

# **Information for Patients undergoing Intravitreal Triamcinolone Acetonide (Kenalog) Injection**

## **Introduction**

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

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 macular 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.

Depending on how the eye responds, these injections may be given on multiple occasions over the coming months in the affected eye. You should not feel anything during the injection, since your eye is numbed with anaesthetic drops prior to the injections. You should also take some antibiotic drops 3 days prior to and after the injections (your doctor will give you a prescription for this).

## **The Injection**

Triamcinolone acetonide (trade name Kenalog) is a steroid injected into the jelly (vitreous) portion of the eye. It has been shown to

reduce the swelling and leakage of blood vessels at the macula and may improve how well you see.

Kenalog is approved by the Medicines and Healthcare products Regulatory Agency (MHRA) to treat swelling caused by many medical conditions. According to the manufacturer, it can be injected into a muscle, skin or joint. Doctors may sometimes use the medication for other reasons which the manufacturers have not approved if they feel it will benefit their patient. **This is known as Off-label or Off-licence use.** Eye doctors have been injecting Kenalog (Off licence) into and around the eye, since studies have shown it helps to treat eye conditions like yours. There are potentially serious risks from this type of injection and from the medication itself. The manufacturer has warned eye doctors of these risks and recommends they do not inject the medication into or around the eye. Despite these known risks and the manufacturers warning, doctors may continue to use it if they think it will help their patient. Your eye doctor feels that this medication is the right one for your condition at this time.

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

You need to know about the possible side effects:

- Less than 0.5% of patients have either eye infections, retinal detachment or cataract as a result of the injection
- Between 28% and 77% of patients may experience an increase in intra-ocular pressure as a result of the injection,

and this is more likely if you have high intraocular pressure before the injection or if a higher dose is injected.

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

Other less serious side effects include pain, subconjunctival haemorrhage (blood shots eye), floaters in your vision, damage to the retina or cornea (structures of the eye), 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.

### **Alternatives to the injection**

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 Kenalog injection. Alternatives include longer-acting intra-vitreous steroid injections (Iluvain, Ozurdex). Laser treatment (which may have already been given) and other types of injection called anti-VEGF therapy

(Avastin, Lucentis). Ozurdex is currently licensed for use in Retinal Vein Occlusions and is available at this hospital for this condition.

### **Client consent**

The nature of my eye condition has been explained to me and the proposed treatment has been described. The risks, benefits, alternatives, and limitations of the treatment have been discussed with me. All of my questions have been answered.

- I understand Kenalog was approved for injections into muscles, skin and joints and it has not been approved for injection into or around the eye to treat eye conditions. Nevertheless, I wish to be treated 'off-label' with Kenalog and I am willing to accept the potential risks that my doctor has discussed with me.
- I will take all prescribed medications exactly as prescribed and will immediately contact my doctor if the following signs of infection or other complications develop: pain, blurry or decreased vision, sensitivity to light, redness of the eye, or discharge from the eye. I have been instructed not to rub my eye or swim for five days after the injection. I will keep all post-injection appointments so my doctor can check for complications. I have been instructed not to drive for my hospital appointment and later on the same day.

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