

## **FUCH'S (Endothelial) CORNEAL DYSTROPHY**

**Fuch's (Endothelial) Corneal Dystrophy** is a progressive disease affecting the part of the eye called the cornea. The cornea is the clear round dome covering the iris (the colored ring in the center of the eye) and the pupil (the black circle in the middle of the eye). By helping to focus light as it enters the eye, the cornea plays an important role in vision.

Fuch's dystrophy reduces the number of cells in the cornea's inner layer (called the **endothelial** layer), which causes the remaining cells to become abnormally thick or swollen. Disordered endothelial cells also produce abnormal, dew-drop shaped outgrowths known as **guttate**. These cell changes cause the cornea to become swollen and cloudy.

Fuch's dystrophy is a progressive disease. Over time the changes to the corneal cells interfere with vision. Fuch's dystrophy usually occurs after age 40. Studies show that it is an inherited condition.

### **WHAT ARE THE SYMPTOMS OF FUCH'S DYSTROPHY?**

A patient with Fuch's dystrophy experiences hazy or cloudy vision, with the disease usually developing over two stages.

Stage 1 may produce no symptoms or only mild symptoms. In this early stage, the swelling of the corneal cells usually occurs in the morning and tends to clear as the day progresses. Vision is worse in the morning because closing your eyes during sleep promotes corneal swelling in Fuch's dystrophy.

Once the disease has progressed to Stage 2, vision no longer gets better later in the day. People with Stage 2 Fuch's dystrophy may experience pain and sensitivity to light. Over time, some patients develop scarring at the center of their cornea. Once scarring is present, the patient may become more comfortable, but the film of scar tissue over the cornea reduces vision. It can take 10 to 20 years or longer for Fuch's dystrophy to progress from its early to late stage. If Fuch's dystrophy results in significant loss of vision, corneal transplant surgery can be performed. In the majority of patients, corneal transplant surgery is never required.

### **HOW IS FUCH'S DYSTROPHY DIAGNOSED?**

To diagnose Fuch's dystrophy, your ophthalmologist checks for cell outgrowths and distortions by examining the cornea with an instrument called a slit-lamp microscope. Your ophthalmologist may also monitor the disease by measuring the thickness of the cornea.

### **HOW IS FUCH'S DYSTROPHY TREATED?**

When reduced vision interferes with daily living, corneal transplant surgery may be recommended. This involves replacing the cloudy cornea with a clear cornea from a donor. Over 40,000 of these procedures are completed each year, and the success rate is excellent. Corneal transplants are the most common and successful of all transplant surgeries.