

## **Fuch's Endothelial Dystropy**

Fuchs' (pronounced "Fooks") Corneal Endothelial Dystrophy is a slow, progressive eye condition that affects the cornea, the clear, dome-shaped front surface of your eye. Specifically, it impacts the endothelial cells on the inner layer of the cornea.



## **Book Now**

Think of your cornea as a window. The endothelial cells are like tiny pumps that constantly work to keep this window clear by removing fluid. In Fuchs' Dystrophy, these cells gradually die off or don't function properly. As a result, fluid starts to build up in the cornea, causing it to swell and become cloudy.

How Does it Affect My Vision?

In the early stages, you might not notice any symptoms. As the condition progresses, you may

Blurred or hazy vision, especially in the morning. This often improves throughout the day as fluid evaporates from the cornea.

Glare and halos around lights.

Sensitivity to light (photophobia).

Eye discomfort or a gritty sensation.

Decreased vision, particularly in later stages.

Who Gets Fuchs' Dystrophy & Its Hereditary Nature

It's a hereditary condition, meaning it often runs in families. If you are diagnosed with Fuchs' Dystrophy, it is highly recommended that your close family members (parents, siblings, and children) also undergo a comprehensive eye examination. This is important because they may carry the gene and could develop the condition, even if they don't have symptoms yet. Early detection allows for monitoring and timely intervention if needed.

It typically affects both eyes, though one eye might be more advanced than the other. Symptoms usually appear in people in their 50s or 60s, but changes in the cornea can be present earlier. Women are more commonly affected than men.



Meet our Optometrists

Tom Roger

B App Sci (Optometry) Grad Cert Ocular Therapeutics FACBO MBA CASA CO (Aviation Eye Examiner)

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## What Causes It?

The exact cause isn't fully understood, but it's believed to be a combination of genetic predisposition and the natural aging process of the endothelial cells. Over time, the faulty endothelial cells lose their ability to pump fluid effectively, leading to corneal swelling. How is it Diagnosed?

Your ophthalmologist (eye doctor) can diagnose Fuchs' Dystrophy during a comprehensive

eye exam. They will:

Examine your cornea using a special microscope called a slit lamp. They'll look for characteristic "guttae" – small, wart-like growths on the back surface of the cornea.

May perform a pachymetry test to measure the thickness of your cornea.

May use corneal topography or specular microscopy to assess the health and density of your endothelial cells.

**Treatment Options** 

The goal of treatment is to manage symptoms and, if necessary, restore clear vision.

Early Stages (Mild Symptoms):

Hypertonic saline eye drops or ointment: These draw excess fluid out of the cornea, helping to reduce swelling and improve vision, especially in the mornings.

Hair dryer: Gently blowing warm, dry air across your face with a hair dryer held at arm's length (on a cool setting) for a few minutes in the morning can help evaporate corneal fluid.

Advanced Stages (Significant Vision Impairment):

Corneal Transplant Surgery: This is the most effective treatment for advanced Fuchs'

Dystrophy.

DSEK (Descemet's Stripping Endothelial Keratoplasty) or DMEK (Descemet's Membrane Endothelial Keratoplasty): These are the most common types of corneal transplants for Fuchs'. They involve replacing only the diseased inner layer of the cornea with healthy tissue from a donor. These procedures are less invasive than full-thickness transplants and often lead to faster recovery.

In rare cases, a full-thickness corneal transplant (PKP - Penetrating Keratoplasty) might be

necessary.

Living with Fuchs' Dystrophy

Regular eye exams with your optometrist are crucial to monitor the progression of the condition.

Follow your optometrist's instructions regarding eye drops and other treatments.

Protect your eyes from injury.

Don't hesitate to ask questions if you have concerns about your vision or treatment.

Remember: Early diagnosis and appropriate management can help preserve your vision and maintain your quality of life. Due to its hereditary nature, encourage your close family members to also get their eyes checked.



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