

Dry Eye in **Diabetes**

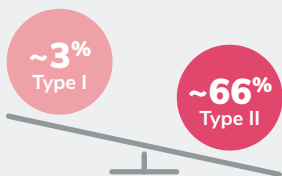
Patient Information

Information & advice to help
you understand & manage
your Dry Eye Disease

Did you know?



The prevalence of Dry Eye Disease (DED) has been reported to be upwards of **50%** in diabetic patients¹



Recent studies have shown increased prevalence of DED in **Type II** Diabetics, over that of Type I²

How do you know if you have Dry Eye?

Dry Eye can present itself in the form of multiple symptoms.³ To identify Dry Eye, look out for the below symptoms:



Eyes feeling like they are burning and itchy



Eyes may water or run

This may seem strange given the term 'dry eye', but watery eyes are actually a common symptom of Dry Eye



Discomfort whilst wearing contact lenses



Blurred vision or fluctuations in vision



Eyes feeling irritated and dry



The feeling of something in the eye

What causes Dry Eye Disease?

The surface of the eye is covered by a thin layer of tears, called the **Tear Film**. The Tear Film has several important functions; it washes, protects, nourishes and lubricates the eye.

In Diabetes, blood flow to nerves present within the structures of the eye can become restricted, resulting in nerve damage. Some nerves play an important role in controlling tear producing glands called lacrimal glands. When these lacrimal glands lose their ability to produce tears, eyes begin to dry up leading to irritation and discomfort.

As Dry Eye is a chronic progressive disease, if left unmanaged, symptoms can persist and become more severe over time.

Other factors which may cause Dry Eye:



Age: Dry eyes are a part of the natural aging process. Between 15-30% of people over the age of 65 experience symptoms of dry eyes.⁴



Gender: Women are more likely to develop dry eyes due to hormonal changes caused by pregnancy, the use of oral contraceptives and menopause.⁴



Environment: Exposure to smoke, wind and dry climates can increase tear evaporation resulting in dry eye symptoms.



Lifestyle: Smoking, diet low in omega-3 and failure to blink regularly, such as when staring at a computer screen for long periods of time, can also contribute to drying of the eyes.



Medications: Certain medicines, including antihistamines, decongestants, blood pressure medications, and antidepressants, can reduce tear production.

What do the experts recommend[†] to manage Dry Eye?

Dry Eye is a chronic and progressive disease, meaning symptoms will reoccur and become more severe over time if left unmanaged. It is important that Dry Eye is diagnosed early and managed correctly. Experts recommend a regimen of heat, cleanse and hydrate.

1. HEAT



Applying a heated eye mask or warm cloth* to closed eyelids for 10 minutes, will help soften clogged oils within your eyelid glands. This allows the oils present within the glands to flow more freely and helps prevent the tears from evaporating from the surface of the eye.

Following the heated eye mask, **gently massage** the eyelids using your forefinger. Massaging will help to push the oil out from the eyelid glands.

Note: If you suffer from diabetic neuropathy or reduced feelings and sensations, you may not be able to determine if the mask is at the right temperature. Therefore, please ask for assistance to check the temperature after heating. Otherwise seek professional advice on the use of a heat mask as part of your dry eye treatment.

**A warm cloth may not retain the warmth as long as a commercially available eye heat mask.*

2. CLEANSE



Cleansing the eyelids daily will help remove debris, bacteria and oil that can often lead to other eye conditions such as Blepharitis or Meibomian Gland Dysfunction.



Whilst lid scrubs (using diluted baby shampoo applied by swab or cotton bud) have been the most widely recommended method, **there are newer, more effective methods** of managing lid hygiene such as commercially available lid scrubs, wipes and foams. Lid scrubs and wipes are usually pre-soaked in a cleansing solution and ready to use.

3. HYDRATE



Eye Care Professionals recommend the use of **preservative free eye lubricants and sprays** which have shown to be more effective than preserved eye drops or ointments in reducing inflammation on the eyes.

Tear replacement with eye drops, sprays or ointments are traditionally considered a mainstay of Dry Eye management, however it is recommended these are used in conjunction with other therapies to target the underlying causes of Dry Eye.

The importance of using **Preservative Free** products



Using preservative free products where possible is recommended, as the **long-term use of preservatives can be harmful to the ocular surface**.⁴ Experts recommend[†] the use of preservative free eye lubricants and sprays which have shown to be more effective than preserved eye drops or ointments in reducing inflammation on the eyes.

[†]DEWSII report, 2017.

References: 1. Association of Optometrists, 2016. 2. Devi, R.S. and Gowda, M.S., 2016. Dry eye in diabetes mellitus patients and its relationship with diabetic retinopathy. International Journal of Scientific Study, 4(8), pp.67-72. 3. Zhang X, Zhao L, Deng S, Sun X and Wang N: Dry eye syndrome in patients with diabetes mellitus: Prevalence, Etiology, and Clinical Characteristics. Journal of Ophthalmology 2016. 4. NICE, Dry Eye Syndrome guidance.