ALBERTA RETINA CONSULTANTS

Excellence in patient care, research and teaching

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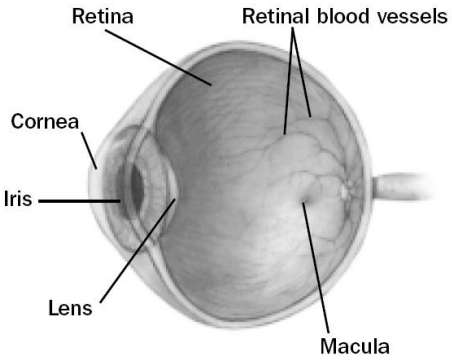
What is an Epiretinal Membrane (ERM)?

An epiretinal membrane (also known as a macular pucker or cellophane maculopathy) is a condensation of a fibrous "membrane" on the surface of the macula. The "macula" is the center of the retina where the highest visual acuity is obtained. The membrane causes the surface of the macula to become wrinkled and more opaque, like a layer of plastic wrap over a camera film. The cause of the membrane is a change in the vitreous in the eye. The vitreous is a jelly-like substance which fills the central cavity of the eye. The vitreous gel shrinks with age in most people. As the vitreous shrinks, it pulls away from the retina (A posterior vitreous detachment or PVD). Usually this occurs without consequence. In some people the vitreous does not completely pull away and continues to contract, (like a scar will contract and close). Visual acuity decreases to a level depending on how distorted the macular surface becomes. Some patients will have minimal vision distortion; others may have severe loss to the level of legal blindness. Sometimes even though the vision reading the eye chart may be quite good, the vision will still functionally be very poor due to distortion (straight lines appear bent, wrinkled). The decision on trying to repair the membrane depends on how poor the vision is, usually on whether or not you can read with that eye alone (i.e. Cover your good eye).



What can be done for an epiretinal membrane?

When the vision is felt to be affected badly enough we perform a surgical procedure that involves removing the vitreous gel and associated epiretinal membrane from the eye so that it is no longer pulling on and distorting the macula.

The vitreous gel is replaced with a special saline fluid and gradually your body replaces it with naturally produced fluid. Sometimes your doctor will decide to replace the vitreous with an air bubble to help flatten the retina.

Three tiny incisions are made into the eye to perform the surgery and in most cases these incisions self heal.

What will I expect after surgery?

There is usually very little pain. Your eye will feel itchy and scratchy for the first few days. You will be putting eye drops in it for 2 – 5 weeks, and wearing an eye patch for about 3 days. It is common for patients to experience mild irritation for a few days after surgery, but severe pain is an indication to call your surgeon immediately. The eyelids are usually swollen for the first couple of weeks, but this gradually resolves thereafter. The patch is only for comfort and can usually be discontinued after 3 or 4 days. It is a good idea to continue using the shield to protect your eye while sleeping

for about 2 weeks. If you have increasing pain or significant worsening in your vision you should call the office.

What are the risks of the procedure?

There are always risks associated with surgical procedures. A retinal detachment occurs in about 1-3% of patients but is usually treatable with further surgery, often with little or no adverse effect on your final vision. The intraocular pressure is transiently elevated in about 20% of patients. This is usually well controlled with eye drops and temporary. However, the inconvenience of additional office visits or medical therapies may be necessary. The most severe complications occur less frequently: the risk of severe hemorrhage, infection, irreparable retinal detachment or complications from anesthesia occurs in approximately one in several thousand cases (similar to risk of dying in a severe car accident). These complications could result in irreversible blindness. Rarely double vision or eyelid droop may develop and need to be repaired with further surgery.

The most common side effect of epiretinal membrane surgery is cataract development. Really, a cataract is a side effect of vitrectomy surgery, regardless of the underlying diagnosis. It begins to develop in almost all patients by 6 to 1 2 months after surgery. It usually becomes severe enough to require removal, but not always. If necessary, it can be surgically removed in the future, and if indicated, an intraocular lens can be implanted. There is a risk of a retinal detachment during cataract surgery. However, the risk of retinal detachment after cataract surgery is considered to be less than 1 %. Patients with a retinal detachment can usually be successfully treated by an additional surgical procedure.

What follow-up is necessary?

For the benefit of the patient, it is important to monitor the status of the eye following surgery. We usually see the patient one day, 1-2 weeks, 6-8 weeks, and then 3 or 4 months after surgery. These may be modified by your doctor. We will give you written directions after surgery about the care of your eye and follow up appointments. If you are having problems or concerns you should call our office 448-1801.