along the very edge of your lids, first the upper lid, then the lower. Start at the nose and sweep across using firm pressure, but not enough to hurt. Do this 5 or 10 times in the half minute or so after you remove the heat bag. You can do both eyes at the same time using 2 hands.

For mild meibomian gland dysfunction you should find that using heat and massage once or twice each day at first will be sufficient. As your symptoms subside you may be able to reduce the amount that you use heat and massage. Severe cases may need more frequent heat and massage at first.

Blepharitis

If you also have blepharitis (crusting along the eyelashes) then it is important to deal with this at the same time in order to help your dry eyes. If this is a problem then your optometrists can also provide you with information on lid hygiene.