

Corneal dystrophies are a group of genetic, often progressive, eye disorders in which abnormal material often accumulates in the clear (transparent) outer layer of the eye (cornea). Corneal dystrophies may not cause symptoms (asymptomatic) in some individuals; in others they may cause significant vision impairment. The age of onset and specific symptoms vary among the different forms of corneal dystrophy. The disorders have some similar characteristics - most forms of corneal dystrophy affect both eyes (bilateral), progress slowly, do not affect other areas of the body, and tend to run in families. Most forms are inherited as autosomal dominant traits; a few are inherited as autosomal recessive traits. Corneal dystrophies affect women and men in equal numbers, except for Fuchs corneal dystrophy which affects women about four times as often as men. The corneal dystrophies can affect individuals of any age. The incidence of corneal dystrophies is unknown. Because some individuals do not have symptoms (asymptomatic), determining the true frequency of these disorders in the general population is difficult. The presence of a corneal dystrophy may be found incidentally during a routine eye examination. A diagnosis may be confirmed by a thorough clinical evaluation, a detailed patient history and a variety of tests, such as a slit lamp examination, in which a special microscope (slit lamp) allows a physician to view the eye through high magnification. Some specific corneal dystrophies can be diagnosed with molecular genetic tests even before symptoms develop.