Eye Lymphoma

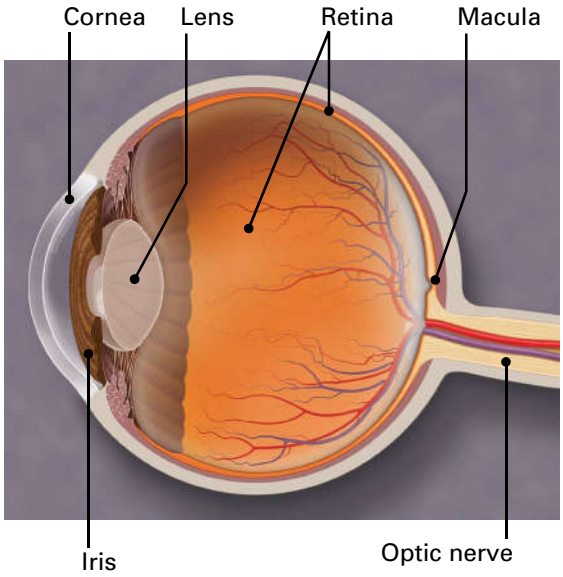
What is eye lymphoma?

Lymphoma is a type of cancer that can affect the eye.

One type of eye cancer is called **primary intraocular lymphoma (PIOL)**. PIOL can develop in the retina and in the vitreous inside the eye. It also affects the optic nerve at the back of the eye.

Eight out of 10 people who have PIOL get it in both eyes. Many people with PIOL also have lymphoma in a part of their brain. This is called primary central nervous system lymphoma.

PIOL is almost always a type of lymphoma called non-Hodgkin's B cell lymphoma. Most people who have it are elderly or have immune system diseases.



Eye Words to Know

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.

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.

Vitreous: Clear, gel-like substance that fills the inside of your eye. The vitreous helps the eye maintain its shape and also transmits light to the retina.

What causes eye lymphoma?

People whose immune systems do not work properly are at risk for getting primary intraocular lymphoma (PIOL).

Some people may have changes in their cells that increase their risk for developing eye cancer.

What are symptoms of eye lymphoma?

The most common symptoms for eye lymphoma include:

- blurry vision
- decrease or loss of vision
- floaters (seeing small dots or lines in your field of vision)
- redness or swelling in the eye
- being extra sensitive to light
- eye pain (though this is rare)

Lymphoma usually affects both eyes, though the symptoms may be more obvious in one eye.

Who is at risk for eye lymphoma?

People at risk for getting eye lymphoma include those who:

- have rheumatoid arthritis or other autoimmune diseases
- have certain medical problems that affect their immune system
- have AIDS (acquired immunodeficiency syndrome)
- are taking certain medications to prevent the body from rejecting a transplanted organ

People without any of these risk factors can still develop eye lymphoma.

How is eye lymphoma diagnosed?

Your ophthalmologist will ask about your symptoms and check your vision and eye movement. The doctor will use an ophthalmoscope—an instrument with a light and a small magnifying lens—to get a good look inside the eye.

Certain imaging tests may be done. These help the ophthalmologist look at the tumor as well as see if the cancer has spread.

A **biopsy** is usually needed. This is where a sample of tissue or cells is taken to be looked at with a microscope and tested. For a biopsy, an ophthalmologist usually does a procedure called a vitrectomy. This is where they insert tiny instruments into the eye and take samples of the jelly-like vitreous.

How is eye lymphoma treated?

Eye lymphoma usually is treated with chemotherapy and external radiation therapy (or sometimes a combination of both).

Chemotherapy is taking medication to kill cancer cells. It can be given directly in the eye, through a vein, or directly into fluid in the spine.

Radiation therapy uses beams of very high energy to shrink tumors and kill cancer cells. Radiation may be targeted only at the affected eye or at both eyes, depending upon where the cancer is.

Radiation therapy may also be targeted to the brain and spinal cord. This can help prevent cancer from spreading there or help destroy hidden cancer cells.

If you have any questions about eye lymphoma, be sure to ask. Your ophthalmologist is committed to protecting your sight.

©2019 American Academy of Ophthalmology
Content last reviewed 03/19

Summary

Eye lymphoma is a type of cancer that can develop in the middle of the eye and in the back of the eye. People who have certain problems with their immune systems are at risk for getting eye lymphoma.

Symptoms of eye lymphoma include blurry vision, loss of vision, and light sensitivity. To help diagnose an eye lymphoma, an ophthalmologist looks inside the eye with an ophthalmoscope. He or she may also take special photographs inside your eye and take a sample of tissue inside your eye to look at in the lab.

If eye lymphoma is found, it is treated with chemotherapy, radiation therapy, or both.

If you have any questions about eye lymphoma, be sure to ask. Your ophthalmologist is committed to protecting your sight.

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

COMPLIMENTS OF:

BRYAN VEKOVIUS, M.D.

OCULOPLASTIC SURGERY AND
NEURO-OPHTHALMOLOGY

450 ASHLEY RIDGE BLVD.
SHREVEPORT, LA 71106

©2019 American Academy of Ophthalmology
Content last reviewed 03/19