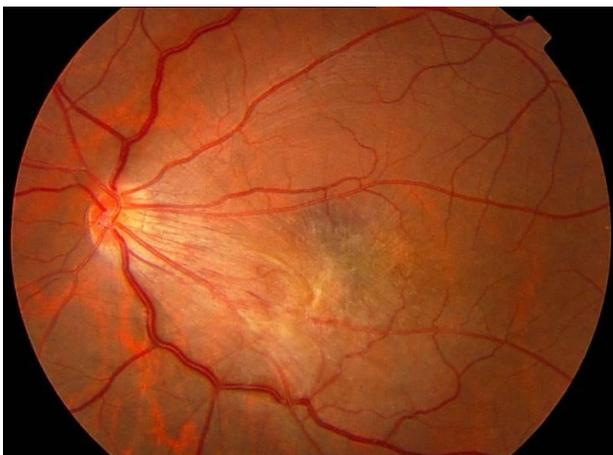


ADELAIDE EYE AND RETINA CENTRE

Macular pucker/Epiretinal membrane information sheet

Macula is the central area in the retina, responsible for central, sharp vision. Macular pucker or epiretinal membrane is caused due to scar tissue formation on the surface of the macula. It is also known as cellophane maculopathy or premacular fibrosis.

To maintain the contour, the eye ball is filled with a jelly like substance known as the vitreous. The vitreous is attached firmly to some parts of the retina including the macula. As the age advances, the vitreous jelly liquefies and shrinks towards the front of the eye leading to its separation from the areas of attachment on the retina. This can lead to appearance of some floating structures like cobwebs in front of the eye. This also causes damage to the surface of the retina which leads to migration of cells for healing of the damaged areas. The migration of cells forms a membrane over the damaged area as a part of the healing process which, once the damage is rectified, starts contracting and wrinkling leading to disturbances of vision.



The most common cause of epiretinal membrane formation is separation of vitreous from the retina, also known as the posterior vitreous detachment.

The other causes are:

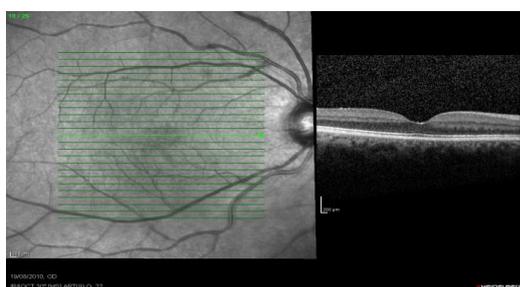
Disorders of retinal blood vessels

Severe trauma to the eye

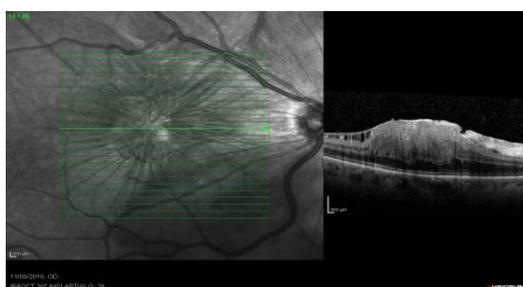
Inflammation of the retina

Retinal detachment.

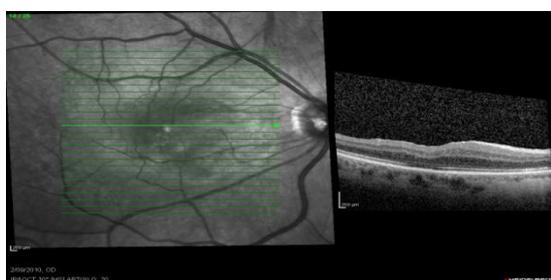
The patients with the epiretinal membrane characteristically complain of decreased vision for distant and near associated with some distortion in the form of wavy lines. It could affect one eye or both eyes. It can easily be diagnosed by an ophthalmologist by performing thorough ophthalmoscopic examination after dilating the pupils with eye drops. Also to confirm the extent of the membrane and to know if there is any associated swelling of the retina, an eye scan called the OCT (Ocular Coherence Tomography)



Normal macular oct



OCT showing epiretinal membrane



OCT post operatively

It may also be necessary for a FFA (Fundus fluorescein angiogram) for further information. These entire tests along with patient's visual assessment give the ophthalmologist an idea as to whether the patient needs surgery or not.

Some patients have a very thin transparent epiretinal membrane with minimal wrinkling and can be treated with magnifiers to improve the near vision.

The only treatment for the epiretinal membrane is to remove it surgically by performing vitrectomy surgery. This is only indicated if the visual disturbance is affecting the daily activities like reading, driving etc or if

there is associated macular swelling and leakage which, if not treated, can lead to permanent loss of vision.

As with any surgery, there are some risks involved with epiretinal membrane peel such as infection, loss of vision, bleed, cataract, further surgery, retinal detachment, increased pressure in the eye, regrowth of membrane, slow recovery.

If gas injected posturing will be required, an injection of Kenacort at the time of surgery may also be necessary.

Regular follow-up and complete eye examination is important for patients with high risk and those who have been diagnosed to have the epiretinal membrane. Hence it is recommended to have routine eye check up so that the disease can be treated at the earliest.