Stickler Syndrome

What is stickler syndrome?

Stickler syndrome is a genetic disorder that causes joint, hearing, and vision problems. It affects collagen, the connective tissue of the body. Collagen is a main component of the eye's **cornea** and **sclera**.

Who is at risk for Stickler syndrome?

Some people inherit Stickler syndrome from a parent. A parent with Stickler syndrome has a 50 percent chance of passing the disorder along to a child. However, other people have no family members who have Stickler syndrome. In those cases, a new change in their genes caused the syndrome.

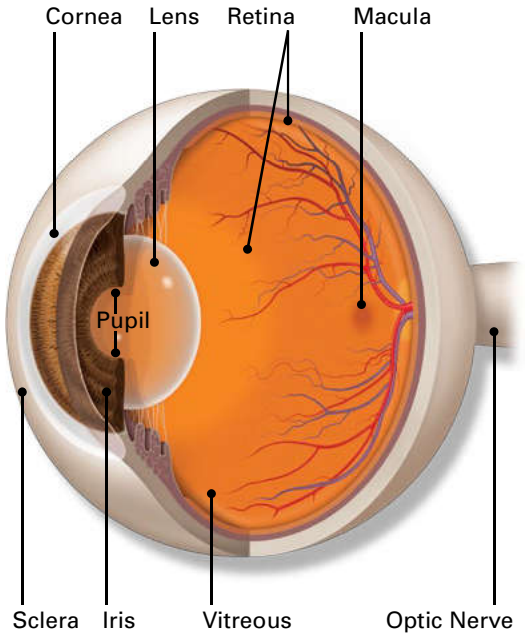
What are the eye symptoms of Stickler syndrome?

Children with Stickler syndrome can have eye problems that are more common in older people.

Nearsightedness. Children with Stickler syndrome are often born with severe nearsightedness. They can only see objects very close to them.

Cataracts. Some children are born with cataracts, a clouding of the eye's lens.

Glaucoma. Children with Stickler syndrome can also get glaucoma. Glaucoma is a disease that damages the optic nerve.



Eye Words to Know

Cornea: Clear, dome-shaped window of the front of your eye. It focuses light into your eye.

Sclera: The outer layer of the eye. This is the "white" of the eye.

Lens: A clear part of the eye behind the colored iris. It helps to focus light on the retina so you can see.

Optic nerve: A nerve at the back of your eye that connects to your brain. The optic nerve sends light signals to your brain so you can see.

Retina: Layer of nerve cells lining the back wall inside the eye. This layer senses light and sends signals to the brain so you can see.

Vitreous: Jelly-like substance that fills the middle of the eye.

Retinal detachment. Detached **retinas** can also threaten the sight of children with Stickler syndrome. They should see their ophthalmologist immediately if they notice a sudden onset of:

- floaters (small specks, dots, circles, lines or cobwebs in the field of vision)
- flashes (flashing lights or lightning streaks in the field of vision)
- dark shadows in their peripheral (side) vision.

How is Stickler syndrome diagnosed and treated?

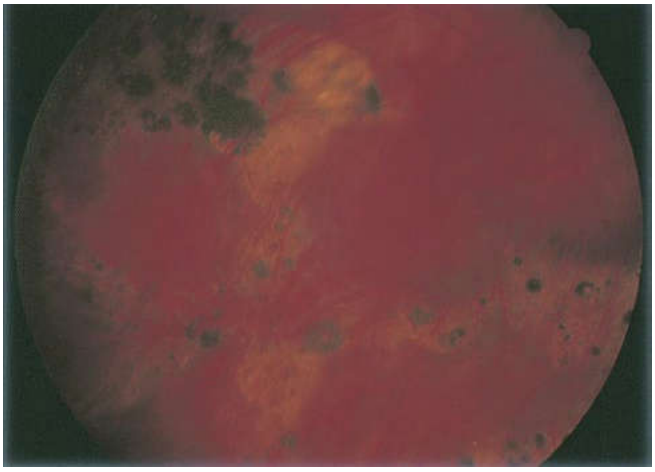
An ophthalmologist diagnoses Stickler syndrome with a physical examination and medical history. A complete eye exam detects the problems associated with the syndrome.

Sometimes, the clear gel that fills the eyeball has an abnormal appearance. This gel is the eye's **vitreous**. The abnormal appearance is visible during an eye exam.

Stickler syndrome cannot be cured, but ophthalmologists can treat eye problems due to the syndrome.

Cataract treatment. Treatment for cataracts in infants varies depending on each patient's condition. Surgery is usually recommended very early in life. Many factors affect this decision, including the infant's health and whether there is a cataract in one or both eyes.

If the child has a cataract in both eyes, it is possible that surgery may be delayed for years. Depending on their severity, it may never become necessary. But if only one eye has a cataract, the infant's visual system can develop abnormally. If left untreated, serious vision problems and even vision loss can result.



With Stickler syndrome, the retina and vitreous can have an abnormal appearance as pigment accumulates and small holes develop in the retina. Without treatment, this can lead to retinal detachment.

Retinal detachment. People with Stickler syndrome have increased risk for detached retina. They should be aware of detached retina symptoms in case they get one. If a detached retina occurs, surgery is necessary to reattach the retina.

Glaucoma. Glaucoma due to Stickler syndrome is commonly treated with medicated eyedrops. Surgery may be needed in some cases.

Nearsightedness. For severe nearsightedness, vision can often be corrected with glasses or contact lenses. Sometimes refractive surgery can help these cases of high myopia as well.

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Summary

Stickler syndrome is a genetic disorder that causes joint, hearing, and vision problems. Children with Stickler syndrome can have eye problems that are more common in older people. These problems include severe nearsightedness, cataracts, glaucoma and retinal detachment.

See an ophthalmologist immediately if someone with Stickler syndrome suddenly notices these signs:

- floaters (small specks, dots, circles, lines or cobwebs in the field of vision)
- flashes (flashing lights or lightning streaks in the field of vision)
- dark shadows in their peripheral (side) vision

Stickler syndrome cannot be cured, but ophthalmologists can treat eye problems due to the syndrome.

If you have any questions about your vision, speak with your ophthalmologist. He or she is committed to protecting your sight.

Get more information about Stickler syndrome from EyeSmart—provided by the American Academy of Ophthalmology—at **aao.org/stickler-syndrome-link**.

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