

# Vitreous Separation

The vitreous is a clear, jelly-like material that fills the inside of the eye. With time, pockets of liquid vitreous develop within the jelly-like vitreous. In most people over 40 years of age, the pockets of liquid vitreous join together and move behind the vitreous jelly, which then collapses forward in the eye and separates from the retina (the inner lining of the eye). This separation of the vitreous from the retina is called a ***vitreous separation*** or a ***posterior vitreous separation***. Vitreous separation is a normal aging process that develops in most eyes. It is especially likely to occur after cataract surgery. It may develop in younger patients if their eyes have been injured or are nearsighted.

Separation of the vitreous from the retina often causes symptoms of ***floaters*** (small specks, dots, spots, cobwebs, or threads that move in the field of vision) and/or ***light flashes*** (flashes of light or light streaks seen in the dark, usually with eye movement). Floaters are often visible when a person looks at a plain background, such as a blank wall or blue sky. Vitreous floaters are cells, particles, or condensations of the vitreous jelly. Although they appear to be in front of the eye, they are actually floating in the vitreous inside

the eye and are seen as they cast shadows on the retina. Although it is common for persons of all ages to note a floater occasionally, floaters usually become larger, more numerous, and/or more noticeable when a vitreous separation develops.

Floaters may sometimes interfere with clear vision, especially while a person is reading, and can be annoying. If a floater appears in your line of vision, it is best to move your eye around to allow the floater to move out of the way.

Flashes develop because the vitreous pulls on the part of the retina to which it is still attached, producing a change that is interpreted by the brain as a light flash, although no light is present.

Vitreous separation and its symptoms usually do not affect vision and are considered harmless. However, they may indicate the development of more serious complications—retinal tears, retinal detachment, or vitreous hemorrhage. Retinal tears develop in 8% to 15% of eyes after vitreous separation. They occur when part of the vitreous is tightly bound to the retina. When the vitreous separates from the retina, the retina that is bound to it pulls away from the eyewall and then tears.

Once a retinal tear occurs, it must be treated promptly with laser or freezing procedures to prevent a retinal detachment. A retinal detachment usually requires surgical repair and may cause blindness. A hemorrhage in the vitreous usually causes hundreds of tiny specks or floaters. Such a hemorrhage results from tearing of a retinal blood vessel when the vitreous separates from the retina. Retinal hemorrhages may also develop, but these usually resolve in several weeks and do not affect vision.

A vitreous separation is a dynamic process. The vitreous separates from the retina over a period of weeks or months. However, most retinal tears develop during the first few days after the vitreous begins to separate and the symptoms begin. It is important to see an ophthalmologist as soon as symptoms develop, so that treatment, if necessary, can be performed promptly.

Late retinal tears can develop up to 12 months after the start of a vitreous separation. Usually, these new tears are accompanied by worsening of the floaters and light flashes—they become

more numerous, more bothersome, or larger. If your floaters or flashes become worse, please call the office promptly to schedule a visit within several days. Again, early detection is important to prevent the sight-threatening complications of retinal detachment.

After vitreous separation has occurred in one eye, it is very likely to develop in the other eye, usually within 2 years of involvement of the first eye. Usually, the second eye responds to the vitreous separation in the same manner as did the first eye. If the first eye had no retinal tears, the second probably will not develop retinal tears. If the first eye had retinal tears, the second probably will develop retinal tears. Therefore, in anyone who has had a retinal tear due to vitreous separation in one eye, the development of new floaters, cobwebs, or light flashes in the other eye is a warning that vitreous separation and possibly a retinal tear may have developed. If you develop any new symptoms, please call the office promptly to schedule a visit.

## Retina Associates

OF CLEVELAND, INC.

*...Quality retinal care you can trust*

**[www.retina-doctors.com](http://www.retina-doctors.com) ♦ 800-4RETINA**

Lawrence J. Singerman, MD  
Z. Nicholas Zakov, MD  
Joseph M. Coney, MD

Michael A. Novak, MD  
Scott D. Pendergast, MD

Hernando Zegarra, MD  
David G. Miller, MD  
Jerome P. Schartman, MD

3401 Enterprise Parkway #300  
Beachwood, OH 44122  
216-831-5700

14601 Detroit Avenue #200  
Lakewood, OH 44107  
216-221-2878

15299 Bagley Road #200  
Middleburg Hts, OH 44130  
440-663-0022

5390 Belmont Avenue  
Youngstown, OH 44505  
330-759-8777

1 Park West Boulevard #150  
Akron, OH 44320  
330-869-0738

3919 E. Market Street  
Warren, OH 44484  
330-856-2238

9485 Mentor Avenue #211  
Mentor, OH 44060  
440-205-4444

6100 S. Broadway Avenue #200  
Lorain, OH 44053  
440-233-6100