Iridocorneal Endothelial Syndrome (ICE)

Iridocorneal Endothelial Syndrome is actually a group of three closely linked conditions: iris nevus (or Cogan-Reese) syndrome; Chandler's syndrome; and essential (progressive) iris atrophy (hence the acronym ICE).

Symptoms

ICE syndrome is more common in women. It is usually diagnosed between ages 30-50.Iridocorneal endothelial (ICE) syndrome has three main features:

1. Visible changes in the iris, the colored part of the eye that regulates the amount of light entering the eye;
2. Swelling of the cornea; and
3. The development of glaucoma, a disease that can cause severe vision loss when normal fluid inside the eye cannot drain properly. ICE is usually present in only one eye.

The most common feature of this group of diseases is the growth of endothelial cells from the back of the cornea onto the iris. This loss of cells from the cornea often leads to corneal swelling, distortion of the iris, and variable degrees of distortion of the pupil (the adjustable opening at the center of the iris that allows varying amounts of light to enter the eye). These endothelial cells may cover up the drainage system of the eye, causing an increase in intra-ocular pressure; a glaucoma.

Treatment

What causes some people to have the disease is unknown. While we do not yet know how to keep ICE syndrome from progressing, the glaucoma associated with the disease can be treated with medication and/or surgery. Sometimes a corneal transplant is needed to treat the corneal swelling.