

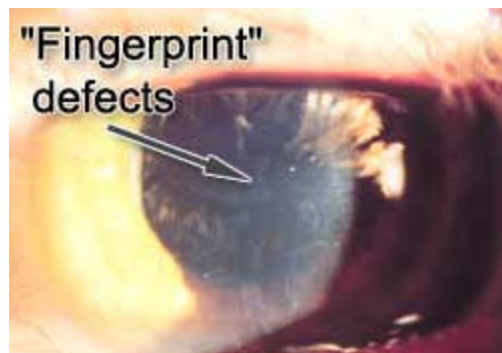
Cogan's Dystrophy

Overview

Cogan's Dystrophy is a disease that affects the **cornea**. It is commonly called **Map-Dot-Fingerprint Dystrophy** because of microscopic dot and fingerprint-like patterns that form within the layers of the cornea.

The cornea is comprised of five layers. Cogan's affects the superficial cornea layer called the epithelium. The epithelium's bottom, or basement layer of cells becomes thickened and uneven. This weakens the bond between the cells and sometimes causes the epithelium to become loosened and slough off in areas. This problem is called corneal erosion.

Even though this disease is commonly known as a dystrophy (a term that describes genetic diseases), Cogan's is not necessarily an inherited problem. It often affects both eyes and is typically diagnosed after the age of 30. Cogan's usually becomes progressively worse with age.



Signs and Symptoms

Some patients with Cogan's dystrophy have no symptoms at all. The symptoms among patients may vary widely in severity and include:

- Light sensitivity
- Glare
- Fluctuating vision
- Blurred vision
- Irregular **astigmatism** (uneven corneal surface)
- Mild to extreme irritation and discomfort that is worse in the morning

Detection and Diagnosis

The doctor examines the layers of the cornea with a **slit lamp microscope**. In some cases, **corneal topography** may be needed to evaluate and monitor astigmatism resulting from the disease.

Suggested Treatment

The treatment for Cogan's is dependent on the severity of the problem. The first step is to lubricate the cornea with artificial tears to keep the surface smooth and comfortable. Lubricating ointments are recommended at bedtime so the eyes are more comfortable in the morning. Salt solution drops or ointments such as sodium chloride are often prescribed to reduce swelling and improve vision. Gas permeable contacts are occasionally fit for patients with irregular astigmatism to create a smooth, even corneal surface and improve vision.

For patients with recurrent corneal erosion, soft, bandage contact lenses may be used to keep the eye comfortable and allow the cornea to heal. In some cases, laser treatment may be beneficial. The surgeon removes the epithelium with an Excimer laser, creating a regular, smooth surface. The epithelium quickly regenerates, usually within a matter of days, forming a better bond with the underlying cell layer.