

Information for patients and carers

Argon Laser Treatment

A decorative graphic at the bottom of the page consisting of three overlapping, wavy bands of blue. The top band is a light blue, the middle is a medium blue, and the bottom is a dark blue.

What is a Laser?

A laser is a highly concentrated beam of light, which can be aimed at a precise area of the eye. The Argon laser can be used to treat the structures of the back of the eye.

Why do I need laser treatment?

Argon laser treatment can be used to treat damage to the retina (light-sensitive layer of tissue at the back of the eye) which can be caused by several conditions:

- Diabetes or other conditions affecting the blood vessels of the retina. Laser prevents further reduction in vision caused by leaking or abnormal blood vessels
- Retinal tear. Sealing a hole in the retina prevents retinal detachment. This is when the inside layer of the eye (the retina) peels away from the next layer and causes visual disturbance. If this is not treated promptly, your sight can be permanently damaged

Occasionally it will be used to treat conditions of the macula (the area of the retina responsible for central vision).

What happens in the laser clinic?

- A trained member of the ophthalmic team will see you and explain in more detail about the procedure and ask you to sign a consent form, please ask any questions you have before you sign
- Your eyesight will be checked and your pupils dilated (made larger) with drops. These drops will make your vision blurred for several hours and may sting for a few seconds
- You will be asked to sit at a machine like the one used to examine your eyes in the outpatient department
- Local anaesthetic drops will be instilled to numb your eye, these may sting slightly
- The laser operator may use a type of contact lens to focus the laser beam accurately onto the retina that is damaged (the contact lens

feels odd but will not hurt); this also prevents you from blinking whilst treatment is in progress. The laser beam is aimed very precisely and your cooperation is essential. Alternatively, the laser operator may choose to lie you down and use an indirect ophthalmoscope to carry out your treatment. This equipment looks like a hat with a light at the front and is used with a non-contact lens. It is important that you keep as still as possible during the procedure

- When the laser is in operation you will be aware of flashing lights, this is normal

How long does the procedure take?

The laser treatment itself will take between ten and twenty minutes per eye, depending on your eye condition, its severity, and the ease of treatment. However, the overall length of the visit may be two to three hours. Expect to stay for a whole morning or afternoon.

Sometimes more than one treatment session is required to complete the treatment.

Are there any risks or side effects?

Some people find this type of treatment uncomfortable, experiencing a prickling or aching sensation. We can offer pain relief if this is necessary.

Following your treatment, you may find that you feel a little dazzled, as the laser light is very bright.

Rarely, your vision may be worse after the treatment; this can be permanent. This can be caused by a build-up of fluid at the back of your eye (macular oedema), bleeding within the eye (vitreous haemorrhage), or an unintended burn to the centre of your retina.

Your eye may be left with the following **long-term effects**:

- Your vision may take longer to adjust to and from bright and dark conditions
- Your vision may be more sensitive to very bright light
- You may not be able to see as well at night
- Your colour vision may change
- Peripheral (around the edge) vision may get worse
- Very rarely, you may develop significant loss of central vision, which may be permanent
- Sometimes laser treatment does not work, and your vision can still get worse despite treatment

This type of laser treatment aims to preserve your present level of vision, rather than improve it. In rare cases scar tissue forms, which may lead to further loss of vision and retinal detachment.

What happens afterwards?

The blurring caused by the eye drops will settle back to normal within about six to twelve hours, as your pupil returns to its normal size. You must not drive during this time. It is not uncommon to experience some effects on the vision for several weeks.

Preparation for the procedure

On the day: Please bring sunglasses as your pupils will be dilated and eyes may be light sensitive after.

Driving: It is not advisable to drive yourself to the appointment. The dilating eye drops may cause blurring of your vision for up to 12 hours. **You will not be able to drive home after the treatment**, so please arrange transport.

Eating/drinking/regular medications

Please continue to take any tablets or other medications as normal. Please continue to eat and drink as normal. If you have diabetes, ensure to have your meals and medications as normal and bring a snack with you in case the clinic is very busy and there are delays.

Contact details

Should you require further advice or information please contact Ophthalmology telephone triage service: **01257 245346** Monday to Friday 9.00am to 4.30pm.

If you feel that your eye condition needs an urgent assessment outside of these hours, please attend the nearest Emergency Department.

Sources of further information

www.lancsteachinghospitals.nhs.uk

www.nhs.uk

www.accessable.co.uk

www.patient.co.uk

www.lancsteachinghospitals.nhs.uk/veteran-aware

<https://bepartofresearch.nihr.ac.uk/>

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If you want to stop smoking, you can also contact Smokefree Lancashire on Freephone **08081962638**

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This information can be made available in large print, audio, Braille and in other languages.

Our patient information group review our leaflets regularly, if you feel you would like to feedback on this information or join our reading group please contact on email address:

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