

CHRONIC DRY EYE – Disease Overview –

- Dry eye affects an estimated 20.7 million people in the United States and is one of the most common reasons that people visit their eye doctor^{1,2}
- Nearly 40 percent of Americans experience symptoms of dry eye on a regular basis³
- Dry eye can be a progressive disease, and if left untreated, chronic dry eye can lead to more serious problems, including impaired vision and an increased risk of eye infection.⁴ Seventy-six percent of patients report their chronic dry eye worsens over time⁵
- One of the largest groups of people affected by chronic dry eye is menopausal women⁶

What is chronic dry eye?

Chronic dry eye occurs when eyes do not produce the right quantity or quality of tears. The main functions of tears are to lubricate the eyes and protect them from bacteria and environmental irritants such as dust. This requires both the right amount of tears and a balance of the many components that make up tears.⁷

Symptoms of dry eye can vary greatly from one person to the next, often fluctuating throughout the day, usually becoming worse later in the day, and may include itching, irritation, sensitivity to light, blurred vision, dryness and foreign body sensation. Dry eye can be a progressive disease that, if left untreated, can lead to increased risk of infection or visual impairment.

What causes dry eye?

Chronic dry eye is often caused by hormonal changes due to aging and menopause or medical conditions and can be exacerbated by environmental conditions.^{8,9}

Dry eye can be aggravated by a number of external factors such as hot, dry or windy environments, high altitudes, heating, air-conditioning and smoke.^{10,11,12,13} Many people also find that their eyes become irritated when reading or working on a computer.^{14,15}

Contact lens wearers may also suffer from ocular dryness.¹⁶ Certain medications, thyroid conditions, vitamin A deficiency and diseases such as Parkinson's disease, rheumatoid arthritis, lupus, rosacea, sarcoidosis and Sjögren's syndrome may also cause dry eye.^{17,18,19}

How do I know if I have dry eye?

If your eyes are dry or if you have symptoms such as blurred vision, itchiness and sensitivity to light, or if you have been using over-the-counter eye drops three or more times a day with little success, you may have chronic dry eye. Though a large percentage of Americans suffer from chronic dry eye, it is more common among certain groups of people. They include:

- Menopausal women
- Older people, because tear production decreases with age
- People who live at high altitudes or in sunny, dry, windy environments because of increased tear evaporation
- People with autoimmune disorders (e.g., Sjögren's syndrome, lupus, diabetes, rheumatoid arthritis, sarcoidosis)
- Computer users because they blink less when concentrating on the monitor
- Contact lens wearers because of increased tear evaporation
- People taking medications such as antihistamines, antidepressants, diuretics, oral contraceptives or hormone replacement therapy

How is chronic dry eye diagnosed?

An eye care professional (ophthalmologist or optometrist) can check for the signs and symptoms of chronic dry eye using several quick and painless tests to measure visual clarity, tear production, ocular surface dryness and damage to the cornea or conjunctiva (the membrane that lines the eyelids).

Some of the tests an eye care professional may use to diagnose dry eye will measure the production, evaporation rate and quality of the tear film. Special diagnostic drops are used to highlight problems that otherwise would be invisible, which are particularly helpful to diagnose the presence and extent of the dryness. These tests may help determine the severity of the condition.

How can dry eye be treated?

Treatment is based on disease severity and an evaluation of the cause of the disease. For example, a humidifier could help treat dry eye resulting from dry air, or if dry eye is a side effect of one or more medications, the feasibility of stopping the medication or reducing the dosage can be considered. In general, early treatment for a chronic disease like dry eye is more likely to achieve better patient outcomes.

There are over-the-counter eye drops and prescription therapies available to help address the condition. Anyone who uses over-the-counter artificial tears three or more times a day or who regularly experiences dryness, blurred vision, itchiness and sensitivity to light despite using eye drops is encouraged to see an eye care professional as they may be a candidate for additional treatments. The eye care professional will try to determine the cause of symptoms, to see if they are the result of an environmental factor or due to inflammation, the underlying cause of the disease.

A doctor may prescribe RESTASIS[®] (cyclosporine ophthalmic emulsion) 0.05%, the first and only prescription eye drop that is believed to target the underlying cause of chronic dry eye – inflammation. RESTASIS[®] helps increase the eyes' natural ability to produce tears which may be suppressed by inflammation due to chronic dry eye. Increased tear production was not seen in patients using topical steroid drops or tear duct plugs. RESTASIS[®] should not be used by patients with active eye infections and has not been studied in patients with a history of herpes viral infections of the eye. The most common side effect is a burning sensation. Full prescribing information on RESTASIS[®] can be found on www.RESTASIS.com.

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