

## Ophthalmology Directorate

### Eye Injection for Macular Disorders Information for Patients

As discussed at your appointment today, please call the Medical Retinal Services Coordinator as soon as possible (within 48 hours) to arrange your treatment plan. Treatment can be offered at Norwich or Cromer Hospitals or the Central Norwich Eye Clinic.

Medical Retinal Coordinator: 01603 288311

Monday to Friday 08.30 – 16.30 hours

#### Introduction

You have recently been diagnosed with a macular disorder.

- Wet macular degeneration
- Branch retinal vein occlusion
- Central retinal vein occlusion
- Diabetic macular oedema
- Pathological myopia

If left untreated, there is a high chance of your central vision becoming more blurred or distorted.

#### **What does this mean?**

The macula is the central part of the retina used for fine detail vision e.g. reading and recognising faces.

- Wet macular degeneration is caused by leakage from blood vessels which grow under the retina, causing swelling and bleeding in the retina. This leads to scar formation and damage to the overlying retina, with loss of central vision.
- Retinal vein occlusion (branch/central) is caused by a blockage in the vein within the eye.
- Macular oedema is swelling in the centre of the retina due to fluid leaking from damaged retinal blood vessels. This damage is commonly due to diabetes or blockage (occlusion). This leads to blurring of the central vision.

- Pathological myopia is where you are shown to be very short sighted with degenerative changes at the back of the eye.

Treatment is available and involves the injection of a drug into the eye to prevent the degenerative blood vessels from growing and leaking. This treatment blocks the action of a growth factor (Vascular Endothelial Growth Factor - VEGF)

The drugs available are called anti VEGF which contain a fragment of an antibody against VEGF and it improves vision in around 30 – 40% of patients.

In 40% of patients, vision stays the same.

In 30% of patients vision can still deteriorate despite treatment.

### **Treatment Plan**

The initial phase includes 3 injections at monthly intervals, with a review in the clinic four weeks after the third injection.

Subsequently repeat injections are given when there are signs of recurrent disease activity – further blurring of vision, or leak detected in the macula when you are reviewed in the clinic.

After the initial three treatments, most people need repeat treatments, often at 2 or 3 monthly intervals. On average patients need 7-8 injections in the first year, 4 in second year and 2-3 in the third year.

You would normally be seen in the review clinic for a check- up at 4 to 6 weekly intervals. At this visit you will have your pupils dilated. A retinal scan will be performed, and the doctor will tell you if you need a further injection.

**If you have suffered a heart attack or a stroke in the three months prior to your injection, please inform Doctor or nursing staff in the clinic.**

### **The Procedure**

Treatment is carried out as an outpatient. There will be a nurse to look after you.

Please DO NOT DRIVE yourself to this appointment.

Please do not wear any eye makeup on the day of treatment.

Drops are put in to numb your eye. A drop of iodine cleans the surface of your eye. Your eyelids are held open by a springy clip and 0.05ml of the drug is injected through the white of your eye using a tiny thin needle.

You will experience some blurring of your vision at first and people often notice a greasy smear or floaters in the vision at first, which is the drug. This usually wears off within 48 hours.

### **Complications**

The risk to your eye from the injection is very small. On average complications (problems) occur only once in every

1000 injections, and include:

- A serious infection inside the eye (endophthalmitis), which can blind the eye. In this hospital this occurs approximately once in every 4,000 injections.
- Damage to the retina causing a retinal detachment.

- Damage to the lens causing a cataract.
- Haemorrhage in the jelly of the eye (vitreous).
- Blockage of retinal circulation with damage to the optic nerve.
- Persistent floaters.
- Increased distortion.
- Corneal abrasion (scratch on the front surface of the eye). Rarely this can occur at the time of the injection. If this happens you will be advised about painkillers to use along with your eye-drops.
- The injection may cause a small haemorrhage (bruise) on the surface of the white of your eye, which will clear in a week or two.
- Your eye may feel a little sore for a couple of hours after the injection.
- Surface irritation can make the eye water for 24-48 hours and may require painkillers.

### **What to do if you have problems after the injection**

Phone for advice if you have:

- Increasing blurring, pain and red eye, which may be signs of infection.
- Dark floaters or flashing bright light in your eye which occur newly after the treatment – possibly due to retinal detachment or haemorrhage.

If you have any questions or worries, please contact:

Retinal Services Coordinator on 01603 288311 08.30 – 15.30

Eye Clinic - 01603 288066

Monday - Thursday 08.45-17.30 hours

Friday 08.45-15.00 hours

Central Norwich Eye Clinic - 01603 647101

At all other times please ring 01603 286286 and ask the switchboard to contact the Ophthalmic (Eye) Doctor on call.

Here are some contact telephone numbers for support agencies:

Vision Norfolk: 01603 629558

Norfolk County Council Social Services Sensory Support

Unit: 01603 729221

Norwich Social Centre for the Blind: 01603 621937

RNIB Helpline: 0303 123 9999

