Ophthalmology

Laser Treatment for Diabetic Retinopathy

Eye problems are common in diabetes and can, in some cases, seriously affect vision. Laser treatment is very effective in preventing loss of vision. Best results are achieved if laser treatment is applied before any vision is lost.

The purpose of the Diabetic Retinopathy Screening Service is to detect diabetic eye problems before vision is impaired.

Laser treatment rarely restores vision. A small number of patients lose vision despite timely laser treatment.

Your recent retinal photographs show that you may benefit from Laser treatment. An appointment has been made for you to attend the Laser Clinic on Clinic 3.

Your eyes will be examined and if laser treatment is required it will be performed at the same appointment.

There are two types of sight threatening Diabetic Retinopathy:
- Diabetic Macular Oedema.
- Proliferative Diabetic Retinopathy.

Diabetic Macular Oedema

Diabetes causes blood vessels near the centre of the retina (macula) to leak fluid. The retina becomes water logged (oedematous). This causes gradual loss of vision. Laser treatment causes the retina to dry out, thus preventing loss of central vision.
Possible side effects of macular laser treatment:-

- Small ‘blind spots’ near the centre of vision.
- Reduction in colour vision.
- Rarely, some permanent loss of central vision.

Proliferative Diabetic Retinopathy

Diabetes causes small retinal blood vessels to block and the retina is starved of blood. Abnormal blood vessels then grow on the retina. This can lead to permanent loss of vision from bleeding into the eye, retinal scarring and retinal detachment. Laser treatment is usually highly effective in preventing this loss of vision if done before visual loss occurs.

Possible side effects of treatment for Proliferative Diabetic Retinopathy:-

- Poor night vision and reduced colour vision.
- Reduction in peripheral vision. In some cases this can be severe enough to prevent you holding a driving licence. (80% of patients retain driving vision)
- Permanent loss of central vision from a laser burn inadvertently hitting the centre of the retina. This is very rare.

Treatment

- The treatment is performed while the patient is sitting at an instrument that is used to examine the eyes.
- Drops are put in to dilate the pupil and anaesthetise the eye.
- A contact lens is placed on the eye to focus the laser beam and minimise eye movement.
- Very brief intense bursts of light are shone into the eye.
- Some patients find laser treatment uncomfortable. In some cases, a local anaesthetic injection renders the procedure pain free. Several treatment sessions are required.
- After laser treatment, the vision will be blurred. This normally clears in a few hours, but may last a few days if extensive treatment is required.
- Please do not drive until your vision has recovered.
Occasionally, there is some pain after the treatment. Common pain relief tablets (for example: paracetamol) will help.

**Follow up**

Patients are reviewed from two to six months after treatment. Several sessions of laser treatment are frequently required. Most patients retain good vision following laser treatment, but regular review is advisable as severe retinopathy can occasionally recur. This is unlikely with good control of blood sugar and blood pressure.

**General Advice**

Good control of blood sugar and blood pressure is very important in preventing loss of vision from Diabetic Retinopathy.

If you have severe pain after laser treatment, or have any other questions, please contact the Ophthalmic Nurses on 01223 217778.

More information can be found on these websites.

www.diabetes.org.uk
www.rnib.org.uk

Or from:-

Diabetes UK
10 Parkway
London NW1 7AA
Tel: 020 7424 1000
Patient Information

This document is also available in other languages, large print and audio format upon request – 01223 216032 or patient.information@addenbrookes.nhs.uk

本文件也可應要求，製作成其他語文或特大字體版本，也可製作成錄音帶。
Cantonese

आ हल्तापेक्ष विनंती करवाली भीषण भाषाओं, भोड़ा लापेखा अखरो अखरो अखरो र अखरो पश्चात मणी रहेजः।
Gujarati

A richiesta questo documento è anche disponibile in altre lingue, a caratteri grandi e in formato audio.
Italian

نک پرکتی مهروها به زمانشکانی که به چاپی درشت و به شریعتی تسجيل دمس دموکویت
Kurdish

دوکوست کی پریماپار اکورتری پاول که بیت تروف کی پریماپار اکورتری پاول که پریپ راچه
Urdu

Document History

Authors
Mr. D w Flanagan. Ophthalmology

Department
Ophthalmology Box 41 Addenbrooke’s Hospital, Cambridge University Hospitals NHS Foundation Trust, Hills Road, Cambridge, CB2 2QQ

www.addenbrookes.org.uk

Contact number
01223 216577

Published
September 2005

Review date
September 2007

File name
Laser_treatment_for_diabetic_retinopathy_PIN747.doc

Version number
1

Ref
747