



Patient information leaflet

Dry Eyes

Definition

“Dry eye is a multifactorial disease of the tears and ocular surface that results in symptoms of discomfort, visual disturbance, and tear film instability with potential damage to the ocular surface”, International Dry Eye Workshop definition 2007.

It can affect up to a third of the general population to a greater or lesser extent.¹

Dry eye disease is becoming more common as a result of worsening air pollution, laser eye surgery, and more work being done at computers.

Dry eye disease may affect all ages and have a marked impact on quality of life

Classification

Dry eye disease is classified into deficient aqueous tear production and increased evaporation from the ocular surface.

Causes

There are several potential causes of reduced aqueous tear production such as age-related dry eye, lacrimal gland disease, diabetes, contact lens wear and facial nerve palsy, and systemic medications.

Evaporative dry eye is caused by increased evaporation of tears from the ocular surface. Causes include: a low blink rate (e.g. during reading, watching television and computer work), increased distance between the lids (e.g. due to lid retraction or lower lid laxity/sagging), certain oral medications; and ocular surface changes caused by contact lens wear, vitamin A deficiency and certain eye drops for example.

Tear quality is also important. Many patients have a mixed presentation.

Symptoms and signs

Patients with dry eyes may experience a burning sensation, blurred vision, mucus discharge, tired, and red eyes. Paradoxically, patients also may suffer from watery, streaming eyes caused by reflex tearing due to an unstable tear film.

Treatment depends on the cause and may include the following:

- *Education and dietary/environmental modifications* e.g. increase intake of omega 3 fatty acids (oily fish or supplements).
- *Artificial tear substitutes* (including drops, gels and ointments)
- *Anti-inflammatory eye drops*
- *Oral antibiotics/anti-inflammatory medications*

- *Punctal occlusion* (occlusion of the tear drainage holes, punctae with tiny punctal plugs, or permanent occlusion with cautery)
- *Therapeutic contact lens wear*
- *Surgery* such as eyelid surgery to correct lid position or to protect the ocular surface

Reference

1. Shimmura et al. Results of a population-based questionnaire on the symptoms and lifestyles associated with dry eye. *Cornea*. 1999 Jul;18(4):408-11.