

Epiretinal Membrane

You or someone you know may have been diagnosed as having an epiretinal membrane. The name of this condition has many synonyms, including macular pucker, preretinal fibrosis, surface wrinkle retinopathy, as well as others. This disorder usually causes blurred and distorted vision. We have prepared the following explanation to help you understand this condition better.

How the eye works

Before we can explain about the condition, it is important to understand how the eye works when it is working properly.

What is an epiretinal membrane?

A thin layer of tissue (membrane) may grow over the surface of the retina (epi-retinal). This tissue is often referred to as scar tissue because the tissue forms as an abnormal healing response in the eye. Epiretinal membranes may occur in conjunction with other eye problems such as retinal detachment, problems with retinal blood vessels, or eye injury. Most epiretinal membranes, however, occur in an otherwise healthy eye, and are not associated with any other problem in your body.

Epiretinal membranes may cause many visual symptoms. As the epiretinal membrane contracts, it causes the retina to become distorted or wrinkled thereby disturbing the patient's vision. Visual symptoms may vary from very mild symptoms to very severe symptoms. Patients may experience blurred vision or loss of central acuity. Patients may also experience distorted vision in which straight lines appear to be bent or curved; or objects appear to be distorted in shape and form. Rarely, epiretinal membranes can damage the retina so severely that the patient can almost lose central vision and only see with their peripheral vision.

Diagnosis of epiretinal membranes

Your ophthalmologist can detect an epiretinal membrane by examining your retina. Sometimes photographs are taken to monitor the stability or progression of an epiretinal membrane. A photographic test called the fluorescein angiogram may be done in order to determine the extent of the damage on the underlying retina.

A fluorescein angiogram is a test where sodium fluorescein dye is injected into the veins of your hand or arm and a series of photographs are taken of your retina. The dye is not x-ray dye, and no x-rays are taken. Rather the dye is a photographic dye and only photographs are taken. The fluorescein angiogram allows the physician to evaluate the

blood vessels in the retina as well as the retinal layer and the layer underneath the retina. Patients who undergo a fluorescein angiogram often get a mild yellow discoloration of their skin. The fluorescein dye is eliminated from the patient's body through the urine, which is discolored for up to 24 hours following the test. The test is generally safe, however, rarely problems, such as allergies to the medication, can occur. Patients who are allergic to x-ray dye are not necessarily allergic to sodium fluorescein.

Treatment of epiretinal membrane

The only treatment of epiretinal membranes is surgery to remove the membrane. If your symptoms are mild, surgery is usually not necessary. Strengthening your bifocals or using a magnifier may improve your near vision, if both eyes are involved. If your symptoms are significant, then an operation called a **vitreectomy** is performed to remove the membrane. This surgery is usually performed as an outpatient procedure with a local sedation form of anesthesia. During the surgery, the retina specialist uses tiny instruments to remove the vitreous jelly from the central cavity of the eye and subsequently remove the membrane which is wrinkling the macula. Usually the macula flattens out and the symptoms slowly improve. The majority of patients get improvement of vision following the operation. Vision does not usually return all the way to normal, however, and you may be left with some distortion in your vision, as well as reduced acuity.

If you have not already had cataract surgery, a cataract (clouding of the eye's lens) may develop within a few years after the vitrectomy operation for your epiretinal membrane. Other complications of vitreous surgery are uncommon, but may include infection, retinal detachment, bleeding, and recurrence of the epiretinal membrane.

Following surgery, most patients go home and are seen on the next day. Most patients wear an eye patch for comfort over the next 3 to 4 days. Most patients return to their normal activities after one week. If you exercise frequently or are involved in other vigorous athletic activity, you should discuss with your doctor how quickly you can return to these activities. In a small percentage of patients, the surgeon will replace the vitreous jelly with a small air bubble to help with healing of the eye; these patients may need to limit their activities for up to 1 week following the surgery and possibly even hold their head in special positions to allow for the best healing of the eye.

After the surgery many patients note some improvement of vision within 2 to 3 weeks. The vision often continues to improve for 6 to 12 months following the surgery. Your physician will inform you if and when you need a change in your glasses or if you have developed a cataract which is sufficiently severe to require cataract surgery. Any

cataract surgery will usually be performed by the ophthalmologist who sent you to the retina specialist.

Surgery is not necessary for everyone who has an epiretinal membrane. Many people have mildly blurred vision and are not bothered by their symptoms enough to need surgery. A retina specialist can help you decide if the surgery is necessary, as well as how likely it would be for you to get improvement following the surgery.