

# Keratoconjunctivitis Sicca & Miebo

### The Following Information has been Prepared for You:

The tear film that coats the front of the eye is very complex. The outer layer of the tear film is oily, produced by special glands within the eyelid, and it serves to prevent evaporation of the salt water middle layer. The inner layer is made of mucus secreted from cells on the front surface of the eye and is important in helping the salt-water layer spread across the front of the eye. The middle layer of salt water contains special anti-infective cells to prevent infections, but also collects the dust and debris that the tears are exposed to as they face the air.

The eyelids have a normal blinking rate of about fifteen blinks per minute. Blinking spreads the tears across the front of the eye while also causing excess tears to be pushed out of a drainage system that leads from the inner corner of the eyelids into the nose. Some tears leave the eye through the natural process of evaporation. Anything that causes disruption of blinking, such as staring at a computer, which decreases the blink rate, may compromise the tear film. Exposure to wind, vents or fans can increase evaporation and compromise the tears.

Dry eyes can also result from medications like birth control pills, blood pressure pills, anti-histamines and anti-depressants. Some medical conditions including arthritis, fibromyalgia, diabetes or menopause can increase the risk of dry eye. Some individuals have incomplete blinking, where the eye does not close fully with each blink. Sleeping with the eyelids cracked open (nocturnal lagophthalmos) can increase the risk of dry eye. In some cases, poor tear quality and reduced tear quantity have no specific causes and are simply due to the aging process.

Dry eyes can range from a truly dry eye surface to a very disrupted tear film. "Keratoconjunctivitis Sicca" is a term commonly used to describe ocular surface disease involving the cornea, conjunctiva, and the eyelids, since they are all involved in inflammatory dry eye disease. The person suffering from dry eyes might actually experience excessive tearing or eye watering as the tear gland tries to resolve the dry eye condition. When the tear levels are low, the eye senses burning, gritty feeling, foreign body sensation, itching and discomfort. As the condition worsens, the eyes can become continually red and vision can become blurry. Contact lenses may become coated with mucus or dehydrated, disallowing the contact lens wearer from wearing them for long periods of time.

Dry eyes can be diagnosed with special eye tests done by the eye doctor.

Dry eye is often a chronic inflammatory condition, and treatment requires getting the inflammation under control and maintaining control to prevent repeated flare-ups and exacerbations. Untreated dry eye could lead to Ocular Surface Disease, which disrupts the health and function of the eyelids, conjunctiva, and corneas. Your eye doctor should be made fully aware of any dry eye symptoms to maintain the long-term health and vision of your eyes.

#### TREATMENT:

Treatment options for dry eye depends on severity, but may include any of the following:

- --- artificial tear drops, gels or ointments
- ---tear drainage plugs that keep the natural tears on the eye these are called "punctal plugs"
- ---punctal cautery to permanently seal the tear drainage canals
- ---oral supplements containing Omega-3 fatty acids such as MaxiTears, which can be purchased at your doctor's office
- ---warm compresses, lid massage and improved eyelid hygiene
- ---cool mist humidifiers in the home or work-space will assist in minimizing evaporation of the tear film
- ---prescription eyedrops that prevent evaporation of the tear film, such as Meibo
- ---prescription eyedrops that stimulate tear production and quiets inflammation, such as Restasis or Xiidra
- ---decreasing exposure to wind and allergens. Ask your eye doctor if you are interested in trying special sunglass and indoor glasses that create a "moisture chamber" around your eyes. These can be specially ordered for you.

| - | limiting the amount of continuous time spent on concentrated near visual activities such as reading and computer       |
|---|--|
| - | contact lenses may be changed to different materials or replacement schedules to allow more comfortable wear, and spec |
| " | scleral" lenses may be prescribed to treat dry eye   |

- ---amniotic membrane tissue transplant may be applied to the surface of the cornea to treat severe corneal inflammation
- --- IPL Treatments
- ---surgical eyelid reconstruction for age-related loss of skin elasticity
- ---sleeping with eye-shields to avoid loss of tears in patients with poor lid closure during sleep

Please make time to have a complete eye and vision examination annually. In some cases, your ocular surface may need to be evaluated more frequently.

Contact our office with any significant vision changes or emergencies that you feel require immediate attention.

Please visit the following website for important information and savings for Meibo dry eye treatment: https://www.miebo.com/savings-support

## **Please Rate the Information You Received**

|                               | □ Very helpful - all questions are answered □ Somewhat helpful - I still have questions □ Not helpful – none of my questions were answered |
|-------------------------------|--|
| Comments / Questions / Typos: |  |

## **Provider Contact Information**

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