

Argon laser trabeculoplasty (ALT)

This leaflet is for patients considering argon laser trabeculoplasty for treatment of glaucoma. It outlines what the procedure involves and its benefits, risks and side effects. If you would like further information then please ask any member of staff.

What is argon laser trabeculoplasty (ALT)?

Argon laser trabeculoplasty is a procedure used to reduce pressure in the eye (also known as intraocular pressure). Normally, the fluid in your eye (aqueous humour) flows through your pupil into the front of your eye. It then drains away through drainage channels inside the eye called the trabecular meshwork. These drainage channels are situated in the angle of the eye, which is where cornea (clear front layer of the eye) and iris (coloured part of the eye) meet.

However, in some people's eyes these drainage channels do not work properly so your eye pressure increases. This increase in pressure may injure your optic nerve (the nerve that carries information from your eye to your brain) and impair your vision. This is called glaucoma.

In this trabeculoplasty procedure, a laser beam is applied to the drainage channels, which helps them to drain the fluid better and thus reduce the pressure in your eye. Aqueous humour is a completely different fluid to your tears, which will not be affected by this laser treatment.

Why should I have this treatment?

It is important to remember that this procedure is performed to save the sight you still have. It will not restore any sight you may have already lost or improve your sight. If the treatment is successful, your intraocular pressure is lowered and you may be able to reduce the number of eye drops you currently use to manage your glaucoma.

This treatment sometimes needs to be repeated in the future to control the eye pressure adequately. The alternative to this laser treatment is to start (or continue) additional eye drops to lower the pressure in your eye, or surgery. Ask your doctor if you would like more information.

What are the risks?

Complications after this treatment are usually mild and include inflammation and occasionally a sharp increase in the eye pressure. You will be given drops to help prevent these problems. If your eye pressure rises immediately after the treatment, you may need additional eye drops or tablets before you can go home. We will not know whether the laser treatment has been successful for about six weeks.

Occasionally, the laser treatment does not reduce the pressure within the eye to a satisfactory level. If this is the case, you may need a different treatment.

What happens during the treatment?

There are no special preparations required for this treatment. You can eat and drink as normal, and you must take your usual eye medication on the morning of the laser treatment. The treatment is performed in the outpatient department, in one of our laser treatment rooms.

On arrival, the nurse will put some drops in your eye in preparation for the treatment. Before commencing, the doctor will explain the procedure and ask you to sign a consent form. You will then sit at a machine similar to the one used to examine your eyes at the eye clinic, but with a special laser attached to it. The doctor will put a contact lens on your eye before applying the laser beam. This lens allows the doctor to view your eye clearly so he/she can apply the laser to the drainage channels.

The treatment is painless due to the anaesthetic drops used to numb your eye beforehand. It takes about 10-15 minutes to complete.

What should I expect after the treatment?

Your vision may be a little blurred and the bright light may dazzle you but this should settle within about 10 minutes. You will be prescribed steroid eye drops to control inflammation within the eye following the laser treatment. The doctor will advise you how long you need to take them for. You must continue to use your usual glaucoma eye drops to the treated eye, unless you have been asked to stop them. If you are using glaucoma drops to the untreated eye, please continue to use them unless clearly instructed otherwise.

There are no activity or work restrictions after ALT treatment, including driving. Your eye may feel a little sore and red after the procedure. If you have discomfort once you get home, we suggest that you take your usual pain relief following the instructions on the packet. It is normal to have the following symptoms for a few hours after the laser treatment: irritable eyes, red eyes, mild discomfort. If any of these symptoms last longer than 24 hours, or if you are

worried about your eyes, call the ward or Eye Day Unit for advice (see below).

Follow-up appointment

You will be seen in the outpatient department about six weeks after the laser treatment to check your eyes and the pressure response to the laser treatment.

If you experience any of the symptoms below any time after your treatment, attend the Eye Casualty immediately:

- Increasing redness of your eye.
- Excessive or worsening pain.
- Loss of vision.

What do I do if I have problems after treatment?

If you have got a minor eye problem, please seek advice from your GP, optician or pharmacist. If you think your problem might be urgent, please attend Eye Casualty.

Eye Casualty (Reading):	Mon-Fri 9am to 5pm; Sat & Sun & bank holidays 9am-12.30pm; Closed Christmas Day and New Year's Day
Eye Casualty: Prince Charles Eye Unit (Windsor):	Mon-Fri 9am to 5pm; Sat 9am-12.30pm; Closed Sun & bank holidays
Dorrell Ward (Reading):	0118 322 7172 (24 hours a day)
Eye Day Unit (Reading):	0118 322 7123 (Mon-Fri 7am to 6pm)

Outside of Eye Casualty hours you should telephone your GP's out of hours service, ring NHS 111 or if you have serious concerns, visit A&E.

Further information

- Visit the Trust website at www.royalberkshire.nhs.uk
- NHS Website www.nhs.uk
- Royal College of Ophthalmologists Tel: 0207 935 0702
- International Glaucoma Association Tel: 01233 64 81 70
www.glaucoma-association.com
- Specific Eye Conditions www.eyecconditions.org.uk

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