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EPIRETINAL MEMBRANE
PATIENT INFORMATION LEAFLET

Please read this information leaflet carefully. If you have any questions or concerns, please feel free to discuss them with me and do not hesitate to contact myself or my team using the above email address or telephone number.

What is an Epiretinal Membrane?

The retina lines the inside of the sphere of the eyeball, capturing light that is focussed upon it. It can be thought of as the film of the camera. At the back of the eye, the central part of the retina is called the macula. An Epiretinal Membrane is a condition where a thin layer of scar tissue forms on the surface of the retina, quite commonly at the macula. This condition used to be known as 'cellophane maculopathy' because it resembles a piece of cellophane being stuck on the retina. The Epiretinal Membrane often contracts and causes the underlying macula to become scrunched up, resulting in reduced vision and distortion of central vision. It can be seen on careful examination of the retina, but is most clearly seen by performing an optical coherence tomography (OCT) scan.

What causes an Epiretinal Membrane?

The most common cause of an Epiretinal Membrane is ageing. However, there can be other causes such as diabetes, trauma, previous eye surgery, inflammation or retinal vein occlusions.

What problems does an Epiretinal Membrane cause?

Sometimes, Epiretinal Membrane does not cause any significant problem and can be stable with minimal long term effect on the vision. However, some can gradually get worse with time causing blurring of vision and distortion of vision. People often describe that straight lines appear wavy or kinked when they have an Epiretinal Membrane.

What treatment options are there?

If the Epiretinal Membrane is not causing problems with vision, then Mr Neffendorf will usually suggest that no surgery is needed. Similarly, if the visual symptoms are mild and not impacting on your daily life, surgery does not always need to be performed.

If you decide to undergo treatment, the only option is surgical removal of the epiretinal membrane. There are no eye drops that are able to treat this condition.

The surgical procedure is called a pars plana vitrectomy, which is keyhole surgery through the white of the eye. Microscopic surgical instruments are used to remove the jelly-substance (vitreous) from inside the eye and then fine forceps are used to peel the Epiretinal Membrane away. The procedure takes approximately 45-60 minutes.

Sometimes Mr Neffendorf will place a gas bubble in the eye at the end of surgery in order to help the eye to heal. This is needed in approximately 10% of people undergoing Epiretinal Membrane surgery, and is usually when there is a weak point or break in the retina which needs treatment with cryotherapy (freeze therapy) or laser. If you have a gas bubble, you cannot fly until the gas bubble is absorbed by the body. In addition, if you require an anaesthetic for a different operation, you should tell your anaesthetist that you have a gas bubble in the eye. This gas usually takes 3 weeks – 2 months to be absorbed depending on the type of gas used. Mr Neffendorf will tell you if a gas bubble has been used during surgery and how long it will likely be present.

Generally speaking, surgery can be performed at any time without significantly affecting the final outcome. However, some studies have shown that substantially delaying surgery can result in a worse long-term visual outcome.

The decision to proceed with an operation rests solely with you, once the risks and benefits of the operation have been explained to you by Mr. Neffendorf. If you decide that you would like to proceed with surgery, please contact us and we will be happy to advise you on how this can be arranged.

What happens before the day of surgery?

Mr. Neffendorf will ask you about all of the regular medications that you take. Occasionally, some may need to be stopped before surgery and this will be explained to you by Mr. Neffendorf.

Which anaesthetic technique?

Most patients decide to have their operation performed under a local anaesthetic. This means you will be awake throughout the procedure. Your eye will be numbed with an injection of anaesthetic around your eye. This injection can sting a little at first (as you might experience at your dentist), but it should not be painful. When you choose to have your surgery performed under local anaesthetic you will be required to lie flat and still during the operation.

If you are nervous, or you feel unable to lie still, or there are any specific medical reasons, you can have the operation performed with sedation (to reduce anxiety) or under a general anaesthetic. General anaesthetic means you will be asleep and will know nothing about the operation. However, unlike a local anaesthetic, General anaesthesia is slightly more risky for your general health. Also, you will have to make sure you have nothing to eat or drink for at

least 6 hours before your operation if you have General anaesthesia or sedation. You might also have to remain in hospital longer after the surgery is completed.

Will I see what's happening?

If you have a local anaesthetic, you may see some bright light from the operating microscope. You might also be aware of some unusual colours and patterns. However, you will not see the actual operation through the eye being operated on, nor from your other eye which will be lightly covered by a drape.

Intended benefits of the operation

The aim is to improve the quality of your vision – seeing better, and having less distortion of vision. Approximately 70-80% of patients see significantly better following Epiretinal Membrane surgery. It can take many months for the final visual outcome to be reached.

It is important to be aware that the vision does not usually return to perfect vision or how it may have been before the Epiretinal Membrane developed. Your chance of improving vision may be lower if you have other eye diseases, for example Glaucoma or Age-related Macular Degeneration. This will have been discussed with you in advance.

Serious or frequently occurring risks of having the operation

If you decide not to have surgery for your Epiretinal Membrane, your vision may slowly worsen. It is however important to be aware that in approximately 3-5% of patients, the Epiretinal Membrane surgery might leave your vision worse than it was prior to the operation. The risk of severe loss of sight, including blindness of the eye, is approximately 1 in 500 cases, usually due to infection or severe bleeding. It is extremely rare to lose the eye as a direct result of the operation.

All types of eye surgery carry risk, and complications have the potential to cause damage to your sight or require the need for further surgery to address unexpected problems. The following list details the most common or significant complications which might occur as a result of having the operation;

Cataract: the onset or worsening of cataract is sped up after Epiretinal Membrane surgery, especially if a cataract is present before surgery is performed. Cataract is a clouding of the lens inside the eye causing reduction in vision. In some cases, Mr Neffendorf may discuss the option of having Cataract surgery combined with your Epiretinal Membrane surgery. If you have already had Cataract surgery in the past, then Epiretinal Membrane surgery will not cause a recurrence of your Cataract.
Pain: mild discomfort following surgery is common, and this can usually be relieved with Paracetamol. Significant pain is uncommon.
Drooping of the Eyelid: common and usually temporary. It would be unusual for this to require further surgery.
Bruising of the Eye or Eyelids: common and usually not concerning.

Dry Eye: common and usually not concerning. Occasionally requires long term lubricating eye drops.
Inflammation inside the Eye: all patients heal differently after Epiretinal Membrane surgery. In some cases, more intense inflammation inside the eye can occur which requires eye drops to be taken for a longer period of time after surgery. Occasionally, loss of vision can occur.
Cystoid Macular Oedema: fluid build-up at the macula (centre of the Retina) due to inflammation. This can usually be treated with further eye drops but can sometimes affect the final vision.
Raised Intra-Ocular Pressure: raised pressure inside the eye which is usually treatable with additional eye drops (often just for a couple of weeks). It is quite common for this to occur temporarily following the surgery. Surgery is only rarely required but loss of vision can occur. If raised intra-ocular pressure persists, then loss of vision can occur and this is known as glaucoma (approximately 2% risk). In these cases, long-term eye drops, laser or surgery may be required.
Low Intra-Ocular Pressure: sometimes this can occur after surgery (less than 2% of cases) and usually it resolves without any further treatment. The likelihood of reduced long term vision due to this is rare.
Retinal Detachment: detachment of the retina of the eye. This occurs in approximately 2% of cases and requires further surgery by Mr Neffendorf. It is not always possible to be repaired, resulting in loss of vision.
Endophthalmitis: severe infection in the eye. 1 in 1000 risk of severe loss of sight.
Suprachoroidal Haemorrhage: bleeding in the wall of the eye. 1 in 1000 risk of severe loss of sight.
Damage to other Parts of the Eye: with any intra-ocular surgery, there is a small chance of damage to other parts of the eye both internally or externally.
Allergy to Post-Operative Eye Drops: occasionally, there can be an allergy to the standard post-operative eye drops (usually the preservative component) resulting in a red, swollen and itchy eye. In this scenario, drops are switched to an alternative preparation.

On the day of Surgery

You should not wear any makeup.
When you arrive, the staff will confirm your details and place eye drops just inside your lower eyelid to dilate the pupil.
You will then be taken to the operating theatre, where you will be given your anaesthetic.

Mr. Neffendorf (and the anaesthetist if required) will see you before the surgery when you will have an opportunity to ask any further questions you might have.
If you are having sedation or a general anaesthetic, you need to stop eating and drinking for 6 hours before surgery, except for still water which you can drink up until 2 hours before surgery.

During the operation

The skin around your eye will be thoroughly cleaned.

A sterile drape will be placed over the eye to be operated on and this will also cover up your other eye.
Mr. Neffendorf will perform the operation. You may see movement or lights during the operation, but you will not be able to see the surgery or the instruments.
The surgery is expected to take approximately 45-60 minutes.
You should try to keep your head still during the operation, but you do not need to worry about blinking. There should not be significant pain during the operation, although it is normal to feel some water running around your eye or a cool sensation. At some points of the surgery, you may feel some pressure on the eye, but it should not be too uncomfortable.

You will be advised to relax for a short period of time after the surgery then allowed to leave the hospital once you are happy to do so, and after your escort has arrived to pick you up. For patients receiving general anaesthetic or sedation, after leaving the hospital you must have someone remain with you for at least 24 hours.

After the operation

At the end of your operation, a shield and soft pad will be placed over the operated eye to protect it, and stop you accidently touching or rubbing your eye especially whilst the anaesthetic is wearing off. This shield can be removed on the following day, but should be used overnight for 7 nights after surgery to protect the eye. Some patients also choose to use the shield during the day for a few days for reassurance. The soft pad can be discarded the day after surgery.

You might notice that the eye is red and swollen, the eyelid is droopy or even closed, and that there may be some double vision – these are all normal, and usually recover quickly. It is common for the vision to be blurred for a few days. If you have a gas bubble in your eye, your vision will be blurred for a couple of weeks, and Mr Neffendorf will have explained this to you. It is normal for your eye to feel a little uncomfortable, with grittiness and some watering for example. Paracetamol or ibuprofen is usually adequate to treat the discomfort. You should be particularly careful not to rub or press on your eye.

On day 1 after the operation, you should gently clean the eyelashes and skin around your eye with clean gauze soaked in sterile water bought from a chemist (Cool, previously boiled tap water works fine also).

You will be given eye drops to be started on the day after surgery. The type/frequency/duration of these drops will be explained to you. If you run out of these drops, please ask Mr. Neffendorf for a repeat prescription. If you are taking any other eye drops (e.g. for glaucoma), you should not stop these, unless you have been advised to do so by Mr. Neffendorf. However, you should start a new bottle of any eye drops that you have been taking long-term.
Wsh your hands before instilling the drops and avoid touching the bottle tip to your eye or lashes.

You should avoid showers for the first week, although baths are safe as long as you do not put your head and eyes under the water. It is advisable to not wash your hair for the first few days and then when you do, it is best to have a 'back-wash' to make sure you do not get any water or shampoo in your eye. Avoid unhygienic environments and swimming for at least two weeks. If you want to swim thereafter, wear goggles or keep your eye out of the water for a month after surgery.
Do not clean the eye itself with tissues or towels etc. You may however remove any debris from the eyelid with a clean piece of gauze/cotton wool with sterile or cold, previously boiled water as described earlier.
Always wipe the closed eyelids from the nose side outwards towards the side of your face.

Make-up near the eyes should be avoided for the first two weeks after your operation.

You can bend down to pick things up after surgery, but you should avoid lifting heavy weights or strenuous activity for at least two weeks. You should also avoid dusty unclean environments, contact sports, and swimming during this period. Mr. Neffendorf does however encourage you to undertake gentle activity such as walking as soon after the operation as you wish.

You should not drive home from the hospital after your operation and always leave with your escort. You should not drive until you are told it is safe to do so.

For those who work, Mr. Neffendorf recommends approximately 1-2 weeks off depending on the type of occupation, and he will have discussed this with you.

Approximately 10% of people having surgery for epiretinal membrane require an injection of a gas bubble (see above). If you have had a gas bubble in your eye, you must not fly in an airplane or go to altitude up a high mountain until the gas has gone. Pressure changes are dangerous while gas remains in your eye. In addition, if you require an anaesthetic for a different operation, you should tell your anaesthetist that you have a gas bubble in the eye, as certain anaesthetic gases need to be avoided.
You should avoid lying flat on your back while the gas is still present. You may be asked to position your head in a particular way to help the gas bubble press against the treated area of retina.

Follow-up appointment

A follow-up, post-operation appointment will be arranged for you to be seen approximately 1 week after surgery.

What if I have a problem?

If you experience any of the following;

- **significant or worsening eye pain**
- **nausea and vomiting**
- **a painful red eye or a feeling of pressure in or around the eye**

- **substantial loss of vision**
- **a shadow or curtain coming across your vision**

Please contact Mr. Neffendorf (on his mobile which has been provided to you) or his team without delay on 0204 600 8699.

If for any reason you are concerned and you are unable to contact Mr. Neffendorf or his team, you should attend a walk-in Emergency Eye Clinic as a matter of urgency.

Most major UK cities have an Eye Casualty department in one of their hospitals.

In London, these are available at Moorfields Eye Hospital and the Western Eye Hospital. There is also a 24 hour NHS ophthalmology emergency service (via the main A&E department) available at King's College Hospital or St. Thomas' Hospital.

Questions regarding any of this leaflet

If you have any questions regarding the contents of this leaflet, or indeed any other issue regarding your eyes, please do not hesitate to contact Mr. Neffendorf or his team.