## **Epiretinal Membrane (Macular Pucker)**

Epiretinal membrane (ERM), also known as macular pucker or cellophane maculopathy, is a common disorder of the central retina (macula) which may cause a central blur or distortion in the vision. An ERM is a layer of scar-like tissue on the surface of the retina. Most eyes with ERM are asymptomatic, but ERMs may require intervention if the vision is significantly affected due to distortion or lack of clarity.

## Why does an epiretinal membrane develop?

In some cases, an epiretinal membrane develops as a response to injury or swelling in the eye. An ERM may form after a retinal tear or detachment, after cataract surgery, or after swelling in the eye from a variety of diseases such as diabetes or uveitis. However, in most cases there is no identifiable cause of the epiretinal membrane.

## **Evaluation of an epiretinal membrane**

A visually significant ERM is usually first identified on clinical examination of the eye. An ERM may cause only a slight wrinkle in the retina, or it may pull on the retina and cause swelling or distortion with decreased vision. Imaging tests such as optical coherence tomography (OCT) and fluorescein angiography (FA) can be helpful in demonstrating the degree to which an ERM is distorting or damaging the underlying retina.



## Micro-incisional / sutureless vitrectomy surgery for epiretinal membrane

*Micro-incisional* / sutureless vitrectomy is the surgical removal of the gel in the eye, or vitreous. Membrane peeling, or removal of the scar tissue, is then performed using microscopic instruments such as picks and forceps. Vitrectomy with membrane peeling is an outpatient procedure that usually takes less than an hour. Surgery is most often performed under local anesthesia, but can be done under general anesthesia as well.

Visual improvement after surgery for epiretinal membrane is gradual, since the retina does not immediately snap back into its normal configuration after surgery. Significant visual improvement is usually seen by 6-8 weeks after surgery, but vision may continue to improve for 6 months or more.

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 is important to consider that postoperative vision may not be perfect, but most 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.

Rare complications after vitrectomy surgery include bleeding, infection, retinal tear and retinal detachment. These complications occur in 1 out of several thousand patients. More commonly, cataract may advance at a faster pace following vitrectomy. Patients who have not previously undergone cataract surgery should expect to need cataract surgery within 1-2 years of vitrectomy surgery.

Bay Area Retina Associates is a group practice of retinal surgeons. All members of the group are board certified by the American Academy of Ophthalmology and have completed fellowship training in vitreoretinal surgery. BARA surgeons have expertise in the treatment of retinal detachment, diabetic retinopathy, age-related macular degeneration, macular hole, epiretinal membrane, and retinal vascular disease. BARA physicians see patients in eight offices and perform surgery at several hospitals and surgery centers around the East Bay.



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