

**DRY, RED, IRRITATED EYES, EYESTRAIN,
ITCHING, STINGING,
GRITTY FEELING...**



 **Quante
medical**
BY LUMBIRD MEDICAL

**OUR SOLUTIONS TO YOUR
DRY EYE
PROBLEMS**



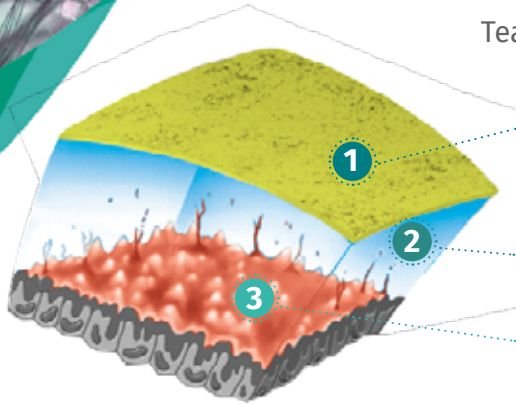
Dry eye

www.mydryeyedisease.com

Ask your doctor for further information

WHAT ARE TEARS?

Tears are composed of three layers, known as the **tear film**:



1. The **LIPID LAYER (OIL)** limits tear evaporation, lubricates the eye and improves vision
2. The **AQUEOUS LAYER (WATER)** hydrates and nourishes the cornea
3. The **MUCIN LAYER (ADHESIVE)** sticks the tears to the cornea

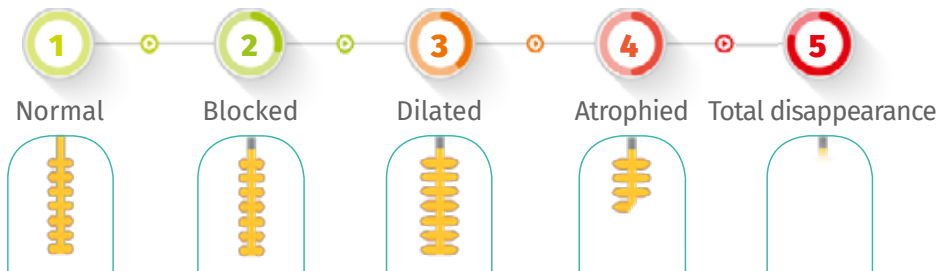
WHAT IS MGD?

MEIBOMIAN GLAND DYSFUNCTION

MGD causes the most common form of dry eye and results in:

- **Reduced lipid (oil) production**
- **Poor quality oil:** the oil thickens and blocks the Meibomian glands, hence it cannot be released
- **Obstruction and atrophy** of the Meibomian glands

• THE MEIBOMIAN GLAND DAMAGE CYCLE



NORMAL stage

PATHOLOGICAL stage

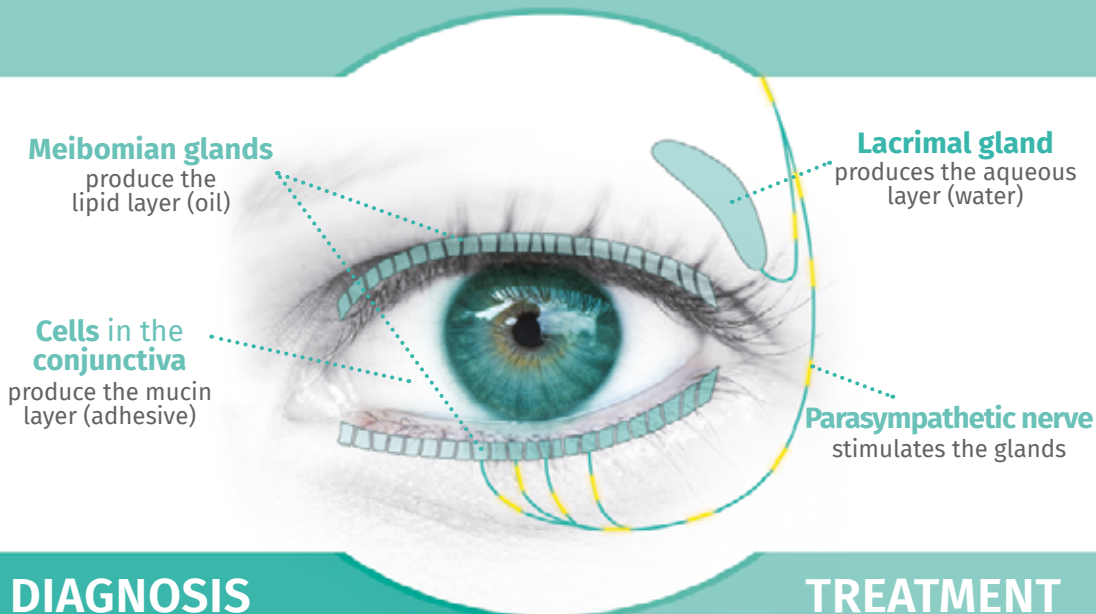
DAMAGED stage



WHAT IS DRY EYE?

A common disease that affects the ocular surface and the eyelids.
What are the causes?

- **Abnormal tear evaporation**, due to insufficient lipids (oil)
- **Poor tear production**, due to insufficient water in the tears
- **Unbalanced tear composition**
- **Low frequency, incomplete blinking**



DIAGNOSIS

- **Standard tests** include a questionnaire to assess symptoms, examination of the eyelids using a slit lamp, Schirmer's test and ocular staining
- **New non-contact examinations** are now available to assess tear quality and quantity, along with meibomian gland imaging

TREATMENT

Since **dry eye** is caused by multiple factors, its treatment is complex and can include:

- Hygiene, heating and massaging the eyelids
- Blinking exercises
- Tear substitutes
- Anti-inflammatory treatments
- Punctal plugs
- Intense Pulsed Light (IPL) therapy
- ...

WHAT IS IPL THERAPY?

INTENSE PULSED LIGHT



1 TREATMENT

in less than
10 minutes

2 WEEKS

interval

3 SESSIONS

+ 1 follow-up
session

• HOW IT WORKS

Non-invasive and painless, IPL (Intense Pulsed Light) therapy involves applying a **series of light pulses to the cheek**, which:

- **Stimulates the parasympathetic nerve** that controls the glands
- **Reduces inflammation** of the skin and eyelids

• TREATMENT PROTOCOL

- **Three sessions** spaced out by 7 to 15 days
- **A fourth session** might be necessary
- **One follow-up session** after several months may be recommended
- Sessions are **quick, painless** and **do not require anaesthesia**
- A **mild stinging sensation** and **heat** may be felt during the session



• EXPECTED RESULTS

- **Improved tear quality** and **quantity**
- **Symptoms reduction**
- **Reduced inflammation** of the face and eyelids, and fewer **Demodex** (eyelash parasites)
- **A lasting effect** (several months)



DRY EYE

WHAT ARE THE SYMPTOMS?

- Dryness, eyestrain, **stinging, itching, irritation, burning, gritty sensation**
- **Sensitivity to light, wind or cigarette smoke**
- **Difficulties opening eyes in the morning** (eyelids stuck together) and wearing contact lenses
- **No tears** when cutting onions or feeling emotional
- **Excessing tearing**

But you may not have any symptoms.

WHAT ARE THE CAUSES?

Dry eye can affect anyone, but it increases with:

- **Hormonal changes**, age
- **Extended screen use**, which leads to insufficient and incomplete blinking
- **Medication use**
- **Cataract** or **LASIK surgery**
- **Environmental conditions** (smoke, pollution, air conditioning etc.)
- Long-term **contact lenses use**
- **Demodex** infections (eyelash parasites) and diseases that cause **inflammation of the eyelids** (blepharitis), such as rosacea, seborrhoeic dermatitis, psoriasis and eye allergies
- **Excessive use of make-up** on the eyelashes and free margin of the eyelids





WANT TO KNOW MORE ABOUT **DRY EYE?**

www.mydryeyedisease.com



PATHOLOGY

Learn more about the origins of dry eye, **symptoms** and **causes**.

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DIAGNOSIS

Dry eye is multifactorial and its diagnosis includes **different tests**. Find out about them.



TREATMENT

Eyelid care, tear substitutes, IPL treatment, find out about the **treatment options** available.

Ask your doctor for further information