

# Fuchs' Corneal Dystrophy

This material will help you understand Fuchs' corneal dystrophy and how it is treated.

## What is Fuchs' corneal dystrophy?

Fuchs' corneal dystrophy is a progressive disease that affects the cornea. It can result in increasingly blurry vision. The cornea is the clear curved window in the front of the eye (see picture on the right). Its main job is to help focus light as it enters the eyes.

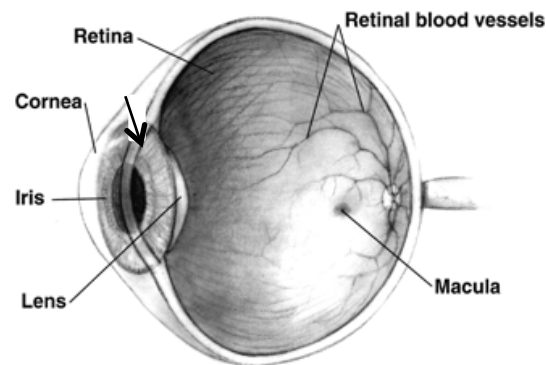


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## What causes Fuchs' corneal dystrophy?

Fuchs' corneal dystrophy is a condition where endothelial cells are slowly lost over time. These cells form the innermost layer of the cornea and are responsible for pumping water out of the cornea. This process keeps the cornea clear, like a window. As the endothelial cells disappear, they are not replaced. Eventually, the endothelial cells that are left can't work hard enough to keep fluid out of the inner layers. The cornea then becomes swollen and cloudy, which causes blurry vision. It may look like you are looking through a foggy window.

Fuchs' corneal dystrophy is often hereditary (passed down in families), but not everyone in the family will have it. Many people may have it but do not experience any symptoms until they are 50 years old or older. Fuchs' corneal dystrophy is more common in women than men.

## How does Fuchs' corneal dystrophy progress?

Fuchs' corneal dystrophy usually happens very gradually.

In the early stage, the vision may be cloudy for a short time after you wake up in the morning. This happens because when your eyelids are closed, the excess fluid inside the cornea can't evaporate. Once you are awake, the fluid will start to evaporate, and gradually the vision can clear.

As the disease progresses, the vision remains blurry throughout the day. Many people will have trouble with glare at night. Many will also find it hard to see small details at a distance or nearby. In advanced cases, some people may develop light sensitivity and pain as more fluid builds up and creates blisters on the cornea. Sometimes the blisters on the cornea can scar causing greatly reduced vision.

You need to have your cornea examined regularly. Your eye doctor will check for signs of corneal swelling, scarring, and endothelial cell loss. S/he may also use special testing to determine how swollen the cornea is or how many cells remain.

### **How is Fuchs' corneal dystrophy treated?**

There is no known treatment to reverse the loss of endothelial cells. There are ways of helping the cornea cope. In the earlier stages, special salt water eye drops can help remove some of the fluid from the cornea. This will help improve your vision. You can also dry your eye with warm air (like from a hair dryer) after waking up in the morning. This may also help improve vision.

If you have severe vision problems from chronic swelling, you may require corneal surgery to replace the endothelial layer that has been lost. This surgery is called a partial thickness corneal transplant. Your eye doctor will discuss the best option for you.

**For more information, scan these codes with your smartphone or visit the website.**



<http://www.geteyesmart.org/eyesmart/diseases/fuchs-dystrophy.cfm>



<http://www.nlm.nih.gov/medlineplus/ency/article/007295.htm>

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