

# Macular Laser Treatment

Information and advice for patients

## Birmingham and Midland Eye Centre

The macula is the central part of the retina (light sensitive layer at the back of the eye). The macula is responsible for detailed and fine central vision like reading, near work and recognizing faces.

In various conditions (eg. Diabetes, Vascular obstruction) fine blood vessels in the retina get damaged and start to leak fluid. This fluid can start to accumulate in the macula and can cause the tissues in this delicate area to swell up (Macular oedema) leading to blurred vision and decrease in central vision. This can cause severe permanent damage to the macular area and if untreated in some cases even blindness.

### What are the benefits?

Macular laser treatment is usually offered for treating this build up of fluid either as the main treatment option or after a course of injections in the eye called (Intravitreal Anti-VEGF injections), which is the other treatment option for macular Oedema.

Laser is a very focused light beam on to an area of the eye. There are different types of laser depending on which part of the eye is to be treated. Macular Laser treatment is done with lasers which are effective on the retina and macular area.

Macular laser helps in reducing the leakage from the small blood vessels and also aids in drying up the existing fluid.

The main aim of this treatment is to prevent any further visual loss. In a small number of people the vision might sometimes improve.

### What are the risks?

Sometimes the laser can lead to blind spots in straight vision. These may not be noticed with both eyes open if you are having treatment in only one eye as the other eye vision will compensate for these tiny spots.

If you need many laser sessions in both eyes and both macular area have been lasered extensively, this could affect the central vision significantly enough to affect the driving vision.

If you have laser treatment to both eyes you need to inform the DVLA.

Accidental laser to the very centre of the macular area is a very rare possibility. This can result in a temporary or permanent decrease in central vision.

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### Preparing for the treatment

The doctor, advising you about the procedure, will explain the details of the treatment and get you to sign the required consent form for the procedure. You will be given a copy of the consent form with all the discussed risks and benefits of the procedure after your signature.

It is a day procedure and bringing someone with you is suggested. As the bright laser light dazzles you, we advise you to have a pair of sun protective eye wear (prescription) with you.

We advise you not to drive to and/or from your appointment, as you will need to have dilating drops applied in the eye. These drops do blur your vision for up to four to six hours after the treatment.

We also advise that you take all your medications prior to this treatment as per normal. You do not need to fast for the procedure unless specifically advised. Especially Diabetics are advised to ensure they have enough provisions for food and medicines as needed.

### During the treatment

Usually the laser rooms are specifically designated, in the outpatient clinic. The nurse will direct you to the seating area.

A nurse will check your vision and instill the dilating eye drops, which will blur your vision for four to six hours. These drops help your doctor to examine the area to be lasered better. Usually a local anesthetic drop will be instilled in the eye.

A microscope similar to the one used in clinic by the ophthalmologist/optician to examine your eyes is used to deliver the laser. A contact lens with an ocular lubricant is often used to view the retina better.

The total procedure usually takes 10-20 minutes, depending on the number of burns intended. Occasionally multiple sessions are needed.

### After the treatment

Following the treatment, you can go home after few minutes.

Slight discomfort or a dull ache in the eye after the treatment has been reported and pain relief medications are suggested as per personal requirement/suitability.

You could experience dazzling or darkening of vision up to 24-48 hours after the procedure.

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### Going home

You are advised to avoid driving for 24 hours after the treatment; so therefore it would be sensible to arrange for someone to collect you from the hospital.

### Follow-up

A clinic review appointment will be arranged for you in a few months to assess the need for further laser or the response to the laser treatment.

### Symptoms to report

If there is any persistent eye pain for more than a few hours or there is an acute drop in your vision, please ring the Eye casualty, Birmingham and Midland Eye Centre for advice/urgent appointment for assessment.

### BMEC A&E

0121 507 6780

Monday to Friday: 8.30am – 7pm

Saturday: 9am-7pm

Sunday: 9am-6pm

Bank Holiday: 9-6pm

### Contact Details

If you have any concerns, please contact the Outpatient Department for Birmingham Midland Eye Centre on

0121 507 6754, Monday to Friday, from 9am - 5pm.

### Further information

Further information can be found in the sources used websites.

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### Sources used in this leaflet:

- National Institute of Blind People (RNIB) (2016), Eye conditions related to Diabetes (online): <http://www.rnib.org.uk/eye-health-eye-conditions-z-eye-conditions/understanding-eye-conditions-related-diabetes>
- National Eye Institute (NEI) (2015), Facts About Diabetic Eye Disease (online): <https://www.nei.nih.gov/health/diabetic/retinopathy>

For more information about our hospitals and services please see our websites [www.swbh.nhs.uk](http://www.swbh.nhs.uk), follow us on Twitter @SWBHnhs and like us on Facebook [www.facebook.com/SWBHnhs](http://www.facebook.com/SWBHnhs).

If you would like to suggest any amendments or improvements to this leaflet please contact the communications department on 0121 507 5303 or email: [swb-tr.swbh-gm-patient-information@nhs.net](mailto:swb-tr.swbh-gm-patient-information@nhs.net)



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