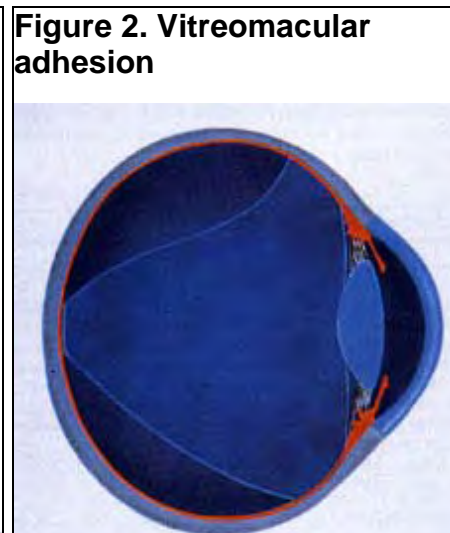
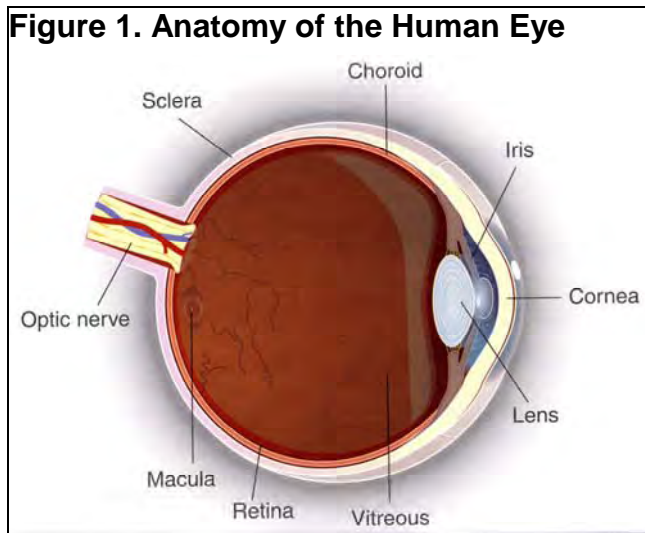


# What You Should Know About Vitreomacular Traction Syndrome (VMT) and Vitreopapillary Traction Syndrome (VPT)

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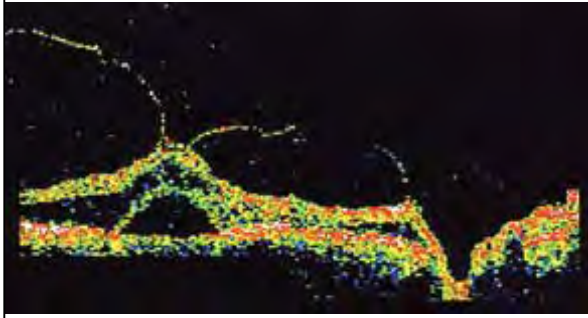
The eye is filled by a vitreous gel that is attached to the neural lining of the back of the eye, the retina, and to the optic disk. The optic disk connects the retina to the brain. Figure 1 shows these normal structures. With aging, the vitreous gel liquefies and separates from the retina and optic nerve. This is called a posterior vitreous detachment. Sometimes a part of the vitreous gel does not liquefy and detach from the retina. When this occurs, the site of residual attachment is often the macula, the central part of the retina that subserves reading and detailed vision. The tugging that occurs between the detached vitreous fibers and the attached area of vitreous gel can cause retinal swelling, fluid collection under the retina, and scar tissue growth on the surface of the retina, any of which can produce blurring and distortion of vision. Figure 2 shows the situation in this so-called vitreomacular traction syndrome. A type of imaging of the retina called OCT can show the tractional forces on the macula and any secondary cysts and fluid pockets (fig 3).



## What Can Be Done for VMT and VPT Syndromes?

Although the vitreous attachment to the macula or optic disk can spontaneously release, this occurs in less than 5% of cases. Usually, in severely symptomatic situations, an operation called vitrectomy is performed. In this operation, three small holes about 1 mm in diameter are made in the sclera near the intersection with the cornea. Through these holes, delicate instruments are introduced under microscopic control and the vitreous gel and abnormal adhesions of the gel to the retina or optic disk are removed.

**Figure 3. OCT of Vitreous Traction**



### **Possible Accompanying Problems**

If scar tissue accompanies VMT or VPT, it can be removed at the time of vitrectomy. Occasionally the lens of the eye is cloudy, which is called a cataract. It is possible to remove a cataract simultaneously with vitrectomy surgery, or that may be done in a separate procedure. Vitrectomy surgery will often

accelerate cataract formation. Even if cataract surgery is not necessary at the time of vitrectomy, it is common to require cataract surgery within the ensuing one to two years. It is unusual for visual acuity to recover to 20/20 after a vitrectomy, although occasionally a result that good may occur. More commonly, there is some residual visual distortion or blurring. In 75 – 80% of cases, patients will say that their post-operative visual acuity is improved.

### **What Happens If Vitrectomy is Not Done?**

Without surgery, persistent traction can produce cystic damage to the retina and eventually cellular death. Although VMT and VPT never cause blindness, it is possible for loss of reading vision to occur.

### **Final Comments**

VMT and VPT may produce only mild blurring, and such cases simply bear periodic monitoring. If progressive visual decline is documented, vitrectomy surgery is usually a better option than continued observation.

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