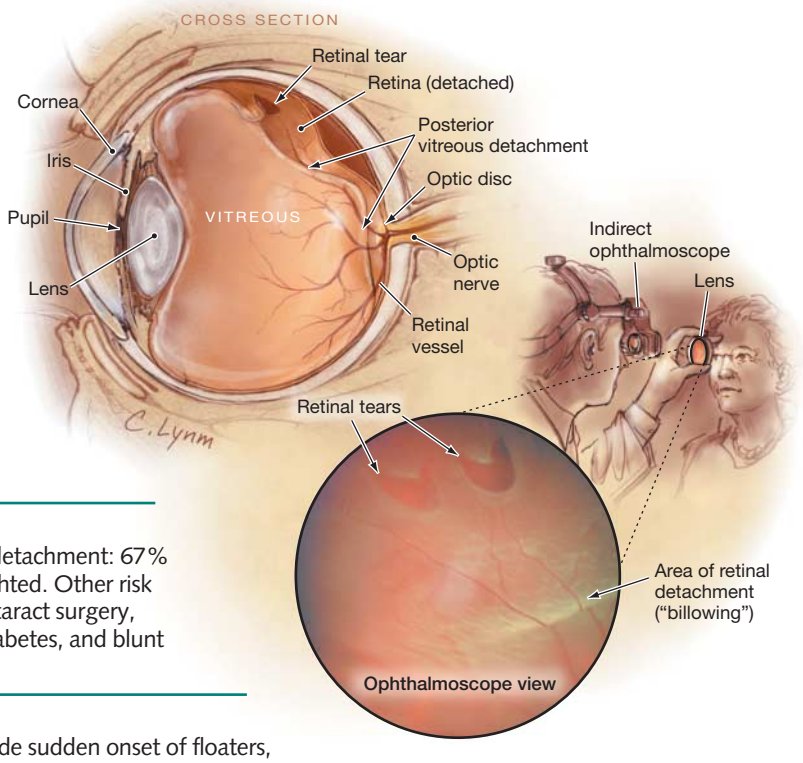
Retinal Detachment

The **retina** is a light-sensitive, transparent tissue located in the back 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** (in which the jelly in the eye peels away from the retina), which is a natural aging process that occurs in many people. Every year, about 1 to 2 people per 10 000 develop retinal detachment. Retinal detachment is a medical emergency. The April 4, 2012, issue of *JAMA* includes an article about the risk of retinal detachment from a type of antibiotic. This Patient Page is based on one previously published in the November 25, 2009, issue of *JAMA*.

Anatomy of an eye with retinal detachment



RISK FACTORS

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

SYMPTOMS

Symptoms of posterior vitreous detachment may include sudden onset of floaters, bright flashes of light, and blurred vision. A small percentage of people with posterior vitreous detachment may develop a retinal tear (the vitreous jelly rips the retina during the process of posterior vitreous detachment), which can progress to a retinal detachment if it is not treated. An increasing area of grayness in one eye ("curtain of darkness") can mean that a retinal tear has progressed to a detached retina. Patients with symptoms of posterior vitreous detachment or retinal detachment should immediately consult an **ophthalmologist** (physician specializing in diseases of the eye). 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

The chances of recovering vision are greater when the retina is repaired before the macula is detached. Most people with retinal detachment need surgery to repair it, either immediately or after a short time. There are several types of surgery used depending on the severity and type of detachment. Patients with tears or small detachments can often be treated in the office with laser surgery, gas bubble injection, or a freeze treatment called **cryopexy**. Patients with more severe retinal detachment need to go to the operating room, where different types of surgery can be performed to reattach the retina. Once the retina is reattached, vision often improves or 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 Eye Institute
  http://www.nei.nih.gov/health/retinaldetach/index.asp
- American Academy of Ophthalmology
  http://one.aao.org

INFORM YOURSELF

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

Sources: National Institutes of Health, American Academy of Ophthalmology

Huan J. Chang, MD, MPH, Writer
Cassio Lynm, MA, Illustrator
Robert M. Golub, MD, Editor

The JAMA Patient Page is a public service of *JAMA*. The information and recommendations appearing on this page are appropriate in most instances, but they are not a substitute for medical diagnosis. For specific information concerning your personal medical condition, *JAMA* suggests that you consult your physician. This page may be photocopied noncommercially by physicians and other health care professionals to share with patients. To purchase bulk reprints, call 312/464-0776.

JAMA COPY FOR YOUR PATIENTS

©2012 American Medical Association. All rights reserved.

Downloaded From: http://jama.jamanetwork.com/ on 07/27/2015