

Retinoschisis

This material will help you understand retinoschisis, its causes, and how it is diagnosed.

What is retinoschisis?

Retinoschisis is a condition that occurs when part of the retina splits or separates into two layers. The retina is like the “film” of the eye. It captures images and sends them to the brain. Retinoschisis can cause slow and steady vision loss. Vision loss will be in the part of the visual field that relates to the area of the retina that has split. The macula, which is responsible for your central vision and allows you to see fine details, is most often affected.

Bleeding in the eye (vitreous hemorrhage) or retinal tears and detachment can sometimes occur as a result of retinoschisis.

What are the causes of retinoschisis?

There are two main causes of retinoschisis:

- **Juvenile X-linked Retinoschisis:** This type is caused by an abnormal gene found on the X-chromosome. Men have only 1 X-chromosome. If their X-chromosome is affected, their vision will likely be reduced. Women, on the other hand, have 2 X-chromosomes. This allows them to be a carrier of the condition without it affecting their vision. For these reasons, mostly boys and young men experience this type of retinoschisis.
- **Degenerative Retinoschisis:** Unlike juvenile X-linked retinoschisis, this is not a genetic condition. In this case, the retina splits due to aging. It can affect both men and women. Because degenerative retinoschisis usually

involves only the peripheral retina, the central vision is typically excellent and patients may not notice visual symptoms.

How is retinoschisis diagnosed?

Degenerative retinoschisis is usually diagnosed with a careful eye examination. For juvenile X-linked retinoschisis, an electroretinogram (ERG) is an important test used to confirm the diagnosis. To perform an ERG, your eye doctor will place special contact lenses in your eyes. These contact lenses measure your retina's response to light. The ERG will show if your retina is working properly or not. Optical coherence tomography (OCT) is an imaging test that your doctor may also use in diagnosis. This test takes a special picture of the eye that allows the doctor to see each of the retina's layers.

How is retinoschisis treated?

Unfortunately, there are no medical treatments for retinoschisis at this time. You may choose to wear glasses or contact lenses to improve the overall quality of your vision. However, this does not "fix" the damaged retina.

People with retinoschisis have a higher chance of developing other eye conditions. Common problems include bleeding in the eye (vitreous hemorrhage) and retinal detachment. A retinal detachment occurs when the retina separates from its place at the back of the eye. You should see your eye doctor regularly to monitor your condition. If these problems are found early, there is a greater chance of avoiding or reducing vision loss.

For more information, scan this code with your smartphone or visit the website listed.



<http://www.kellogg.umich.edu/patientcare/conditions/retinoschisis.html>

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