

Macular Hole Surgery

An information guide



Macular Hole Surgery

Your eye specialist has advised you to have surgery for a diabetic vitreous haemorrhage. This leaflet gives you information that will help you decide what to do. You may wish to discuss the information with a relative or carer. Before you have the operation, we will ask you to sign a consent form, so it is important that you understand the information in this leaflet.

What is a Macular Hole?

A macular hole is a small, circular gap which opens up at the centre of the retina. The part of the eye affected by the Macular Hole is called the Macula, which is made of special nerve cells and it provides our sharp, central vision needed for seeing fine detail (reading and driving etc). Macular holes result in distorted and/or blurred vision.

What causes a Macula Hole?

The exact cause of Macular holes is uncertain. It seems to occur most often in people aged 60-80 and is twice as common in women. In some cases it can be related to other conditions such as short sightedness, trauma or following retinal surgery.

Treatment of a Macular Hole

The treatment involves surgery. An experienced eye surgeon will carry out the operation and may supervise a trainee doctor who may perform all or part of the surgery.

The Anaesthetic

You may have a local or general anaesthetic. Most retinal operations are performed under local anaesthesia with or without sedation. Please let your surgeon know if you are claustrophobic, or feel you will not be able to tolerate the procedure under local

anaesthesia. General anaesthesia is associated with many more risks than local anaesthesia.

The Surgery

An operation called a Vitrectomy, where specialised instruments remove jelly-like substance that normally fills the centre of the eye, called vitreous is performed. A fine membrane that is about a tenth of a millimetre is peeled off the surface of the retina. The surgeon then leaves a special gas bubble inside the eye which disappears on its own after a few weeks.

The operation for Macular Hole does usually takes 60 to 90 minutes and it can be performed under local anaesthetic injection with the patient remaining comfortable and awake during the procedure. It is very important for the patient to stay still, especially during the very delicate manoeuvres when the membrane is removed using fine forceps.

After the operation

If you have discomfort, we suggest you take a pain reliever e.g. paracetamol, every 4 to 6 hours. It is normal to feel itching, sticky eyelids and mild discomfort for a while after Macular hole surgery. It is common for your eye to water. Occasionally, the area surrounding the eye can become bruised. Any discomfort should ease after 2 to 3 days. In most cases, your eye will take about 6 weeks to heal.

Posturing

If we put a gas or oil bubble in the eye, we will usually ask you to keep your head and body in a particular position. This is called 'Posturing' and aims to provide support. This is an important part of the treatment and the position you hold your head will depend on where the holes are in the retina.

We may advise you to sleep in a certain position at night. By following our instructions, you will give your retina the best chance to be successfully treated. Your co-operation matters a great deal.

If you have a gas bubble in your eye, you **must not travel by aeroplane** or ascend to significant altitude by other means on transport.

You **must** also warn your doctor you have a gas bubble in the eye should you need another operation of any kind.

What are the benefits of Macular Hole Surgery?

- Following surgery, the vision is typically more blurred and it improves as the gas in the eye dissolves.
- The average improvement in vision is 2 lines on the vision chart
- Improvement in the sharpness of vision and reading is less predictable
- Sometimes there is no improvement in vision; closure of the macular hole then prevents further reduction in vision.

The risks of Vitrectomy Surgery

Failure of the Macular Hole to close: this occurs in 1-2- out of 10 patients. In most circumstances, it is possible to repeat the surgery. If the hole fails to close, then the vision may be a little worse than prior to surgery. Minor complications are common and in most cases can be treated effectively. Very rarely, some complication can result in **blindness**.

Cataract

This is the clouding of the lens inside your eye which can cause blurred or reduced sight. This can be a consequence of a vitrectomy for diabetic vitreous haemorrhage. The chance of developing cataract in the first year is 1 in 5 and is less likely if you are younger or have no cataract prior to surgery.

Retinal tear and detachment

A tear in the retina may occur 1 in 10 times with this surgery. These can be treated at surgery however, a retinal tear allows fluid to pass from the vitreous cavity between the retina and the inside wall of the eyeball causing the retina to tear off the wall (detachment). This can occur in 1 in 50 cases. Most retinal detachments can be repaired with further surgery but occasionally cannot and leads to sight loss. Tears or detachment are more likely with more complex surgery.

Post-Operative Vitreous Cavity Haemorrhage

This occurs in 3 out of 10 patients after vitrectomy for diabetic vitreous haemorrhage and refers to blood still present in the eye after surgery (residual blood) or new haemorrhage into the vitreous cavity at some time after surgery. Sometimes blood can clear spontaneously but for some patients it does not clear quickly and can cause high pressure in the eye. A further operation, vitreous washout, for residual or recurrent blood could be required in 1 in 10 patients after the initial vitrectomy for diabetic vitreous haemorrhage. This vitreous washout feels similar to the experience of the original vitrectomy operation.

Raised Pressure in the Eye

This could occur due to several reasons. If pressure is high it can cause pain, nausea and vomiting. Usually pressure is controlled with eye drops or medications for a few weeks. However, sometimes further surgery is needed and in some cases vision is slightly damaged if pressure is very high and prolonged.

Sympathetic Ophthalmia

This is when surgery to one eye can cause inflammation to both eyes. This could require strong medications and can result in poor sight in both eyes. This may occur between 1 in 1000 and 1 in 2000 times after vitrectomy

Pupil Size and Focussing

Occasionally, especially if laser or freezing treatment is needed, the pupil can remain larger on the treated side, even after stopping eye drops after surgery. This can affect focussing and could cause sensitivity to bright lights. This usually almost completely recovers over the months following surgery.

Reduced peripheral field (side vision) and reduced night vision

This may occur as a consequence of laser treatment during surgery. Sometimes this can stop patients driving because the DVLA Standards require patients to have a certain amount of peripheral field vision.

Endophthalmitis

This is a term used for infection inside the eyeball. It may occur in 1 in 1000 to 1 in 2000 times after surgery. This can be bad for eyesight long term and can lead to further treatment or operations.

Choroidal Haemorrhage

This is bleeding between the layers of the wall of the eyeball and may occur in 1 in 1000 patients. This can badly affect vision long term and further operations may be needed.

Loss of the Eye

Very rare following this operation. Most commonly surgery is used to remove an eye or part of the eye if sight is lost and the eye is painful or unsightly. This may occur because of factors unrelated to surgery. After a cosmetic shell or "glass eye" can achieve a good cosmetic effect

Further Surgery

If you develop any complications from the initial procedure then you may need further surgery. You may require cataract surgery once the eye has recovered from your vitreous or retinal surgery.

Contact Details:

The Royal Oldham Hospital, Oldham :

A&E Department - 0161 627 8923

Friday 5pm until Monday 9am

Oldham Integrated Care Centre Eye Clinic - 0161 621 3721

Monday to Friday 9am - 4.30pm

Rochdale Infirmary, Rochdale :

Eye Clinic - 01706 901757

Monday to Friday 9am until 5pm. Friday 9am until 12.30pm

Eye Ward - 01706 901766

Monday to Friday 8am until 8pm

Urgent Care Centre - 01706 517005

Monday to Friday after 8pm. Friday 8 pm until Monday 9am.

Fairfield General, Bury :

Eye Outpatients Clinic - 0161 778 2804

Accident & Emergency – 0161 778 2600

After 8pm Monday to Friday, Friday 8pm until Monday 8am

If English is not your first language and you need help, please contact the Interpretation and Translation Service

Jeśli angielski nie jest twoim pierwszym językiem i potrzebujesz pomocy, skontaktuj się z działem tłumaczeń ustnych i pisemnych

اگر انگریزی آپ کی پہلی زبان نہیں ہے اور آپ کو مدد کی ضرورت ہے تو ، براہ کرم ترجمانی اور ترجمہ خدمت سے رابطہ کریں

Dacă engleza nu este prima ta limbă și ai nevoie de ajutor, te rugăm să contactezi Serviciul de interpretare și traducere

ইংরাজী যদি আপনার প্রথম ভাষা না হয় এবং আপনার সাহায্যের প্রয়োজন হয় তবে অনুগ্রহ করে দোভাষী এবং অনুবাদ পরিষেবাটিতে যোগাযোগ করুন

إذا لم تكن الإنجليزية هي لغتك الأولى وتحتاج إلى مساعدة ، فيرجى الاتصال بخدمة الترجمة الشفوية والتحريرية

☎ : 0161 627 8770

@ : interpretation@pat.nhs.uk

To improve our care environment for Patients, Visitors and Staff, **Northern Care Alliance NHS Group** is Smoke Free including buildings, grounds & car parks.

For advice on stopping smoking contact the Specialist Stop Smoking Service on 01706 517 522

For general enquiries please contact the Patient Advice and Liaison Service (PALS) on 0161 604 5897

For enquiries regarding clinic appointments, clinical care and treatment please contact 0161 624 0420 and the Switchboard Operator will put you through to the correct department / service

The Northern Care Alliance NHS Group (NCA) is one of the largest NHS organisations in the country, employing 17,000 staff and providing a range of hospital and community healthcare services to around 1 million people across Salford, Oldham, Bury, Rochdale and surrounding areas. Our Care Organisations are responsible for providing our services, delivering safe, high quality and reliable care to the local communities they serve.

The NCA brings together Salford Royal NHS Foundation Trust and the hospitals and community services of The Royal Oldham Hospital, Fairfield General Hospital in Bury, and Rochdale Infirmary (currently part of The Pennine Acute Hospitals NHS Trust).



www.facebook.com/NorthernCareAllianceNHSGroup



www.linkedin.com/company/northern-care-alliance-nhs-group



Northern Care Alliance NHS Group (NCA) @NCAlliance_NHS



Date of publication: April 2011

Date of review: February 2020

Date of next review: February 2022

Ref: PI(SU)685

© The Northern Care Alliance NHS Group

www.pat.nhs.uk

www.northerncarealliance.nhs.uk