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**COMPLIMENTS OF:** 

Get more information about Fuchs' dystrophy from EyeSmart—provided by the American Academy of Ophthalmology—at aao.org/fuchs-dystrophy-link.

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978-1-61525-511-5



#### **Summary**

Certain cells pump fluid from our cornea to keep it clear. With Fuchs' dystrophy, these cells gradually die and fluid builds up. The cornea gets swollen and puffy, and over time, vision becomes cloudy or hazy.

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Early treatment may include using a hair dryer to blow warm air on your face, drying your cornea's surface. Also, eye drop medicine or ointments may reduce swelling of the corneal cells. If vision gets very bad or the cornea is scarred, a corneal transplant may be necessary.

With Fuchs' dystrophy, it is important to see your ophthalmologist regularly to check for any changes in your condition.

If you have any questions about your eyes or your vision, speak with your ophthalmologist. They are committed to protecting your sight.



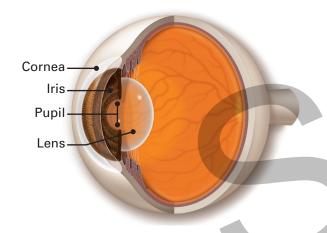
### **Fuchs' Dystrophy**



#### What is Fuchs' dystrophy?

Fuchs' dystrophy is a disease of the **cornea**. It is when cells in the corneal layer called the **endothelium** gradually die off. These cells normally pump fluid from the cornea to keep vision clear. When they die, fluid builds up and the cornea gets swollen and puffy. Vision becomes cloudy or hazy.

Fuchs' dystrophy has two stages. In the early stage (stage 1), vision is usually hazy in the morning. With the later stage 2, vision remains blurry all day.



The cornea is the eye's clear, dome-shaped covering.

#### Eye Words to Know

**Cornea**: Clear, dome-shaped window of the front of your eye. It focuses light into your eye.

**Endothelium:** Inner layer of cells that make up the cornea. These cells remove extra fluid from the cornea.

People in their 30s and 40s may have Fuchs' dystrophy but not know it. Vision problems might not appear until age 50 or later.

Women are more likely than men to have Fuchs' dystrophy. Family history of Fuchs' also increases your risk of developing it.

# What are Fuchs' dystrophy symptoms?

In the early stage (stage 1), you may notice few, if any, symptoms. Your vision may be hazy or blurry when you first wake up, but improve throughout the day. This is because your eyes normally stay moist when they are closed during sleep. But when you are awake, the fluid dries normally. In the later stage (stage 2), your blurry or hazy vision will not get better as the day goes on. Too much fluid builds up during sleep and not enough dries up during the day. Also, tiny blisters may form in the cornea. The blisters get bigger and eventually break open, causing eye pain. Here are other symptoms:

- Sandy or gritty feeling in your eyes
- Being extra sensitive to bright light
- Eye problems get worse in humid areas
- Very blurry or hazy vision from scarring at the center of the cornea

## How is Fuchs' dystrophy diagnosed?

Your ophthalmologist will look closely at your cornea and measure its thickness. This is called pachymetry. They will also check for tiny blisters on the front surface of the cornea and drop-like bumps on the back surface of the cornea. Using a special photograph of your cornea, your ophthalmologist may count your endothelial cells.

## How is Fuchs' dystrophy treated?

There is no cure for Fuchs' dystrophy. However, you can control vision problems from corneal swelling. Your treatment depends on how Fuchs' dystrophy affects your eye's cells.

Here are treatments for early Fuchs' dystrophy:

- Use an eye drop medicine or ointment to reduce swelling of the cornea's cells.
- Use a hair dryer, held at arm's length, to blow warm air on your face. This helps dry the surface of your cornea.

For very poor vision or scarred corneas, you may need a corneal transplant. This surgery could be one of two types:

- Endothelial keratoplasty (EK): Healthy endothelial cells are transplanted into your cornea.
- Full corneal transplant: The center of your cornea is replaced with a healthy donor cornea.

Your ophthalmologist will discuss what treatments are best for your condition.

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