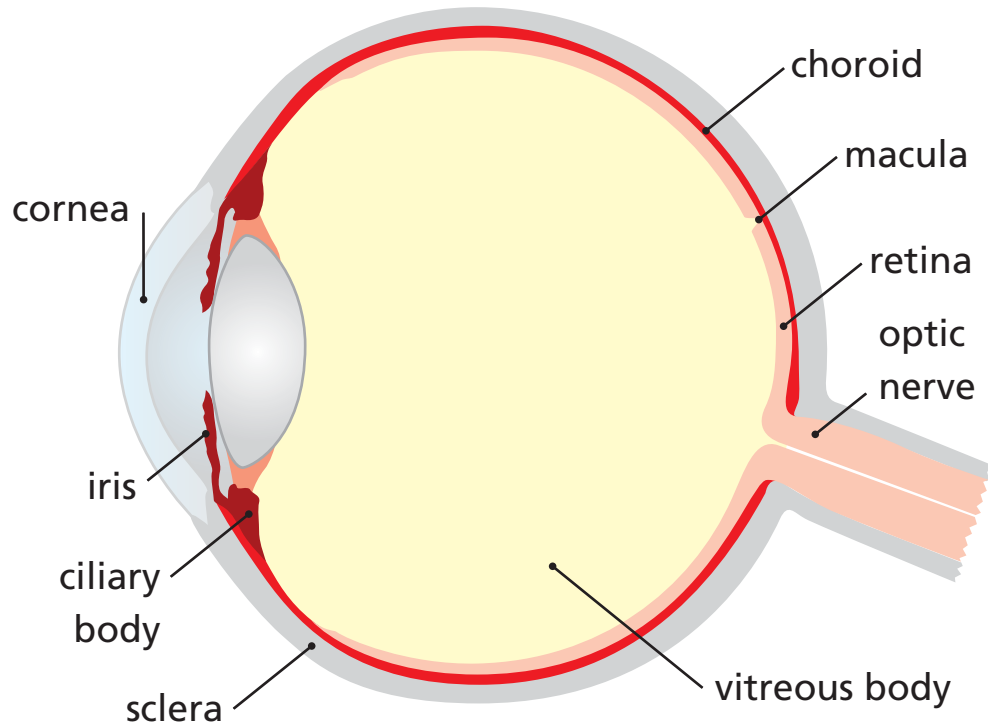




laser treatment for **Proliferative Retinopathy**

This information sheet is written for patients who may undergo laser photocoagulation to an area of proliferative retinopathy.



Cross section of the eye

What is proliferative retinopathy?

Proliferative retinopathy refers to the growth of abnormal, fragile blood vessels from the retina – a nerve layer at the back of the eye that is responsible for vision. Proliferative retinopathy is also called retinal neovascularisation. These abnormal blood vessels can leak fluid, bleed and cause scarring. This is a frequent cause of vision loss among patients with diabetes and other retinal vascular disorders such as retinal vein occlusion.

What is laser photocoagulation?

In this type of laser treatment, light rays are directed into the eye and focused onto a tiny spot on the retina. The light produces heat that cauterises, or seals, the abnormal blood vessels. This prevents leakage and bleeding from the abnormal blood vessels. The effectiveness of this treatment has been shown in several clinical trials in the late 1980s.

What does the treatment involve?

Diagnosis of retinopathy is made during a clinical examination by your ophthalmologist. Sometimes additional information is required to optimise treatment and a fluorescein angiogram test may be requested. A type of contact lens is placed on the eye to be treated to view the abnormal blood vessels and treat your eye safely.

Usually local anaesthetic eyedrops are applied that will minimise the discomfort of the lens on the surface of the eye. With this method of anaesthesia, the eye is able to move and you will be asked to keep the eye still looking straight ahead or even in a particular direction. This is very important and ensures that the doctor performing the laser therapy treats only the areas around abnormal blood vessels causing them to regress and not the centre of the normal retina. There is minimal discomfort associated with this 20-30 minute procedure. An alternative method of anaesthesia that is rarely required is injection of local anaesthetic beneath the eyelid and adjacent to the eyeball to immobilise the eye and to minimise discomfort during treatment.

Laser treatment may be carried out in one or several treatment sessions depending on the severity and extent of the new vessels and how well you cope with the treatment.

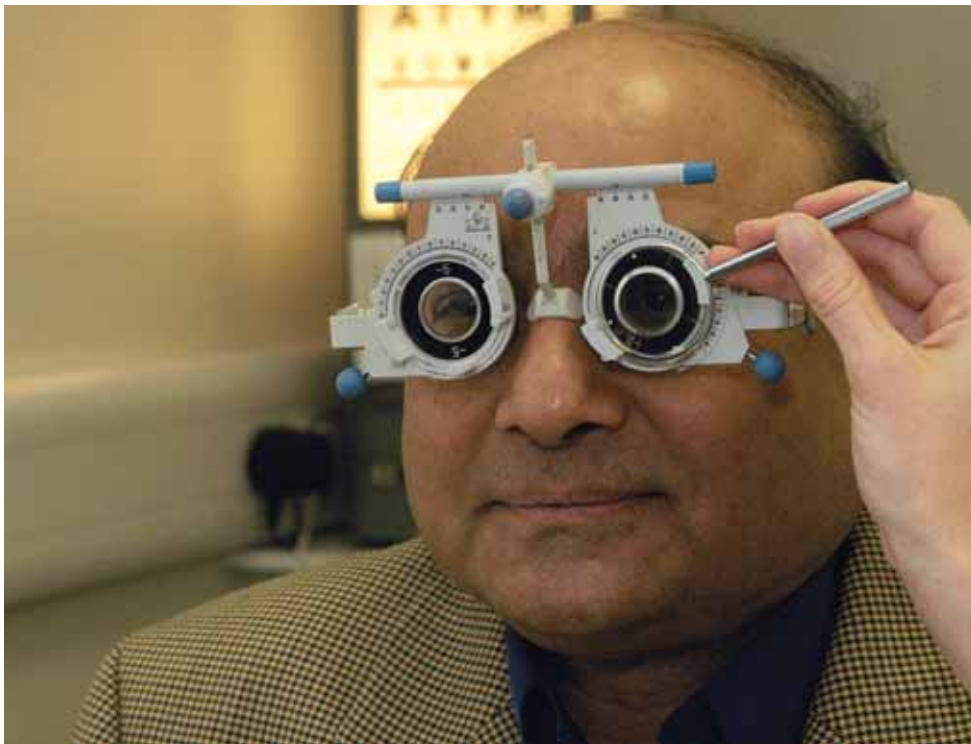
How effective is the treatment?

The aim of this treatment is to decrease the risk of severe visual loss by preventing the development or promoting regression or shrinkage of abnormal retinal blood vessels (retinopathy). No safe proven alternative exists to reduce the likelihood of losing vision from proliferative retinopathy. Your vision may actually deteriorate following treatment. In many cases, this improves over several weeks to months. In some cases, further laser treatment may be necessary. Permanent worsening of vision usually is due to an inability to halt the natural deterioration in visual function caused by retinopathy. However, it is also rarely possible that your vision may decline as a direct result of treatment.



Does the treatment last indefinitely?

After treatment, periodic re-examination is necessary to monitor your response to treatment and detect any changes in the status of the retinopathy, especially any change that would require additional treatment. Usually, more than one laser treatment is required (as the treatment is not 100% effective), but the treatments are often spaced over a period of several months. **For this reason it is very important to maintain follow-up appointments after initial laser treatment.** In diabetic patients optimum control of their diabetes and blood pressure may help prevent further eye problems in the long term.



What are the side effects of the treatment?

Your vision may actually deteriorate following treatment due to the inability of the laser treatment to halt the natural decline in vision caused by proliferative retinopathy. However, there is a very small risk of sudden reduction of vision as a direct result of treatment. Vision disturbance may also occur that takes the form of noticing worse night vision and side vision. If very intensive treatment is required, some patients may lose enough peripheral vision to affect their ability to drive. There is a 5 to 10% chance that treatment will diminish reading vision as well. No safer alternative exists to reduce the likelihood of losing vision. If treatment is not carried out, there is an increased risk of permanent vision loss from bleeding and scar tissue formation inside the eye, or possibly from high pressure in the eye.

Further information

The DVLA should be made aware if you require many treatments in both eyes, as your driving vision may be impaired.

For further information please call:

DVLA Drivers Medical Group

Ph: 0870 600 0301

(Monday – Friday, 8.15am - 4.30pm).

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