

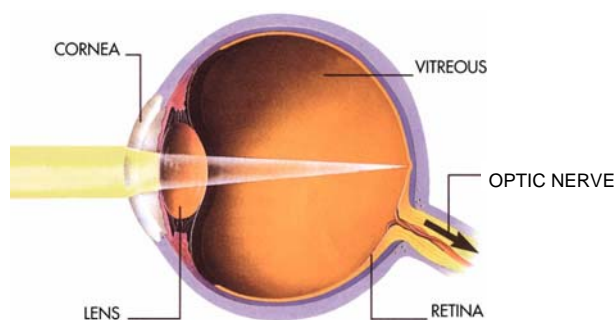


EPIRETINAL MEMBRANE

Macular pucker or epiretinal membrane (ERM) are two terms for a common disorder of the central retina which leads to symptoms of

distortion and central blur. An ERM is excessive scar tissue on the surface of the retina. Most eyes with ERM are without symptoms

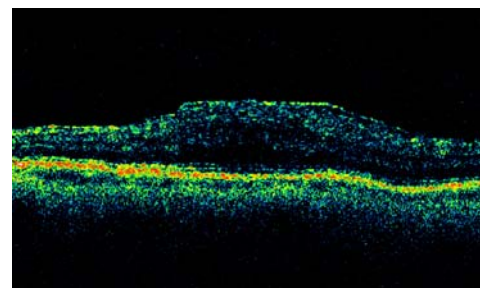
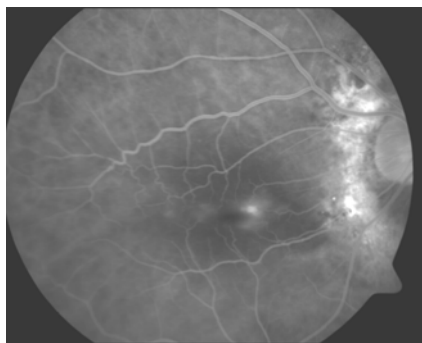
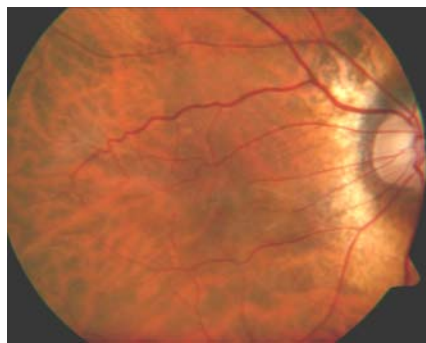
HOW THE EYE WORKS



The eye works like a camera. The lens and cornea focus light rays into the back of the eye. The retina works like the photographic film in a camera. The macula is part of the central retina, with which we see fine details and color.

Arteries bring blood to the retina. Veins take blood away from the retina. The main vessel which leads from the retina through the optic nerve to the heart is the central retinal vein.

HOW AN EPIRETINAL MEMBRANE DEVELOPS



The vitreous shrinks as we get older, and finally separates from the retina. As it peels away from the retina, it roughs up the surface of the macula. In response, the retina sends out reparative cells to smooth over its surface, like a scab forming over a scraped knee. However, the scar tissue may develop into a permanent structure that does not peel away. If it affects the central retina, it will affect central vision. Most eyes do not require surgery. If vision is poor enough, vitrectomy with membrane peeling may improve vision in 75-85% of patients. Surgery can be performed when vision is 20/50-20/70 or worse.

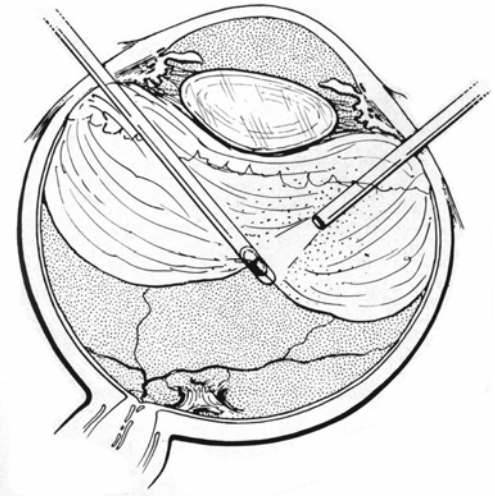
The ERM may appear transparent, or as a dense white plaque. It may wrinkle the retina or induce swelling of the macula, or central retina. Fluorescein angiography may be performed to assess the possible causes of the membrane, and to determine specific characteristics. If left untreated, an ERM does not cause blindness. However, once central vision is significantly affected, it rarely improves spontaneously. Fine reading vision may worsen.

If the ERM is the result of previous retinal detachment, central vision may be limited by prior macular detachment. Macular degeneration, cataract, or pre-existing ocular pathology may also limit final visual acuity after surgery.

VITRECTOMY FOR EPIRETINAL MEMBRANE

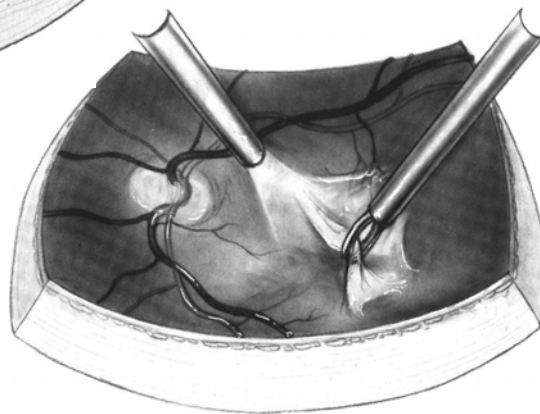
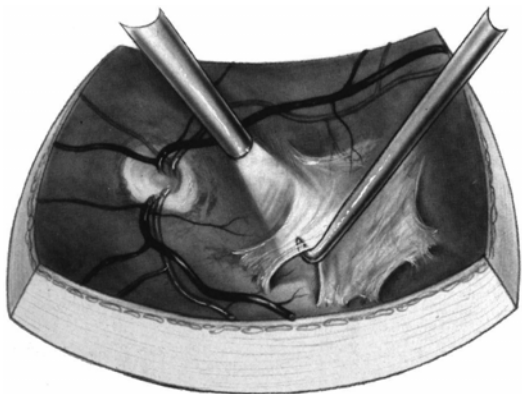
Vitrectomy is the surgical removal of the gel in the eye, or vitreous. A bent needle or pic is used to elevate an edge of the ERM, and micro-forceps then peel the scar tissue away from the retina. The gel is replaced with clear sterile saline. This is an outpatient procedure that usually takes 35 to 60 minutes. Surgery is most often done under local anesthesia, but can be done under general anesthesia as well. You may go home the same day as surgery.

After vitrectomy, you may feel the self-absorbing sutures for about 4 weeks. Glasses may be prescribed about 3 months after surgery to obtain the best acuity. Vitrectomy with membrane peeling can lead to visual



improvement in 75-90% of eyes with enough distortion and blur to warrant surgery. The average postoperative acuity is half way between preoperative vision and 20/20. It takes about 3 months for vision to improve, but may continue for a year after surgery.

It is important to consider that postoperative vision may not be perfect, but 90% of eyes that undergo this surgery have a decrease in distortion. Eyes that have had a prior retinal detachment in the macula are less likely to have return of fine vision.



COMPLICATIONS OF VITREOUS SURGERY

Any time surgery is done, there may be rare complications. With this surgery, they include but are not limited to bleeding, infection, retinal tear, and retinal detachment. All these are very rare, and are listed not to scare you away from surgery, but to let you know that any time we do

any surgery there are potential complications.

More commonly, cataract may advance at a faster pace following vitrectomy. Vision may improve 3 months after vitrectomy, then blur from cataract. This generally takes months to years and will respond to surgery.