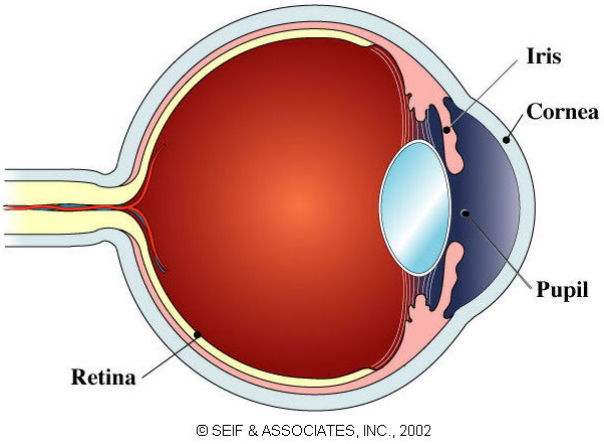
Juvenile Retinoschisis

The retina is a layer of tissue containing the nerves that receive light and sends the light signals to the brain. The retina lines the inside of the back of the eye.



The term *retinoschisis* means "splitting" of the layers of the retina. In this condition, the inner and outer layers of the retina become separated by cysts. Since the nerves cannot communicate across these cysts, light signals cannot be properly transmitted the brain and vision is effected.

Juvenile retinoschisis is a genetically transmitted disease that first produces symptoms in childhood. It generally affects young boys. Patients with retinoschisis are more prone to retinal detachments which are much more serious and can cause loss of vision or blindness. Retinoschisis itself however, while causing diminished vision, generally does not result in total blindness.

CAUSES

- This condition is a genetically transmitted defect carried on the X chromosome (female sex chromosome).
- Females are often the carriers. They pass the defect on to their sons.
- Very rarely, a female child will have two abnormal X chromosomes and have this condition. However, this can only occur if the father already has the disease and the mother is a carrier.

SYMPTOMS

Children with this condition have their vision affected in two ways depending on where the cysts have formed in their retinas.

- Reduced central vision or ability to read or see detail straight ahead. This occurs when the cysts have formed near the center, focusing portion of the retina (*macula*).
- Reduced side (*peripheral*) vision. If the splitting occurs in areas of the retina off to the side of the macula, vision can be reduced in the opposite direction off to the side.

DIAGNOSIS

- Retinoschisis is a very hard to diagnose. It requires a skilled eye physician.
- The diagnosis should be confirmed by an ophthalmologist who is a retina specialist.

TREATMENT

Since this is a genetic disease, it cannot be cured. It is very important that children with retinoschisis be examined by an ophthalmologist at regular intervals. This is due to the danger of a developing retinal detachments. These may cause blindness, but can be treated with surgery, or sometimes prevented by laser treatments.

SEEK IMMEDIATE MEDICAL CARE IF:

- A young male child has obvious poor vision in one or both eyes.
- Your child experiences a sudden appearance of:
  - Flashing lights off to th side.
  - Floating dark specks in front of the field of vision.
  - A drop in vision straight ahead or in any direction of side vision.

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