

VISION LOSS FROM RETINITIS PIGMENTOSA

RP Inherited Blindness Affects 1.5 Million People Worldwide

Retinitis Pigmentosa (RP) is a very rare retinal dystrophy

Retinitis pigmentosa is a group of rare genetic disorders that cause loss and breakdown of cells in the retina. RP affects nearly 1 in every 4,000 people, typically starting in childhood eventually leading to loss of most sight. Please use this guide to better understand and learn about RP.

01 | Cause

RP is caused from genetic mutations of one or more of the 50 genes that makeup the retina, and hold the genetic makeup to create cell proteins called photoreceptors. Photoreceptors are comprised of rods (how we see in the dark) and cones (how we see detail and color) that allow a patient to see. The mutations cause lack of protein production, protein toxicity or abnormal protein growth.

02 | Symptoms

Symptoms usually occur from a young age in RP patients and progress over time to eventual near-complete to complete loss of vision. Early stages of symptoms include:

- Poor night vision
- Loss of visual field
- Difficulty reading, driving, walking and recognizing faces

It is crucial to see your medical provider if you suffer any symptoms related to RP as they could indicate an even more serious condition; such as Usher syndrome, Leber's congenital amaurosis, rod-cone disease, Bardet-Biedl syndrome, and Refsum disease, among others.

03 | Diagnosis

Finding RP with an ophthalmoscope that allows for a wide, clear view of the retina; will show abnormal dark deposits within the retina. RP patients have significant decreased electrical activity in the eye, thus using an electroretinogram (ERG) will measure the electrical activity of the photoreceptor cells, helping provide a diagnosis.

Genetic testing is also available and allows for a patient to understand their particular mutation and how their RP will progress. To determine the extent of the vision loss, a visual field test will allow a clinician to map a patient's visual field by watching a dot of light move within a half-circle.

04 | Treatment

There have been significant advances in gene therapy that have shown results in patients with RP and related conditions. There is a possibility of significant improvement with the gene therapy. Other options for patients would be to receive aid from:

- Lenses that magnify central vision
- Programs that convert text to audio
- Guide dogs

For additional resources on ophthalmology and vision related diseases and concerns please visit, <http://www.aao.org>

Did You Know?

39 million people world-wide are blind

References

https://nei.nih.gov/health/pigmentosa/pigmentosa_facts

<http://www.blindness.org/retinitis-pigmentosa>