Epiretinal membrane

We have given you this factsheet because you have been diagnosed with an epiretinal membrane that requires treatment. We hope that this factsheet answers some of the questions that you may have.

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. The part of the eye affected by the epiretinal membrane is called the macula. The macula is made up of special nerve cells and it provides our sharp central vision needed for seeing fine detail such as reading or driving. When an epiretinal membrane forms over the macula, it causes distorted or blurred vision.

In most cases, the development of ERM is related to normal ageing changes inside the eye. In some cases, it can be related to other conditions such as diabetes, blockage of a blood vessel, inflammation, or following retinal surgery. ERM is not related to macular degeneration and does not usually affect the other eye. ERM can affect up to 8% of people in later years.

Your eye doctor can detect an epiretinal membrane during an eye examination. This is done by using eye drops that temporarily make your pupils large. Sometimes patients need a special scan of the back of the eye to confirm the presence of ERM. Your eye doctor will look at your symptoms and help you decide whether to proceed with an operation.

In many cases, ERM is found by chance at a routine examination and the vision may not be affected. Epiretinal membranes can occasionally get worse, causing blurring or distortion of vision. Only those with affected vision require treatment.

Epiretinal membrane removal options

If ERM affects vision, the only way to treat it is to remove the membrane surgically. We can do this with an operation called a vitrectomy. Your surgeon will remove the jelly-like substance (vitreous) that normally fills
the centre of the eye. The removal of the vitreous inside the eye does not cause any permanent harm, but it can speed up the development of a cataract. The vitreous is replaced by natural fluid produced inside the eye. In some cases, the surgeon has to leave a special gas bubble inside the eye which disappears on its own after a few weeks.

Epiretinal membrane removal is a short operation performed under local anaesthetic which numbs the eye area. You will be awake for the procedure but will not be in any pain.

If you have not already had cataract surgery, but are showing early signs of a cataract, then your eye doctor can perform this at the same time as ERM removal. From a patient perspective, having both operations at the same time means fewer visits to the hospital and getting the sight back quicker. Not all patients need this second operation, and younger patients may not develop cataracts until later in life.

After the membrane removal operation, you may have blurred vision and it can take a few months for it to improve. The operation is usually successful in reducing the distortion in vision due to ERM. We cannot predict the sharpness of the vision if the vision was not distorted to start with.

Risks

As with any procedure, there are risks involved and you can discuss these with your eye doctor before your operation. Specific complications of epiretinal membrane removal include:

- **cataract**
  This means that the natural lens in eye is cloudy. If you have not already had a cataract operation, you will almost certainly get a cataract after the surgery. As a cataract is inevitable, we may offer you combined surgery with cataract extraction at the same time as the vitrectomy and epiretinal membrane removal.

- **retinal detachment**
  The retina detaches from the back of the eye in 1 to 2% of patients undergoing vitrectomy surgery. We can repair retinal detachments with a second operation, but there is a chance that this can lead to blindness.

- **bleeding**
  In rare cases, there may be bleeding in the eye. In severe cases, this can lead to blindness if it is not treated.

- **infection**
  This is very rare and occurs in about one in 1000 patients, but needs urgent treatment and can lead to blindness.

- **raised eye pressure**
  It is not uncommon for the pressure in the eye to increase after a vitrectomy operation. In most cases it does not last long and can be controlled with extra eye drops and/or tablets to reduce the pressure. Most patients will be given some of these medications routinely, straight after the surgery, to minimise any pressure increase. Your eye pressure will be checked at your subsequent clinic visits. If the pressure is extremely high or lasts for a long time, there may be some damage to the optic nerve. This would necessitate long term treatment and monitoring.

Once you are discharged from the vitreoretinal service it would be prudent to include a full glaucoma test in the annual review conducted by your optometrist or optician, as there is a small risk that you might develop eye pressure problems some time later.

For a small minority of people, the vision may end up worse than before the surgery. There is a tiny risk of total loss of sight.
After your operation

After your operation, we will give you eye drops to use for a few weeks, which will help the eye settle. You will not have to stay in hospital longer than one night. Patients are typically reviewed in clinic a couple of weeks after surgery. Some patients may have to do head exercises for a few days after the operation. Most patients can go back to their usual daily activities, although you should avoid unhygienic environments and anything that puts the eye at risk of injury.

Most people will need at least two weeks off work after their operation. The amount of time off work will depend on the kind of work you do and the kind of operation that is performed. Your eye surgeon will discuss this with you.

What can I expect for my vision?

The primary objective of the surgery is to stop the vision becoming more distorted and blurry. Nonetheless, most patients notice a reduction in the distortion and an increase in the clarity of the vision. The ERM tends to cause structural changes to the retina, only some of which improve after the removal of the membrane. We would not expect your vision to return to how it was before the ERM developed.

Useful links

For further information about how the operation is done, please visit our website.
www.uhs.nhs.uk/OurServices/Eyes/Departments/EyInpatientsAndEyeSurgery/Eyeinpatientsandeyesurgery.aspx

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