



Epiretinal membrane

Your eye doctor has told you that you have an epiretinal membrane. You might want to discuss the information with a relative or carer. If you require an operation, we will ask you to sign a consent form, so it is important that you understand the information in this leaflet before you agree to go ahead with surgery. If you have any questions, we suggest you write them down so you will remember to ask one of the hospital staff.

What is an epiretinal membrane?

If you think of your eye as a camera, the retina is like the photographic film. It is a very thin layer of tissue, which is sensitive to the image focused on it, sending information to the brain.

At the very centre of the retina is the macula. This is a very special area of the retina, which we use for reading and recognising complex shapes. Sometimes, scar tissue forms which grows across the macula. If this scar tissue contracts, it may cause distortion of the retinal tissue. In some cases, this contraction may also affect the vision, particularly when reading and doing other visually demanding tasks. Left untreated, this condition will not cause total blindness.

What causes an epiretinal membrane?

In most cases, there is no underlying cause for the epiretinal membrane. It is thought to happen because the vitreous (jelly inside the eye) pulls away from the retina. This most commonly happens to people over the age of 50. The membrane may also form following eye surgery or inflammation inside the eye.

How will an epiretinal membrane affect my vision?

Often the scar tissue does not affect your vision. However, sometimes it can and when it contracts (shrinks) it causes distortion of your central vision – for example, straight lines appear wavy or crooked, and reading is difficult. Depending on the severity of this distortion, you might notice a substantial loss of central vision with blurring. In some cases, patients only notice symptoms when one eye is covered –for example during an eye test at the optician.

How is an epiretinal membrane treated?

The only way to treat an epiretinal membrane is by having an operation. Eye drops or glasses will not help.

Should I have surgery for my epiretinal membrane?

Your doctor will help you to decide if surgery is appropriate for you. The main reason to proceed with the operation is to attempt correction of the distortion of your central vision. If you are not aware of any visual problems, you might not need to have surgery. However, if the distortion affects your ability to work, drive, read, or perform other important activities, you should consider having an operation.

Some patients decide not to have an operation and accept the distorted central vision in the affected eye. This is reasonable, especially if the vision in the other eye is not affected. There is no “right” or “wrong” decision, as every person has different needs and priorities.

Will the problems get worse if I leave it?

Not necessarily. In general, you should only go ahead with surgery if you find the distortion of your vision troublesome at the moment, and not as a preventative measure.

Your surgery

Most epiretinal membrane surgery is performed under a local anaesthetic but some are done under general anaesthetic. The details of anaesthesia will be given to you separately, and is available on our website:

<http://www.moorfields.nhs.uk/content/having-operation>

The operation will be performed by an experienced surgeon. Often, under the supervision of an experienced surgeon, a junior surgeon might perform some, or all, of your operation.

You will need an operation called a ‘vitrectomy’. Vitrectomy operations are keyhole surgery for the eye. The surgeon makes tiny openings, less than 1mm across, in your eye and removes the vitreous from inside. Your surgeon will then grasp and gently peel away the epiretinal membrane from the retina. Sometimes we put small stitches on the eye. These dissolve naturally over about four to six weeks. At the end of the operation, we usually put a pad and shield over your eye to protect it. These will be removed the morning after your surgery.

After your operation

Your eye will feel uncomfortable, gritty, and itchy and might appear red or bruised – this is normal for 7- 14 days. Paracetamol can be taken for pain relief every four to six hours. Your eye will take two to six weeks to heal, but your vision may continue to improve for several months. You will be reviewed in clinic about two weeks after the operation. We will give you eye drops and we will explain how and when you should use them. This is to reduce any inflammation, give your eye some rest and prevent infection. **Please don't rub your eye as this may increase infection and lead to complications.**



When to seek advice

While a certain amount of discomfort is normal after the surgery, you should contact the hospital immediately if you have any of the following symptoms:

- a lot of pain that is not relieved with paracetamol- this can sometimes be a sign that the eye pressure is high.
- loss of vision.
- increasing redness of the eye.

You can receive information and advice from experienced ophthalmic-trained nurses by calling Moorfields Direct telephone helpline (details can be found below). In the case of an emergency, attend your local A&E department or Moorfields A&E, which is open 24 hours a day, seven days a week.

What improvement in my vision can I expect after the operation?

After an epiretinal membrane is removed, vision gradually improves over a period of three to six months in 70%-80% of patients. However, in some cases vision may not improve following surgery, due to damage already caused by the membrane. In about 10% of patients, the membrane may return, which will cause the visual problems to recur. Surgery usually improves the vision in the affected eye, but it will never be completely normal.

What are the side effects of surgery?

A vitrectomy operation can cause small tears to form in the delicate structure of the retina, which may cause the retina to move away from its normal position

at the back of the eye (retinal detachment). Sometimes, the surgeon can see this problem starting during the vitrectomy operation, and will put a bubble of gas or air into your eye to prevent any damage occurring. However, if you did experience a retinal detachment, you would need to have another (different) operation to repair the detached retina and prevent sight loss in the affected eye.

If we put a gas or air bubble in your eye **you must not fly for the periods of time specified below.** This is because the gas or air bubble will expand in size and thus can lead to raised pressure inside your eye, leading to visual loss.

We use **three types of gases:**

- C3F8 which is long acting and can stay in your eye **for up to 12 weeks.**
- SF6 which can stay in your eye **for up to four weeks.**
- C2F6 which can stay in your eye **for up to eight weeks.**
- Air – which can stay in your eye **for two weeks.**

You will be told after your surgery which type of gas bubble was used.

It is important to note that the gas can react with another gas called **nitrous oxide**, which can cause problems in your eye if any is administered. Nitrous oxide is commonly used during childbirth and in A&E as pain relief. Please tell the midwife or A&E staff treating you (or ask your family to) that



you have gas in your eye and that **they should not administer any nitrous oxide**. Should you need a general anaesthetic for any reason during this time it is important that you also tell the anaesthetist that you have had surgery and gas in your eye.

There is a 1:1000 chance of total loss of vision (blind eye) and a 2-5% chance of reduced vision after this type of surgery.

If gas is inserted into your eye during the vitrectomy operation, you may have to **posture** (keep your head in a certain position) after the operation while the gas bubble dissolves. During this time, your sight will be blurred. A member of staff will provide you with a posturing leaflet to assist you with this or you can view it on our website.

The likelihood of getting a cataract (where the lens in your eye becomes cloudy) increases after a vitrectomy, so you might need surgery for this condition sometime in the future.

Useful contacts

- Advanced nurse practitioner, vitreo retinal service based at Moorfields Eye Hospital in City Road
Opening times: Monday – Thursday, 7.30am-5.30pm
Phone: 020 7253 3411, bleep 417
- Staff nurse, vitreo retinal service
Opening times: Monday-Thursday, 7.30am-5.30pm
Phone: 020 7253 3411, bleep 422

- Mackellar ward based at Moorfields Eye Hospital in City Road, open seven days a week
Phone: 020 7566 2590

Author: Yvonne Kana, advanced nurse practitioner
Revision number: 4
Approval date: July 2019
Review date: July 2022

Moorfields Eye Hospital NHS Foundation Trust
City Road, London EC1V 2PD
Phone: 020 7253 3411
www.moorfields.nhs.uk

Moorfields Direct telephone helpline
Phone: 020 7566 2345
Monday-Friday, 8.30am-9pm
Saturday, 9am-5pm
Information and advice on eye conditions and treatments from experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)
Phone: 020 7566 2324/ 020 7566 2325
Email: moorfields.pals@nhs.net
Moorfields' PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks
Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being





referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs

