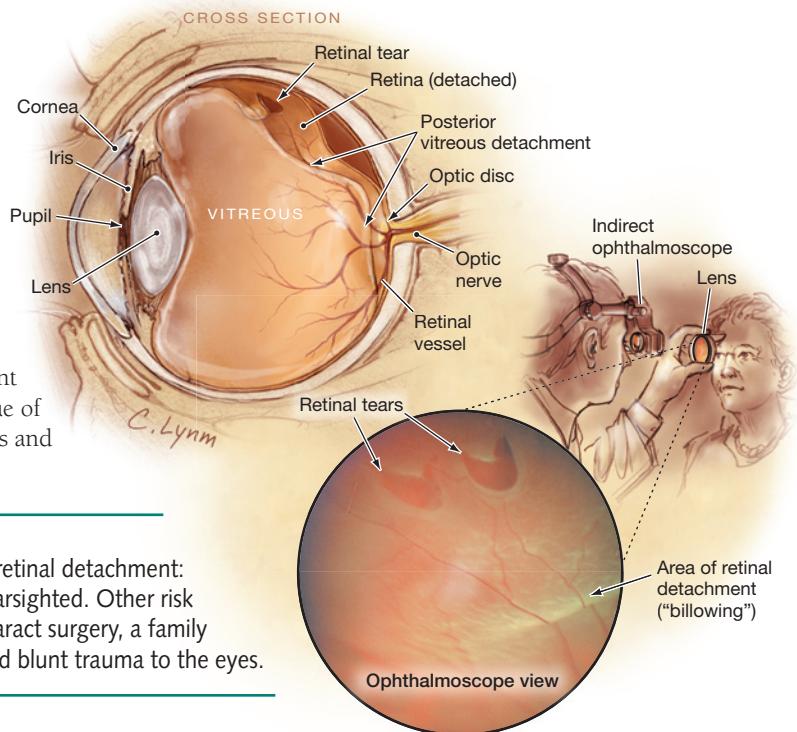


Retinal Detachment

The **retina** is a light-sensitive, transparent tissue located on the back wall of the eye. Light is focused on the retina by the cornea and the lens. The retina then converts the image into neural impulses and sends them to the brain via the **optic nerve** (the nerve connecting the eye to the brain). **Retinal detachment** is the separation of the retina from the tissues underneath it. It is important to distinguish retinal detachment from **posterior vitreous detachment** (when the jelly in the eye peels away from the retina) or a **tear** (the vitreous jelly rips the retina during the process of posterior vitreous detachment). Every year, about 1 to 2 people per 10000 develop retinal detachment. Retinal detachment is a medical emergency. The November 25, 2009, issue of *JAMA* includes an article about eye floaters and flashes and distinguishing symptoms of retinal detachment.

Anatomy of an eye with retinal detachment



RISK FACTORS

Extreme nearsightedness is an important risk factor for retinal detachment: 67% of people who develop retinal detachment are nearsighted. Other risk factors include retinal detachment of the other eye, cataract surgery, a family history of retinal detachment, uncontrolled diabetes, and blunt trauma to the eyes.

SYMPTOMS

Symptoms of retinal detachment include sudden onset or increase of floaters, bright flashes of light, blurred vision, or a shadow or blindness in a part of the visual field in one eye. An increasing area of grayness in one eye ("curtain of darkness") can mean that a retinal tear has progressed to a detached retina. If this happens, the patient should immediately consult an **ophthalmologist** (physician specializing in diseases of the eyes). The goal is to prevent detachment of the **macula** (central region of the retina) because this is the portion of the retina responsible for fine, detailed central vision.

TREATMENT

People with retinal detachment should seek emergency medical attention from an ophthalmologist. Chances of recovering function are greater when the retina is repaired before the macula is detached. Most people with retinal detachment will need surgery to repair it, either immediately or after a short period of time. There are several types of surgery used depending on the severity and type of detachment. Patients with severe cases will need to go to the operating room, although some cases of retinal detachment can be treated with an outpatient procedure. Small holes and tears can be treated with laser surgery or a freeze treatment called **cryopexy**. Once the retina is reattached, vision improves and stabilizes. A person's ability to read with the affected eye after surgery depends on whether the macula was detached, how long it was detached, the severity of the retinal detachment, and the type of treatment performed.

FOR MORE INFORMATION

- National Institutes of Health
www.nei.nih.gov/health/retinaldetach/index.asp
- American Academy of Ophthalmology
one.aao.org

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at www.jama.com. Many are available in English and Spanish.

Sources: National Institutes of Health, American Academy of Ophthalmology

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