

## Managing Posterior Lid Margin Disease

Posterior blepharitis, also called posterior lid margin disease (PLMD), is a clogging, inflammation, and eventual scarring of the oil glands along the edge of the eyelid. Oil is an important part of the tear film that lubricates the eye. Without this oil, tears evaporate quickly and the eye dries out, causing eye irritation or frank pain and vision blur. If the oil is released in intermittent “globs” rather than smoothly integrated, then the tear film carries an oil slick that blurs the vision and creates “glare” and “dazzle” in bright daylight or when looking at lights at night. There are many treatment options for PLMD, and management should be tailored to each individual’s situation.

Fish oil and flaxseed oil are often extremely helpful for PLMD by providing essential nutrients frequently lacking in the diet, inducing an anti-inflammatory effect to help open gland ductules, and “thinning” the oils produced by the eyelid glands.

**FISH OIL:** Any high quality Omega-3 oil proven to be PCB and mercury purified is good. We like Carlson Labs fish oil which is available in gelatin capsules or as a straight oil in both orange and lemon flavors at Whole Foods, most vitamin shops, and over the internet. 1-2 Tablespoons or 1000 mg a day is appropriate.

**FLAXSEED OIL:** Do NOT take this as a gelatin capsule, but take 1-2 Tablespoons each day of the straight oil. Your body will absorb and use up to 5 times as much of fish and flaxseed oils if you take them about the same time as consuming a **SULFONATED PROTEIN** (soy, peanut butter, egg, or turkey). Be warned that these oils are highly caloric (~ 123 Cal/Tbsp), so start exercising.

Some alternate tips for incorporating flaxseed oil into your diet:

- 1 Tbsp of ground flaxseed + 3 Tbsp of water (let sit a couple of minutes) = 1 egg for baking
- Stir flaxseed oil into soups, stews, chili, and yogurt. (Add the oil after cooking.)
- Replace up to one-fifth of the flour with ground flaxseed in bread, pizza dough, muffin, cookie, or meatloaf recipes. Using more than this will make the food too dense.

In addition to dietary oils, **WARM COMPRESSES** are perhaps the single most helpful treatment in PLMD as they “melt” the oils in the eyelid glands allowing the oils to pass out more easily through partially scarred ductules into the tear film. At first, we recommend at least 3 warm compresses a day. The first compress of the day can be in the shower. Increase the water temperature slightly, face the stream, and let the hot water run over your closed eyes for at least 2 minutes. Be sure to shield your nose and mouth with your hand so that you may breathe easily. **Rice in a Sock:** Fill a clean, cotton sock with 2-3 cups of raw brown rice and tie off the end with a string. Microwave to desired temperature (usually about a minute or less, depending upon the wattage of the microwave). If it feels too hot, it is too hot. **Caution:** Socks that are not at least 80% cotton may melt or burn and rice at the center of the sock may get hotter than that at the periphery, so shake your sock well before applying it. After heating, place the sock over a hot, moist facecloth or paper towel and then position over your eyes for at least 10 minutes.

For people with severe problems and lots of thick mucus discharge, **N-acetyl cysteine** can be very helpful. Studies have shown that 100 mg taken three times a day is beneficial; however, most stores only carry 1,000 mg doses. So, try 1,000 mg 1-3 times a day.