

# Patient Information

# Eylea treatment for diabetic macular oedema (DMO)

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## Introduction

The doctor has found that you have swelling affecting the centre of the retina at the back of your eye. This is known medically as diabetic macular oedema (DMO).

Your eye doctor has already given you a patient information booklet about diabetic eye disease and its treatment. This leaflet describes the latest treatment available to you for DMO Eylea eye injections.

## What are Eylea eye injections?

Eylea injections are currently the most effective treatment for DMO. They work by penetrating into the nerve layer at the back of the eye (the retina, see figure 1). The macula is the most important part of the retina and is responsible for your central vision. Over time, the injections close up the leaking blood vessels affecting the macula. This should reduce the swelling in the area, and hopefully improve your vision. Your doctor may suggest laser treatment in addition to these injections, if appropriate.

Since 2012, we have been using Ranibizumab (Lucentis) injections for the treatment of DMO. In 2015, Aflibercept (Eylea) injections were approved for this condition by the National Institute for Health and Care Clinical Excellence (NICE). Recent trials have shown that Aflibercept (Eylea) is slightly more effective than Ranibizumab (Lucentis) in patients with poor vision from DMO. We are now using this injection as first line treatment.

In some patients who respond incompletely or inadequately, we can add a steroid implant as well.

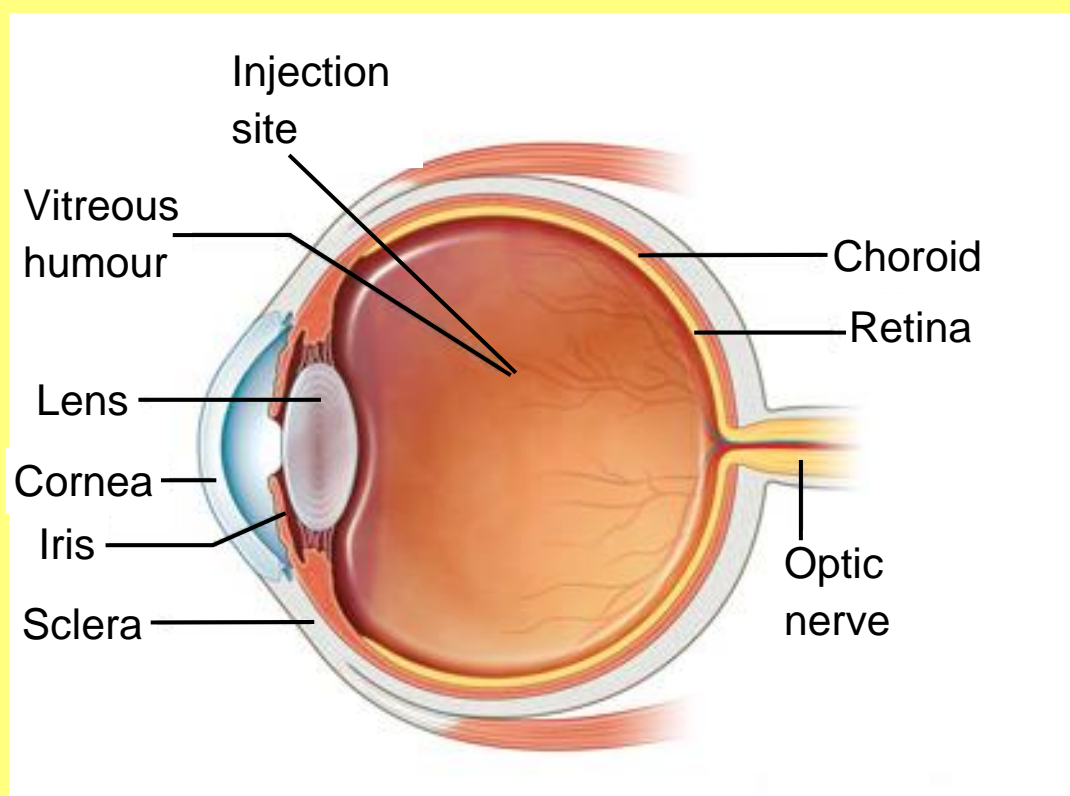


Figure 1 shows the side image of an eye (image courtesy of NHS Choices)

### **How does the treatment work?**

If your doctor has suggested Eylea treatment, it means your eye contains extra amounts of a protein called vascular endothelial growth factor (VEGF). It is one of the causes of leaky, abnormal blood vessels. The excess fluid that comes from these blood vessels can build up and lead to changes in your vision.

Eylea is designed to block VEGF. By blocking VEGF, Eylea may prevent damaged blood vessels from leaking fluid into the macula.

You will need to have Eylea injections once a month for the first five months – this is called a loading dose. You will then need to have an injection every two months for one year. After this, you will just need to have the injection when you need it, depending on the condition of your eye.

## **How long am I consenting for treatment?**

You will be given an indefinite course of treatment, unless you withdraw consent or lose capacity.

## **What are the benefits?**

The benefits of the treatment are:

- It should reduce inflammation and swelling in the macula of your eye.
- It can also help improve vision and prevent further damage.

## **What are the risks of having the injections?**

It is important that you know about the risks of the treatment:

- About two in every 100 patients may have a stroke or mini stroke (TIA) during the two-year course of treatment. However, it is not clear if this is due to the injections or due to diabetes.
- About two in every 100 patients may experience chest pain (angina) and a heart attack.
- Eye-related risks may affect about four in every 100 patients. These may include:
  - A cataract (about one out of every 100 patients may get this).
  - Leakage of blood into the vitreous humour of the eye (about one out of every 100 patients may get this).
  - About one to two people in every 200 patients may get raised eye pressure, retinal detachment or an eye infection.

## **What are the alternatives?**

There are alternatives that are licensed for use with people who have DMO, and some that are not licensed yet. Amongst the licensed ones are Ozurdex implants and Iluvien implants. These drugs are licensed only for those people who have long standing (chronic) swelling and have had cataract surgery.

Intravitreal triamcinolone (IVTA) and intravitreal avastin injections are unlicensed but still used in the UK.

## **What happens before the treatment?**

If you want, you can take paracetamol tablets on the morning of the injection, if you can take them (always read the label; do not exceed the recommended dose).

## **What happens during the treatment?**

The eye doctor will put numbing anaesthetic drops into your eye. This means you should not feel anything during the procedure. When your eye is numb, the eye doctor will deliver the Eylea medication through a tiny needle. While this is happening, you may feel some pressure on your eye.

You will not need to stay in hospital.

## **Will my vision improve with the injections?**

Research has shown that people who have DMO and are treated with Eylea injections have improved eyesight. They are able to read up to two lines more on the eye chart, compared to those who have had laser treatment only. 30 per cent of patients could read three lines more on the eye chart, compared to laser alone, after two years of treatment.

Fewer patients have decreased eyesight after the treatment compared to laser treatment alone.

## **Are there any reasons why I cannot have the injections?**

- The injections cannot be given to people who have had a stroke, mini stroke (TIA) or heart failure in the past three months.
- It will not be used if you have an infection or inflammation in or around the surrounding tissues of the eye.
- Eylea injections are not suitable for pregnant or breastfeeding women.
- Additional support may be needed for patients who may find local anaesthetics difficult to tolerate due to dementia/cognitive impairment. In this case, alternative solutions will be discussed with the patient and those who support them.

## 'One Stop Service'

The Trust is introducing a 'One Stop Service' for some intravitreal injections. A 'One Stop Service' is where an injection may be offered on the same day you attend the eye clinic. This may result in you having an extended waiting time in clinic, but it will mean you do not have to return on a separate occasion for your eye injection. A doctor or nurse will discuss this with you in the clinic.

## Advice after eye injections

### What should I expect after the injection?

Your eye may feel painful for 24 to 48 hours. If necessary, you can take painkillers such as paracetamol or ibuprofen if you can take them (always read the label; do not exceed the recommended dose). If the eye becomes significantly red and painful with reduced vision, contact the **Urgent Referral team** immediately on **01384 456111 ext. 3633**.

It is best to avoid products containing aspirin. However, if you take regular soluble aspirin (75mg), you can continue to take it as advised by your GP.

If you have bruising on or around the eye, this should fade gradually over the next couple of weeks.

At times, a tiny air bubble can be introduced into the eye during the injection. This appears as a round, dark floater in the centre of your vision the day after the injection. Do not be alarmed, as this will get smaller and should disappear within 48 hours.

Rarely, the surface of the eye can get scratched during the injection process. This can cause sharp, sudden pain three to six hours after the injection. If this happens, it is easy to treat, so please get in touch with the **Urgent Referral team** at Russells Hall Hospital Eye Clinic on **01384 456111 ext. 3633** (9am to 4.30pm, Monday to Friday).

## **What do I need to do?**

If you have an eye pad to prevent the cornea from being scratched or damaged, you can gently remove this the next morning. The eye pad may be slightly bloodstained, but this is nothing to worry about.

You can clean your eye the morning after your injection with cool, boiled water and a small piece of cotton wool or lint. Close your eye first, and then gently wipe from the inner corner of the eye to the outer corner of the eye, using a fresh piece of cotton wool or lint each time and for each eye.

If you were prescribed antibiotic drops to use at home, continue to use them for five days. If you have been prescribed glaucoma eye drops, you should use them on the morning of the injection, but not after the injection for the rest of that day. The next day you should start your glaucoma eye drops again using a new bottle.

## **What if I have any problems or questions after reading this leaflet?**

Please contact the **Urgent Referral Clinic** team at Russells Hall Hospital Eye Clinic on **01384 456111 ext. 3633** (9am to 4.30pm, Monday to Friday).

## **Eye emergency, out of hours**

In case of an eye emergency after the closing hours of the Eye Clinic at Russells Hall Hospital (including weekends and bank holidays), please contact:

### **Birmingham and Midland Eye Centre on 0121 507 4440**

The doctor on call is usually based at the Eye Centre, City Hospital, Dudley Road, Birmingham. They may need to call you back, and if necessary, they will arrange for you to visit them.

## **Can I find out more?**

You can find out more from the following weblink:

### **RNIB**

<http://www.rnib.org.uk/eye-health-eye-conditions-z-eye-conditions/understanding-eye-conditions-related-diabetes>

**Note:** the information in this booklet is provided for information only. The information found is **not** a substitute for professional medical advice or care by a qualified doctor or other healthcare professional. **Always** check with your doctor if you have any concerns about your condition or treatment. This is only indicative and general information for the procedure. Individual experiences may vary and all the points may not apply to all patients at all times. Please discuss you individual circumstances with your eye doctor.

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## Reference

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