

Phone: (614)-339-8500 Toll Free: (866)-373-8462 Sugat S. Patel, M.D.
Louis J. Chorich III, M.D.
Dino D. Klisovic, M.D.
Lisa M. Borkowski, M.D.
Dominic M. Buzzacco, M.D.
Johnstone Kim, M.D.

Retinal Tear Information

What is a retinal tear and what causes it to happen?

The eye is like a camera, with lenses in the front and film in the back. The film in the back is called the retina. It lines the back three guarters of the eye such as an inner tube lines the inside of a tire. The middle of the eye is filled with a jelly-like material called vitreous. In childhood, this is very thick like Jell-O™, but after about the age of 20 years, the gel becomes thin and watery. Eventually in many people, the thicker back skin of the vitreous peels away from the retinal surface. This is called a **Posterior** Vitreous Detachment or PVD, and should not be confused with the much more serious retinal detachment. The PVD causes the normally clear fibrous strands in the gel to clump together, casting noticeable shadows known as floaters. The skin can also pull on the retina, stimulating the photoreceptor cells and causing a sensation of flashing lights. Sometimes the gel pulls hard enough on the retina to cause a tear. This is important to detect and treat, because fluid can leak from the center of the eye, through the tear, and under the retina, causing a retinal detachment, and potentially severe vision loss.

How are retinal tears diagnosed?

Vitreous detachment from the back of the eye often, but not always, causes symptoms of light flashes and floaters in the vision. When this happens, it is important to examine the retina for possible tears. This is done using an eye examination including drops to dilate the pupils and often special techniques to better visualize the outer, front edge of the retina. This can sometimes be done by the primary eye doctor, but on occasion is done by a retinal specialist.

How are retinal tears treated?

If caught early, retinal tears can be treated before retinal detachment has had a chance to develop. This is done using laser surgery or a freezing treatment called cryopexy to literally "spot-weld" the retina around the tear in order to prevent vitreous fluid from leaking through the tear and under the retina. Laser surgery involves focusing very bright green or red laser light on the retina surrounding the tear. This cauterizes the area, resulting in scar tissue that does not affect vision, but does effectively reseal the tear. Retinal cryosurgery does the same thing using a pencil-like instrument that makes a freeze mark on the outside of the eye, adjacent to the tear, which penetrates through and seals the area.

How do I know if the treatment is working?

Laser or Cryo surgery does not alleviate the floaters or the flashing lights. These symptoms are caused by the clumps in the vitreous and tugging on the retina, both of which will still be present following treatment. These symptoms usually subside slowly for several weeks following their onset. Treatment is done to prevent retinal detachment. If there are any new symptoms, such as a sudden shower of new floaters, new or worsening light flashes, or a curtain or shadow coming over the vision from any direction, then this could be an indication of new tears or a retinal detachment developing in spite of the previous treatment. Such symptoms should be reported immediately.

What is the long-term outlook?

Retinal tears usually occur around the time of a posterior vitreous detachment. Once a tear is treated, further problems and additional retinal tears are quite unusual. You doctor may want to re-examine your eye a few weeks after the initial vitreous detachment, and certainly after treatment of a tear. We will discuss your individual circumstances with you.

Main Office: 6655 Post Road Dublin, Ohio 43016 East Office: 150 Taylor Station Road Columbus, Ohio 43213 Lancaster Office: 618 Pleasantville Road Lancaster Ohio 43130 Mount Vernon Office: 1355 Yauger Rd Mount Vernon, OH 43050

Arena Office (Eye Center): 262 Neil Avenue Columbus, Ohio 43215

Chillicothe Office: 159 E. Second Street Chillicothe, OH 45601 Mansfield Office: 466 South Trimble Rd Mansfield, Ohio 44906 Zanesville Office: 2935 Maple Avenue Zanesville, Ohio 43701