

Laser treatment for diabetic macula oedema (diabetic maculopathy)

Information for patients

Diabetic eye disease occurs when the blood vessels that nourish the inner layer of the eye (the retina) become damaged over time. In advanced cases, fluid can leak out of these damaged blood vessels and build up in the central part of the eye known as the macula. This is known as diabetic macula oedema which causes blurred vision.

How do we treat diabetic macula oedema?

Diabetic macula oedema is mainly treated with injection therapy into the eye. On some occasions however, it can be treated with laser therapy if the tissue swelling and leakage does not involve the centremost part of the macula (known as the fovea).

Laser therapy for diabetic macula oedema is done alongside improving your blood sugars, blood pressure and cholesterol levels.

What is laser therapy?

Laser therapy makes tiny burns on the areas of tissue swelling at the macula. The goal of this therapy is to cause the fluid to get absorbed back into your bloodstream and to reduce the tissue swelling. The aim of the laser treatment is not to improve your vision but to prevent your vision from getting worse.

What are the risks of laser treatment?

Complications are very rare. Some people can still 'see' the laser grid pattern after treatment. Usually, this continues for up to two months and, very occasionally, for up to six months after treatment.

In a national survey, around one in 10 people reported seeing a small but permanent blind spot close to the centre of their sight.

The chance of you completely losing your central vision after laser treatment for problems in your macula is around 1 in 300 (0.3%).

We cannot completely avoid accidental laser burns to the very centre of your vision. You may find it difficult to keep still or may accidentally look at the laser if it fires. If we feel that the risk of this happening is too high, we will stop your treatment.

Occasionally, a laser burn to your retina may result in new blood vessels growing that may bleed and cause scarring to the central vision, resulting in permanent loss of your central vision.

What to expect on the day of your laser appointment?

On arrival, the nurses will check your vision and measure your eye pressures. You will then have both pupils enlarged with drops; this will blur your vision for a few hours. This will allow the doctor to examine the back of your eyes in more detail.

You will be taken to a laser room and will have your eyes numbed with anaesthetic drops. Right before the procedure, the doctor will place a contact lens onto your eye to prevent you from blinking.

What happens during laser treatment?

You will notice bright flashes of light. You may be asked to look in certain directions. You may experience a stinging sensation that can be occasionally uncomfortable. Should you experience any discomfort, please do not pull away but inform the doctor by an agreed signal.

What happens after your laser treatment?

Your vision will be blurred for a few hours but this usually recovers. You should not drive to and from your hospital appointment. We also advise you to wear dark sunglasses to protect you from bright sunlight.

You will be given an appointment for more laser treatment (if needed) or to attend a review appointment in clinic.

Further Information

If you have any queries please contact nursing staff in E4 at the Princess Alexandra Eye Pavilion between 08:00-17:00 Monday to Friday.

Telephone: **0131 5361174**

After 17:00 and at weekends you can speak to a member of the nursing staff by phoning:

Telephone: **0131 536 1172**

You can also contact your local Diabetic Retinopathy Screening office.

Websites

The below websites offer further advice and information about diabetes and vision problems:

Diabetes UK: **www.diabetes.org.uk**

NHS inform: **www.nhsinform.scot**

Royal National Institute of Blind People: **www.rnib.org.uk**

The information in this leaflet can be made available in alternative formats, such as easy read or large print on request.

Please call PALS: **www.cas.org.uk/pass**