What is Macular Hole Surgery?

Patient Information Leaflet

Ophthalmic Day Surgical Unit
01253 957420
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In the majority of cases macular holes develop spontaneously. There is no way to prevent them from occurring or to identify who is at risk of developing a hole in one or both eyes.

For a better chance of repair and sight recovery, surgery to macular holes that have been present for less than twelve months is advisable. If a macular hole has been present for longer than a year the success rate is low. If a macular hole is present in one eye it is very important to be aware of any changes to your sight in the other eye and if any occur contact your GP or Optometrist quickly. Without surgery your central sight will usually deteriorate but you will not lose the peripheral (outer) sight. You are very unlikely to go blind because of this condition.
Surgery is offered to repair the hole. The operation involves removing the jelly-like substance from the back of the eye to stop it from pulling on the hole. A gas bubble is then inserted which comes into contact with the retina, presses against the wall of the eye and seals the macular hole. During the operation tiny cuts are made in the eye, which are then stitched at the end of the surgery. The stitches do not have to be removed. Your eye will be firmly padded and covered with a plastic shield to protect the eye. This will be removed the following day.

An experienced eye surgeon will carry out the operation and may supervise a doctor in training who also performs part or all of the operation.

You will be in hospital overnight and sometimes an additional stay of 1 - 2 nights is needed.

Posturing (The way you lie) after surgery is a critical part of your post-operative care and information about this is given on page 8.
You will be informed of your admission date by letter. Please read the instructions carefully - if you are having a general anaesthetic you will be advised when not to eat and drink.
LOCAL ANAESTHETIC

Before the operation a Doctor will obtain your consent for surgery. The nurse will put drops in your eye several times to enlarge the pupil. On arrival in the anaesthetic room next to the operating theatre, the Doctor will give you an injection around the eye to freeze it and therefore keep it still for the surgery. An instrument will be put in your eye to keep it open so you do not have to worry about blinking. After the injection, a firm pressure pad will be placed on your closed eye for approximately 15 minutes to enable the anaesthetic to get into the tissues surrounding the eye. You will then be taken into the operating room where you will be made as comfortable as possible. You will be expected to keep still and lie fairly flat (your head will be supported by a special headrest) for 1 1/2 to 2 hours whilst the operation is carried out. A nurse will hold your hand during the operation if you wish.
GENERAL ANAESTHETIC

You will be asked not to eat or drink for several hours before you are taken to the operating theatre. Before the operation, an anesthetist will come to speak to you and a doctor will see you to obtain your consent for surgery. Before the operation the nurse will put drops in your eye several times to enlarge the pupil. On arrival in the anaesthetic room next to the operating theatre the anesthetist will put a little tube in your hand or arm into which he/she will give you something to make you go to sleep. During the operation, the anaesthetist will closely monitor your heart rate, breathing, blood pressure and blood oxygen levels. For six to twelve hours after surgery you may feel tired and sleepy.
When you return to the ward the nurse will monitor your blood pressure, pulse and blood oxygen levels. You may feel mild discomfort for a while after the operation for which you will be able to have pain relief. Your eye may feel itchy and scratchy and sometimes there is a little discharge. Please do not rub your eye as it will be very sensitive. Slight bruising around the eye can also occur. The discomfort should settle after a couple of days.

Several eye drops will be given to you to help prevent infection and reduce inflammation. You will have to use them for several weeks. When you are discharged, the staff will explain how and when to use them at night for two weeks.

You will be required to place a clear eye shield over your eye to protect it whilst you are sleeping.

Advice will be given on when you should attend hospital for follow-up appointments, which is initially within the first few weeks FOLLOWING surgery.
POSTURING

A very important part of post-operative care is the way you posture (lie) after surgery. To enable the gas bubble that has been inserted to apply pressure on the macular area the back of the eye (to seal the hole) it is essential that you lie down in that position for 2 weeks. However, you will be able to get up to use the bathroom and have your meals. This may seem quite daunting and difficult to think about doing but there is no other way in which to assist the hole to close. Adhering to the advice maximises the chances of sight improvement and successful closure of the hole. If you are not able to keep to the posturing For the time required, it is less likely that the operation will succeed.

Informing family/friends beforehand of what is expected will enable support to be planned and if necessary arrangements made for social services and district nurses.
SIGHT RECOVERY

The gas bubble is slowly reabsorbed and the space left filled with liquid produced by the eye. This can take approximately 6 - 8 weeks. During this time the eye is unable to focus light properly and initially your sight will be blurred. Because of this you may only be able to see shapes and shadows. As the bubble is reabsorbed your sight will begin to return. It can take as long as 3 months until sight recovery is achieved even if the macular hole is closed. The degree of sight improvement varies from patient to patient; for some, sight recovery is small whilst for others it can be significantly improved.
WORK

If you are employed you are advised not to work for 3 months. This applies to any kind of employment.

TRAVELLING

It is not advisable to travel by air whilst the gas bubble is still present, as the depressurisation will cause the gas bubble to expand and your eye will become very painful.

BENEFITS AND RISKS OF MACULAR HOLE SURGERY

The benefit of surgery is that your central sight will be restored but to what degree cannot be predicted. Research has shown that there is an 80% closure rate of the macular hole and a 60% chance of sight improvement.
There are risks with any surgery and complications can occur, however the percentage of patients who experience complications is small. Developments such as tears or detachments (coming away) of the retina during the operation or in the immediate post operative phase are usually repaired by surgery. Also, Endophthalmitis, (a serious eye infection) or a choroidal haemorrhage, (bleeding inside the eye) can occur, although the incidence of this happening is rare. Not all complications can be repaired and a small percentage of patients will lose all sight in the eye.

In some individuals who have not had cataract extractions the formation of the cataract (clouding of the lens in the eye which will make the vision not as clear ) can occur within 6 months to 2 years. If this should happen the cataract could be removed and an implant inserted to improve sight.

We realise that coming into hospital is for many people a worrying time. We will do our best to support and look after you in a professional and caring way.
Options available
If you’d like a large print, audio, Braille or a translated version of this booklet then please call 01253 955588

Patient Relations Department
For information or advice please contact the Patient Relations Department via the following:

Tel: 01253 955588
email: patient.relations@bfwh.nhs.uk

You can also write to us at:
Patient Relations Department
Blackpool Victoria Hospital
Whinney Heys Road
Blackpool
FY3 8NR

Further information is available on our website: www.bfwh.nhs.uk

References
This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:
Policy Co-ordinator/Archivist
01253 953397

Useful contact details
Hospital Switchboard:
01253 300000

Ophthalmic Day Surgical Unit
01253 957420

Travelling to our sites
For the best way to plan your journey to any of the local sites visit our travel website:
www.bfwhospitals.nhs.uk/departments/travel/

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