**Epiretinal Membrane**

**The macula**
The macula is a small area in the central part of the retina. It contains large number of light-sensitive nerve cells hence allows us to see fine details clearly and perform activities such as reading and watching television. Without a healthy macula, we simply will not be able to see clearly; the central vision may be affected by blurriness, dark areas or image distortion.

**What is epiretinal membrane?**
Epiretinal membrane is a membrane growing on the surface of the macula. It can cause wrinkles, folds and distortion of the macula.

![Normal eye](image1.jpg) ![Epiretinal membrane](image2.jpg)

**What causes epiretinal membrane?**
Eye conditions causing epiretinal membrane include:

1. Ageing (most common)
2. After Cataract Operation
3. Retinal tear or retinal detachment
4. After retinal cryo or laser therapy
5. Diabetes retinopathy
6. Retinal vascular diseases
7. Inflammation involving the posterior part of the eye
8. Eye trauma, etc.
What are the symptoms of epiretinal membrane?

Early stage of epiretinal membrane may be asymptomatic. When the disease progresses, symptoms can range from mild to severe. Both eyes are involved in 20% of patients. Symptoms include:

1. Blurred central visual, especially when you read or perform detailed task
2. Distorted of wavy vision
3. Decreased or increased size of image
4. Double image

How is epiretinal membrane detected?

Epiretinal membrane can be detected by examining the retina through dilated pupils. Your doctor may perform Optical Coherent Tomography (an eye scan using light beam to detect the structure and thickness of the retina) or Fundus Fluorescein angiography (a procedure that takes special photographs of the back of the eye after injecting fluorescein) in order to gather more details for the severity of your disease.

How is epiretinal membrane treated?

For patient with no or mild symptoms, no treatment may be necessary. Eyedrops, medicines or laser therapy do not improve vision.

For patients with moderate to severe visual loss or visual distortion, a surgery called vitrectomy is recommended. During surgery, your eye doctor uses micro instrument to remove part of the vitreous and the membrane on your macula. After the membrane is removed, the macula can become more normal and vision can improve slowly in most of the patient, although most patients will not return entirely to normal.

Figures showing Optical Coherence Tomography before and after surgery

What are the risks of surgery?

The most common risk following macular surgery is an increased rate of cataract development. In most patients, cataract can progress sooner or later. Your doctor can decide to perform cataract removal operation simultaneous with the macular surgery or afterwards. Other less common complications include infection, bleeding, retinal detachment and recurrence of the epiretinal membrane.

How successful is the surgery?

Discuss vision recovery with your doctor before your surgery. Vision improvement varies from patient to patient. Patient having mild epiretinal membrane for shorter duration have a better chance of visual recovery. Generally speaking, majority of patients will get some improvement in vision and a reduction in image distortion.