

Information for Patients undergoing Argon laser Pan-Retinal Photocoagulation (PRP) treatment

Your condition

Your diabetic eye disease (retinopathy) has now progressed to a stage that the retina has sensed a lack of oxygen and started to develop new blood vessels on its surface. This unfortunately isn't good news, as these new vessels service no useful purpose. Being fragile, they rupture and bleed inside the eye. This will cause a sudden loss of vision.

Should the new vessels grow on the surface of the iris (the coloured part of the eye) they can block the drainage of fluid out of the eye and can cause the pressure inside to build up to high levels fairly quickly. This is very painful and can also cause irreparable loss of vision. Laser treatment is done to help get rid of these vessels. The treatment is generally performed over 1 to 3 sittings.

The procedure

Please do not drive to the hospital for your appointment or for the rest of the day.

Laser is a focussed beam of light energy of a specified wavelength. It is applied as spots on the back of your eye. The surface of your eye will be made numb with local anaesthetic drops after which a contact lens will be applied. You will not have to worry about keeping your eyes open but it would help if you co-operate by

looking in the direction that your doctor asks you to. You will see bright flashes of light in quick succession as the laser is applied. These spots can number up to a thousand in one sitting and will be completed in approximately 20 minutes time. These flashes of light (together with the fact that your pupils have been made big) will leave you dazzled for a few hours. We recommend that you go straight home and have a good rest. Should you experience any headache afterwards, you can take a couple of Paracetamol tablets (500mg) or other painkillers that you are used to.

Laser treatment is not a painless procedure. You will 'feel' the laser each time it is applied. However, the sensation at the back of your eye which most people experience is not intolerable. Re-treatments can be more painful at times. It is important that you remain still during the procedure, as movement can be dangerous as it may direct the laser to a wrong part of the eye. If you wish to draw attention, please knock on the table or say "stop" and the doctor will stop immediately.

Alternative treatment options

Injection of steroids, steroid implants and Anti-VEGF agents into the eye are being tried for resistant conditions. This is an operation that carries a higher risk. Some of these are licensed for use in the eye, while others are being used Off-license. These may become

available on the NHS in the future. Please discuss with your eye doctor.

What happens if you don't have this treatment?

The new blood vessels will continue to grow and cause severe and persistent bleeding, scarring and retinal detachment together with irreversible loss of vision.

The benefit

The treatment should help get rid of the new vessels and reduce the risk of bleeding in future. It is not done to improve your eyesight.

The serious or frequently occurring risks

- Laser treatment can cause deterioration in central vision, which is usually transient.
- This treatment reduces your visual field (side vision/peripheral vision). This can affect your fitness to drive. You are obliged to inform the DVLA, especially if you have this treatment in both eyes.
- It can impair your night vision and you may take longer to adapt in darkness. Again this has implications for you driving at night. You are expected to use your judgement in these circumstances.

For further information

- Please refer to the RNIB booklet Understanding Diabetic retinopathy
- Please feel free to ask the doctor or the nursing staff should you require further information or clarification on the information that has been provided to you.

Author Mr. S. Shafquat
Consultant Ophthalmologist