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**Patient Information**

**Intravitreal dexamethasone (Ozurdex) implant treatment for RVO (retinal vein occlusion)**

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**Introduction**

Your doctor has found that you have leakage of blood vessels, causing swelling at the back of your eye (the macula). This occurs as a result of different conditions, including diabetes, blockage of the veins at the back of the eye, after cataract surgery, inflammation and abnormal vessels Macular Telengiectasia (Mac Tel). If left untreated, it may result in a permanent reduction in your vision in that eye.

This leaflet contains detailed information on a treatment with the medical name of ‘dexamethasone’, also known as Ozurdex. This leaflet includes information on the procedure, the risks and the benefits.

**What is dexamethasone (Ozurdex)?**

Dexamethasone (Ozurdex) is an intravitreal implant approved by the National Institute for Health and Care Excellence (NICE) for the treatment of macular oedema due to retinal vein occlusion where laser photocoagulation is not suitable (approved in June 2011). The active substance in Ozurdex is dexamethasone. Dexamethasone belongs to a group of medicines called corticosteroids.

This implant is injected into the jelly (vitreous) portion of the eye. The implant then slowly dissolves, releasing dexamethasone which blocks chemical pathways that lead to inflammation, leakage from the retinal blood vessels, and oedema. By reducing the swelling in the macula, it may help reverse some vision loss that may be caused by a retinal vein occlusion.

Optic nerve

Sclera

Iris

Cornea

Lens

Vitreous humour

Choroid

Retina

Injection site

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

In your case, the swelling at the macula is due to a retinal vein occlusion. To reduce this swelling, you need to be started on eye injections. They work by penetrating into the nerve layer at the back of the eye (the retina). The macula is the most important part of the retina which is responsible for central vision. Over time, the injections close up the leaking blood vessels affecting the macula, which should reduce the swelling in the macula, and hopefully improve your vision.

The injection can be repeated again after four months, with up to six injections for central retinal vein occlusion and five for branch retinal vein occlusion (under review).

**Will my vision improve?**

This implant has been proven effective in large clinical trials. The effectiveness and safety of OZURDEX® intravitreal implants has been studied in 853 patients who had either branch or central retinal vein occlusions. Results showed that 20 per cent to 30 per cent of patients who received OZURDEX® gained three lines of vision on the eye chart within one to two months. Once vision had improved, the improvement lasted for one to three months.

**What are benefits of the implant?**

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 injection?**

You need to know about the possible side effects (figures from research appears below):

* 25 per cent (25 in 100) patients may experience an increase in intraocular pressure as a result of the injection, and this is more likely if you have high intraocular pressure before the injection.
* 20 per cent (20 in 100) patients may develop a conjunctival haemorrhage.
* Seven per cent (seven in 100) may develop eye pain.
* Four per cent (four in 100) patients may develop a new cataract or experience worsening of an existing cataract within 12 months of the injection.
* Very few patients, less than half a per cent (one in 200), have either eye infections or retinal detachment as a result of the injection.

Some of these complications can lead to blindness. Additional medications or procedures (including surgery) may be needed to treat these complications.

Other less serious side effects include floaters in your vision, damage to the retina or cornea (structures of the eye), headache, inflammation of the eye and bleeding. Again, additional medications or procedures may be required to treat these side effects.

**Other possible limitations**

The goal of treatment is to prevent any further loss of vision. Although some patients have regained vision, the medication may not restore vision that has already been lost, and may not ultimately prevent further loss of vision caused by your disease.

**What are the alternatives?**

Your doctor will be happy to discuss alternative treatments, although these may not be as effective in controlling your condition, or may have more serious side effects than the Ozurdex implant. Intracinol is an alternative steroid (Triamcinolone) approved for ophthalmic use (has a shorter duration of action).

Alternatives include laser treatment (which may have already been given) and another type of injection called anti-vascular endothelial growth factor (anti-VEGF) therapy, Ranibizumab (Lucentis), Aflibercept (Eylea) and Faricimab (Vabysmo).

**What happens before the treatment?**

Please take your usual medication and eye drops on the day of your injection appointment. Before your injection, you will be given a tablet and eye drops to lower your eye pressure. 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?**

You should not feel any pain during the eye injections, since your eye is numbed with anaesthetic drops prior to the injections. You may feel some pressure on your eye. You will not need to stay in hospital.

**What happens after the treatment?**

Most patients will not have any eye drops after the injection, however a small number of patients may be given antibiotic drops for five days after the treatment. Your doctor will discuss this with you. You can take a couple of paracetamol tablets (500mg) on the morning of the injection or afterwards (if not allergic) if necessary.

Please continue to take any other eye drops that you already use (such as, for glaucoma). After the injection, the eye will be covered by an eye shield to prevent corneal scratch / abrasion. Please keep the shield on the eye until the next morning.

**Is there any reason why I cannot have the implant?**

* The implant cannot be given to people who have glaucoma or significant increased eye pressure.
* It will not be used if you have an infection or inflammation in or around the surrounding tissues of the eye.
* Additional support maybe needed for patients who may find local anaesthetic difficult to tolerate due to cognitive impairment. In this case, alternative solutions will be discussed with the patient and those who support them.

**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, continue to use them at home 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.

**References:**

Randomized, sham-controlled trial of dexamethasone intravitreal implant in patients with macular edema due to retinal vein occlusion. Ophthalmology 2010;117:1134-46.

<http://publications.nice.org.uk/dexamethasone-intravitreal-implant-for-the-treatment-of-macular-oedema-secondary-to-retinal-vein-ta229/guidance>

**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 health care 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 your individual circumstances with your eye doctor.

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**Retina lead**

This leaflet can be downloaded or printed from

<http://dgft.nhs.uk/services-and-wards/ophthalmology/>

