Patient Information:
Epiretinal Membrane

Overview:
An epiretinal membrane (ERM) is a thin “film” of scar tissue that causes wrinkling (or puckering) of the retina and can lead to inflammation and swelling within the retina. When this occurs in the macula—the part of the retina responsible for central vision—it is called a macular pucker.

Epiretinal membranes form when cells not normally found on the retina begin to grow and proliferate (causing the scar tissue). A wide variety of eye conditions can lead to the formation of an epiretinal membrane, though in some cases the cause is not apparent.

Age is the biggest risk factor for developing an ERM. A recent study showed that the prevalence of ERMs in the United States was around 4% in people under 60 years old, and around 14% in people over 60 years old. Patients with any of the following eye conditions are at an increased risk of forming an Epiretinal Membrane; Posterior Vitreous Detachment (PVD), retinal tear, recent eye surgery, diabetes, vein Occlusions, recent trauma to the eye, or inflammatory eye conditions.

How can the doctor determine the extent of my Epiretinal Membrane?
The doctor will perform a dilated exam using a slit lamp to determine the extent of the membrane and its effect on the macula. To check the outer retina, the doctor will use an indirect ophthalmoscope. Since inflammation and swelling of the retina are frequently present in a patient with an epiretinal membrane, the doctor may order several tests.

What tests are performed?
Testing is important because it helps the doctor to precisely document the epiretinal membrane, check for swelling, and measure changes that occur. The three types of tests described below are performed in our clinic.

- **Optical Coherence Tomography (OCT)** is a high definition image of the retina taken by a scanning ophthalmoscope with a resolution of 5 microns. These images can determine the presence of swelling by measuring the thickness of your retina. The doctor will use OCT images to objectively document the progress of the disease throughout the course of your treatment.

- **Fundus Photography** is an image taken by a digital fundus camera to document the vein occlusion in the retina.

- **Fluorescein Angiography** is a test that documents blood circulation in the retina using fluorescein dye which luminesces under blue light. Fluorescein is injected into a vein in your arm and digital fundus pictures are taken afterwards for 10 minutes. These pictures show the extent of the membrane and the presence of leakage from blood vessels that may have been damaged by the membrane.

What are the symptoms?
Some patients may have no symptoms; however, most patients complain of one or more of the following symptoms:

1. Blurry vision
2. Slowly decreasing vision
3. Mild distortions
4. Central flashes
5. Double vision
6. Objects appear slightly larger than normal

What treatments are available?
Most epiretinal membranes stay the same size or continue to grow, and only rarely do they resolve on their own. It is important to get regular check-ups because the progress and speed at which the membrane grows is impossible to predict.

1. When an epiretinal membrane is small, only observation is required to track changes in the membrane and its effect on vision.
2. Surgical intervention is necessary if an epiretinal membrane gets large enough to cause significant changes in vision and/or quality of life.

Studies have shown membranes removed from eyes with a visual acuity of 20/50 or better have a much greater chance of regaining 3 to 4 lines of vision. If an epiretinal membrane progresses too far, even surgery will do little to bring vision back.

What is my follow up care?
There is no known way to prevent the formation of an epiretinal membrane, or slow the growth of the membrane (if it is growing). Return visits with us are recommended to monitor your disease progress. It is important to detect changes in your condition and formulate treatment plans as needed.