

## **Lattice Dystrophy**

Lattice dystrophy is a corneal dystrophy that results from an accumulation of amyloid deposits (abnormal protein fibers) throughout the middle and anterior corneal stroma (middle corneal layer). During an examination, the eye doctor sees these deposits in the cornea as clear, comma-shaped dots and branching filaments that overlap, creating a 'lattice' effect. Over time, the lattice lines will grow opaque and involve more of the stroma, clouding the cornea and possibly reducing vision.

In some patients, these abnormal protein fibers will accumulate under the cornea's outer layer, the epithelium, which can cause an erosion of this layer. This condition is known as recurrent epithelial erosion, which is quite painful. In addition to causing pain by exposing the corneal nerves, these erosions can result in temporary vision problems.

To lessen this pain, your eye doctor may prescribe eye drops and/or ointments to reduce the friction between the eroded cornea and the eyelid. An eye patch may also be used to immobilize the eyelid and improve comfort. These erosions generally heal within three days, although occasional pain or a feeling of having something in the eye may occur for the next several weeks.

Although lattice dystrophy can occur at any time in life, it usually arises in children between the ages of two and seven. By around age 40, some patients will have significant scarring under the epithelium, resulting in a corneal haze that can greatly reduce vision. When this is the case, a corneal transplant may be necessary. Although people with lattice dystrophy have an excellent chance for a successful transplant, the disease may arise in the transplanted cornea within a few years. Roughly 15 percent will require a second corneal transplant. Early lattice dystrophy, whether in an original or transplanted cornea, responds well to treatment with the excimer laser.