Dry Eye

What is dry eye?

Dry eye occurs when you do not produce enough tears or the composition of the tears is abnormal and cannot adequately cover the surface of the eye.

The tear film is an essential part for ensuring the overall health of the ocular surface.

It cleanses, lubricates and nourishes the surface of the eye as well as protecting it against infection. Both the quality and quantity of the tears must be maintained within certain levels to ensure a healthy and clear refractive surface essential for good vision.

Chronic dry eye can lead to damage of the eye's surface, an increased risk of eye infections, and eventually the inability to produce tears. Left untreated, severe forms of dry eye can even damage your vision, as well of course as being extremely uncomfortable.

What causes dry eye?

Dry eyes are caused by a lack of adequate tears. Your tears are a complex mixture of three basic layers - oil, water and mucus. This mixture helps make the surface of your eyes smooth and clear, and it helps protect your eyes from infection. Problems with any of these layers can cause dry eye.

The outer layer (oil layer) is produced by the meibomian glands that line the edge of the upper and lower eyelids. The water layer is produced by the lacrimal gland located under the orbital rim bone just below the eyebrow. The mucus layer is produced by microscopic goblet cells in the conjunctiva.

For some people, the cause of dry eyes may be due to an imbalance in the composition of their tears, or they do not produce enough tears to keep their eyes comfortably lubricated. Age, eyelid problems, certain ocular and systemic diseases and medications, and other causes such as environmental factors (including extended screen usage) and hormonal changes can also lead to dry eyes.

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What are the symptoms?

You may have dry eye if you are experiencing:

- Redness or irritation of the eye
- Heaviness of the eyelic
- · Foreign body or sandy sensation in the eyes
- Watery eyes which may be due to reflex tearing. The tear properties may be altered in dry eye so that there is insufficient protection of the ocular surface, resulting in irritation and reflex tearing.
- Transient blurring of vision

Can dry eye affect my ability to wear contact lenses?

Yes. Dry eye is one of the leading causes of contact lens intolerance or discomfort. Contact lens can cause tears to evaporate from the eyes causing irritation, protein deposits, infection, and pain.

How is dry eye diagnosed?

Dry eye is diagnosed by tests and procedures done in the eye clinic that assess tear stability and amount of tear production. Some patients are not aware that they have symptoms of dry eyes until they consult an ophthalmologist.

How is dry eye treated?

Common treatments of dry eye include lifestyle changes and the use of eye drops. There is also increasing evidence that taking a supplement containing certain oil combinations may help significantly in the treatment of dry eye. There is good evidence around the essential fatty acids derived from Flaxseeds, Borage Oil and Fish Oil. This combination of oils has been shown to reduce inflammation in the glands that produce tears, and improve the quality of the tear film for more continuous relief of symptoms.

For more serious cases of dry eyes, certain drugs or surgery may be an option.

Lifestyle changes such as reduced contact lens wear, less time using screens, reduced exposure to air conditioning, can have a significant impact on the control of dry eyes.

Your ophthalmologist will advise you as to what is the best course of treatment for your particular condition.

This patient information leaflet is a general guide to help patients understand specific eye conditions, treatments or tests. The information does not replace the need for individual advice from an ophthalmologist or eye specialist.