Lattice degeneration is a common peripheral retinal degeneration, with oval or linear patches of retinal thinning. Lattice degeneration affects about 10% of the population and is bilateral in 30 to 50% of those patients. It may run in families and it is more common in near-sighted eyes. Patients with lattice degeneration are typically asymptomatic, and the lesions are usually an incidental finding of dilated eye exam. Lattice lesions usually develop during the teenage years and may continue to develop over many years.

Lattice degeneration may predispose the retina to tears or atrophic holes which may lead to retinal detachment. For this reason, the acute onset of floaters, flashes of light, peripheral field loss, or central vision loss should be taken seriously and a detailed retinal examination is appropriate.

**Thinning of the retina**

Lattice lesions may be single or multiple and are usually located near the periphery of the retina. The back part of the eye is filled with a gel called the vitreous. Condensed vitreous gel is adherent at the margins of lattice and may pull on the retina.

Lattice lesions appear to be caused by loss of peripheral retinal capillaries (fine blood vessels), which leads to thinning of all retinal layers and in some cases a full-thickness retinal hole.

Lattice degeneration and associated retinal holes or breaks can be detected by peripheral retinal examination with scleral depression, a technique in which the doctor pushes on the edge of the eye with an instrument in order to clearly visualize the periphery of the retina.
How is lattice degeneration treated?

Mild lattice does not interfere with vision and does not present a high risk for future retinal detachment. Prophylactic treatment is indicated only in specific circumstances.

Lattice degeneration complicated by retinal tear or an increasing cuff of fluid under the retina constitutes an urgent indication for treatment with laser retinopexy or cryoretinopexy. Both of these techniques create a controlled scar around the tear in order to seal it and prevent a vision-threatening retinal detachment from occurring.

Lattice lesions in fellow eyes of patients who have retinal detachment in the other eye may be treated prophylactically, but there is still a small chance of retinal detachment even after treatment.

What is the prognosis for lattice degeneration?

Patients with significant lattice lesions may be at slightly increased risk for vision loss due to retinal detachment. These high risk patients should have regular follow-up examinations of the retina. Patients with lattice degeneration should be aware of the signs and symptoms of retinal tear or detachment and seek urgent ophthalmic care when needed.

Symptoms of retinal tear or retinal detachment:

- Flashes of light ("lightning bolts" or sudden arcs of light lasting a split second)
- New floaters, particularly a shower of new floaters all at once.
- A shadow or curtain in the peripheral vision that is constantly present.