

## Epiretinal membrane

### What is an epiretinal membrane?

An epiretinal membrane (ERM) is a condition where a very thin layer of scar tissue forms on the surface of the retina, where the vision is sharpest (the macula). When an ERM forms, it may contract and crumple up the macula resulting in distorted and/or blurred vision.

### What causes an epiretinal membrane?

In most cases the development of an ERM appears to be related to normal aging changes inside the eye. In some cases it can be related to other conditions such as:

- Diabetes;
- Retinal vein occlusion;
- Retinal detachment; and
- Eye inflammation.

Epiretinal membranes are very common and affect about 1 in 10 people in later years. An ERM usually only affects one eye and for many people does not cause problems for the eye sight.

### Assessment for epiretinal membrane

Your eye specialist can detect an ERM during an eye examination following the use of eye drops that temporarily make your pupils large.

Sometimes, a special OCT scan of the back of the eye may be needed to confirm the presence of an ERM.

Your eye specialist will assess your symptoms to help you decide whether to proceed with treatment.

## **What should I expect with a diagnosis of epiretinal membrane?**

In many cases, the discovery of an ERM is by chance at a routine examination and the vision may not be affected. These ERMs may not to change and do not always affect vision.

Epiretinal membranes can occasionally get worse, causing blurring and/or distortion of vision.

Treatment for ERM is only required in those cases where the vision has been affected.

## **Epiretinal membrane removal**

If an ERM affects vision, the only way to treat it is to remove the membrane surgically. This is achieved by an operation called a vitrectomy. The ERM is gently peeled away from the surface of the macula. In some cases, the surgeon has to leave a special gas bubble inside the eye which disappears on its own after a few weeks.

The operation for ERM removal does not usually take longer than an hour and it can be performed using a local anaesthetic injection with the patient remaining comfortable and awake during the procedure. Sedation is often used to make the patient feel more relaxed.

Following membrane removal, the vision is typically more blurred for a few weeks, and it is usually several months until the final result is known. Overall 4 out of 5 people see better as a result of the operation, noticing reduced distortion and improved sharpness of vision. For people who do not improve the operation stops any further loss of vision.

## **Risks of surgery for epiretinal membrane**

Surgery for ERM removal speeds up the onset of cataract, which is a very treatable cause of worsening vision. Sometimes, an early cataract is removed at the same time as the membrane removal to spare the patient from cataract surgery in the near future.

Epiretinal membrane removal carries the risk of 1 in 50 cases of ending up with significantly worse vision and 1 in 50 of requiring further surgery to deal with recurrent ERM or other complications of surgery such as retinal detachment.

The risk of serious complications of ERM removal is about 1 in 1000 cases, where the eye becomes totally blind due to a bleed during surgery or an infection after surgery.

Some patients may develop persistently high eye pressure, which can damage the nerve of the eye causing vision loss. This condition is called glaucoma and can affect 1 in 100 patients following this type of surgery. It may require long term use of eye drops and sometimes glaucoma surgery in order to preserve vision.

## **What should I do following surgery?**

Following surgery, you will be given eye drops to use for a few weeks, which will help the eye settle from surgery. The operation does not require staying in hospital longer than one night and patients are typically reviewed several times over the weeks after surgery.

In some situations you may be asked to position your head in a certain way for some part of the day for a number of days. Otherwise, you can do most daily activities, although you should avoid unhygienic environments and anything that puts the eye at risk of injury.

## **How much time off work will I need?**

Most people will need at one to two weeks off work after surgery. The amount of time off work will depend on the kind of work you do and the kind of surgery that is done. This will need to be discussed with your surgeon.