

## EYE-Q

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# Retinitis Pigmentosa and Low Vision

February is designated by Research to Prevent Blindness and the National Institutes of Health as Macular Degeneration and Low Vision Awareness Month. This gives us an opportunity to talk about and increase the awareness for diseases such as macular degeneration and other eye diseases that result in low vision. Today I would like to talk about one of the common inherited causes of low vision in adults: Retinitis pigmentosa.

Retinitis pigmentosa is a disorder in which the cells in the eye that sense light break down (degenerate), leading to a slow loss of vision and sometimes blindness. The light-sensitive cells of the retina, called rods and cones, send visual information to the brain.

Approximately 100,000 people in the United States have retinitis pigmentosa, making it one of the leading causes of blindness. In people who have the disease, the first signs usually can be detected by about age 10, and the first symptoms usually show up in adolescence. The total amount of vision loss and how quickly the disease worsens vary from person to person.

No one knows exactly what causes retinitis pigmentosa. It is believed to be an inherited disorder, and research suggests that several different types of gene mutations (changes in genes) can cause this disease. In most cases, the disorder is linked to a gene that must be inherited from both parents in order to cause the disease. But dominant genes and genes on the X chromosome also have been linked to retinitis pigmentosa. In some cases, a new mutation causes the disease to occur in a person who does not have a family history of the disease.

The first symptom of retinitis pigmentosa is usually diminished night vision, so that it becomes more difficult to see in dimly lit or dark places. People with retinitis pigmentosa also slowly lose their side vision and visual sharpness. Over time, the disorder leads to tunnel vision, in which the outer edges of vision are dark, leaving a shrinking circle of vision in the center. Eventually, people with retinitis pigmentosa can go blind, but most people with this disorder retain some vision even in old age.

Because retinitis pigmentosa is a genetic disorder people are born with the disorder already programmed into their cells. This means there is no way to prevent it from developing, and there is no proven way to prevent or delay the associated vision loss. Your ophthalmologist can see the first signs of retinitis pigmentosa in affected children as early as 10 years old. Symptoms typically begin in adolescence and slowly get worse over time. The disorder and visual loss last a lifetime.

Unfortunately, there is no known treatment for retinitis pigmentosa. Some research suggests that taking high doses of vitamin A (15,000 IU/day) may slow degeneration a

little in some people, but the results are not strong. Because too much vitamin A is dangerous, and because its effect on the disease is weak, more research needs to be done before this therapy is accepted widely. If you have retinitis pigmentosa and want to try vitamin A therapy, talk with your eye physician first to learn about the safety and potential value of this treatment.

The important thing is to see your eye doctor if you notice any change in your vision, such as decreased ability to see at night or loss of peripheral vision

Even though the visual loss is both progressive and permanent, the amount and speed of degeneration varies by individual so the extent of vision loss cannot be predicted.

*If you have questions about your eye health e-mail Dr. Barowsky at [doctom@tdkj.com](mailto:doctom@tdkj.com) and we'll try to answer your questions here at Eye-Q.*