

Macular hole surgery

repairing the macular part of your eye

If you need information about macular hole surgery or your hospital visit on audiotape, please call 020 7188 8815.

You have been given this leaflet because your ophthalmologist (eye doctor) believes you need macular hole surgery to improve your eyesight. This leaflet explains what macular hole surgery involves and the risks and benefits of the procedure.

Your doctor or nurse should have given you information about what a macular hole is, what causes it and how it affects your eyesight. There are also some contacts at the end of this leaflet to help you find more.

What problems does a macular hole cause?

People with a macular hole will probably have changes in the central part of their vision. These changes can range from straight lines looking wavy in the early stages to a small blank patch in the centre of vision in the late stages. You may have first noticed that you had trouble reading small print or that there is distortion when you look at a printed page.

What happens if I do not have my macular hole treated?

If you do not have any treatment for your macular hole, your central vision will generally get worse in the eye that is affected, but you will not lose all of the vision in your eye.

How successful is macular hole surgery?

The most important factor in predicting whether the hole closes as a result of surgery is the length of time that the hole has been present. For patients who have had holes for less than six months, approximately nine out of 10 operations will be successful. However, for patients with a hole present for a year or more only around six in 10 operations will be successful.

Most people have some improvement in vision after they have recovered from the surgery. However, in others the operation's main effect is to stop the sight becoming any worse.

Your doctor will speak with you in more detail about what results you can expect from the surgery.

What does the operation involve?

Macular hole surgery is sometimes done under a general anaesthetic (medication that causes you to be asleep for the entire procedure).

Other times it is done under a local anaesthetic which 'freezes' the area around your eye so that it is pain-free but you are awake. Your eye surgeon will discuss with you the type of anaesthetic that is being recommended for you.

A specially trained medical doctor, called an anaesthetist, will meet with you to discuss the anaesthetic that you will be having and if you have a general anaesthetic, he/she will stay with you and monitor your care during your surgery.

You might find our leaflet, **Having an anaesthetic**, useful. Please ask your doctor or nurse for a copy.

Using delicate instruments the eye surgeon will remove the vitreous jelly in your eye. The surgeon takes particular care peeling the jelly away from your retina at the back of your eye. This leaves a space inside the eye into which a gas is inserted.

The gas is inserted to help the macular hole heal in the correct place. This gas is lighter than air so it floats upwards. The gas acts like a bandage, pressing the macular hole flat onto the back of the eye, repairing the hole and making sure that there is no risk of further damage or retinal detachment.

In the seven – 10 days after the operation, the gas bubble slowly shrinks and eventually disappears. As this happens the space that was taken up by the gas is filled with aqueous fluid – the natural fluid made by the eye.

With the gas in place, the vision in your eye will be very poor, a bit like having your eye open under water. When the gas has been absorbed, your vision should improve. This generally takes between six and eight weeks.

If you have other problems with your eyes such as cataracts, it is possible, and quite common, for these to be treated during the same operation. Your eye surgeon will give you more information, and you may wish to ask for our information sheets on the other conditions that are being treated.

Consent - asking for your consent

We want to involve you in all the decisions about your care and treatment. If you decide to go ahead with macular hole surgery, you will be asked to sign a consent form. This confirms that you agree to have the procedure and understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

It is normal to be anxious. If you have any questions or concerns about the procedure you will have time at your pre-assessment appointment to discuss these with your eye surgeon.

What are the risks associated with macular hole surgery?

Like any surgery, there are some risks associated with macular hole surgery that you need to be aware of. We will explain these risks to you in clinic.

Possible problems from this surgery are:

- **Failure to close the macular hole.** Depending on how long you have had a macular hole, the risk of the operation not effectively closing the hole is between five to fifty out of 100 patients (5% to 50%). We will talk to you in more detail about this when you sign the consent form. Provided there are no other complications, failure does not usually make the vision worse. If the operation fails to close the hole we will discuss with you whether another operation would be helpful.
- **Retinal detachment** happens in around one of every 100 cases. This is a serious complication in which the retina comes away from the inside wall of the eye. It can cause blindness in the eye affected, but in most cases it can be successfully treated, and vision restored. If your retina detaches, you will notice sudden loss of vision in one eye which is similar to a curtain being drawn across the eye.

Some other problems, such as glaucoma or haemorrhage (bleeding) can occur but they tend not to be as severe or problematic as retinal detachment or infection. If you would like more information, or have any concerns at all about the risks associated with macular hole surgery, please ask your doctor or nurse.

- **Infection** occurs in around one of every 1,000 macular hole surgeries and can be blinding. If this were to happen, treatment would involve injections into your eye and high doses of antibiotics. However, infection is very rare.

Some other problems, such as glaucoma or haemorrhage (bleeding) can occur but they tend not to be as severe or problematic as retinal detachment or infection. If you would like more information, or have any concerns at all about the risks associated with macular hole surgery, please ask your doctor or nurse.

What do I need to do before surgery?

You should have received either the leaflet **Your inpatient stay** or **Your outpatient visit**, which gives more information about what to bring with you and what to expect during your visit. If you do not already have a copy, please ask for one from a member of staff caring for you. You should be given the leaflet, **Having an anaesthetic**. If you do not have a copy, please ask us for one or contact the Knowledge and Information Centre (KIC) on 020 7188 3416.

Fasting instructions

Please do not eat or drink anything (except non-fizzy water) for six hours before your appointment. This means that you cannot suck on sweets or chew gum. You are allowed to drink water up to two hours before your appointment. **If you continue to eat or drink after this, your surgery will be cancelled.**

Medicines

If you are taking any medication, these may need to be temporarily stopped or adjusted around the time of your surgery or treatment, you will be given information on how to do this at your pre-assessment appointment. Do not make any changes to your usual medicines and continue to take them unless you have been advised to do so. Please remember to bring them into hospital with you.

If you are taking any medicines that thin your blood, such as antiplatelet medicines (for example aspirin or clopidogrel) or anticoagulant medicines (for examples warfarin or rivaroxaban), please tell your doctor or the nurse as you may need to stop them temporarily before your surgery. Also tell your doctor or nurse if you have diabetes as you may need to alter the dose of your diabetes medicines, as you will need to fast before the procedure. Further information on stopping any medicines will be given to you when you come for pre-assessment. Please ask us if you have any questions.

Please let us know if you are taking any regular medicines (including anything you buy yourself over the counter or any herbal or homeopathic medicines) and if you have any allergies to any medicines.

What happens after your surgery

Following surgery, your eye may be sore. When you wake up, your eye will be padded with a plastic protective shield taped over it. The pad and shield can be removed the day after the operation.

You will have a certain amount of vision in the eye which was operated on; it is very hard to predict how much because it depends on a lot of factors. Before your surgery your eye surgeon will talk to you about what to expect.

When can I go home?

You will usually need to stay in the hospital overnight, so the doctors and nurses can monitor your recovery and make sure you are well enough to go home.

If you had a general anaesthetic, you will not be able to leave the hospital unless a responsible adult is there to help you get home.

You will also be given our leaflet, **Going home after your eye surgery under general anaesthetic**, which has more information about looking after yourself until you have fully recovered from the anaesthetic. It is very important that you follow these instructions.

Can I return to my normal activities after surgery?

The gas bubble will be still present in your eye for between six and eight weeks after your surgery and during this time:

- You must **not** drive a motor vehicle of any sort.
- You must **not** fly in an aeroplane.
- If you have a general anaesthetic for any reason during this time, you must tell your doctor and anaesthetist that you have recently had macular hole surgery and may still have a gas bubble in your eye.

Following surgery the gas bubble will give you very poor vision in one eye. This means that your balance will be affected and you will have trouble judging distances. You will have to be very aware of steps and kerbs. It is not safe to operate machinery or to use tools with which you could injure yourself. You should also expect to have some problems with activities such as pouring liquids or picking up objects. Your vision should become more normal once the gas bubble has gone.

Most people are well aware of when the gas bubble has gone. You will be able to see it getting gradually smaller. It usually takes six to eight weeks.

How do I care for my eye after the surgery?

Eye drops. We will give you eye drops to take home. It is important that you use these as directed. One is usually a steroid to control the inflammation that you will need to take four times a day for a month. The other an antibiotic to prevent infection four times a day for two weeks. You may also be given drops and/or tablets to control the pressure in your eye. We will review this treatment at your follow up appointment approximately two weeks after your operation.

Sleeping positions. You will need to sleep with your head on one side, resting on an ear. **You must not sleep on your back for at least one month after your operation.** This is to make sure that the gas bubble is in contact with the macular hole as much as possible.

If you cannot lie on your side, then you should sleep propped up with pillows so that you are at a 45 degree angle. If you move around a lot at night, some people have found it useful to sew a clothes peg onto the back of their nightclothes. This can stop you from moving onto your back whilst you are asleep. We can give you more information about this.

If you have concerns about sleeping positions, please talk to your doctor or nurse.

Posturing. As well as keeping your head in a certain position overnight, it **may** be necessary for you to spend several hours during the day with your head held still and in a specific position, called posturing. It will depend both on your specific condition and the professional opinion of your eye surgeon. Some people will not need to do posturing at all.

If you need to posture after your operation, your surgeon and nurse will have explained this to you and we will also provide you with written instructions to take home.

Follow-up appointment

You will be given an appointment to return to the hospital between one and three weeks after the operation. This is to check that the macular hole is healing. We will often change the eye drops that you are using as well.

If you do not receive an appointment, or need to change it for any reason, please phone the eye department's reception on **020 7188 4311**.

What if there are any problems?

Your eye will feel sensitive and may be uncomfortable after the operation. If you are in serious pain at any time, your vision gets worse than it was on the day after the surgery, or the discomfort continues for more than three days, please seek medical advice from your GP or your nearest eye casualty. There is one at St Thomas' Hospital.

Useful sources of information

Royal National Institute of the Blind (RNIB) is a charity offering information on many different eye conditions. RNIB can also provide information in large print format or on audiotape.

t: 0845 766 9999

e: helpline@rnib.org.uk

w: www.rnib.org.uk

Contact us

If you have any questions or concerns, please contact the nurses in the eye day care unit at St Thomas' hospital on 020 7188 6564

- Monday to Friday 7.30am to 6pm
- Saturdays 9am – 12pm.

Outside these hours, please contact the eye doctor on call via the main switchboard on 020 7188 7188.

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) e: pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) e: complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 e: languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 e: members@gstt.nhs.uk w: www.guysandstthomas.nhs.uk/membership

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