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## **Patient Information:**

# **Intravitreal Steroid (Triamcinolone) Injection**

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Mr Tanner has advised you to have an injection of Triamcinolone steroid into your eye as recent evidence has suggested that this form of treatment is very effective in decreasing swelling and oedema at the back of your eye, particularly the central area of the retina known as the macula. Over the last few years an increasing number of studies has suggested that Triamcinolone injections are of benefit in a wide variety of conditions including vein occlusions, diabetic macular oedema, post operative macular oedema and also when used in conjunction with photodynamic therapy in the treatment of age related macular degeneration.

### **What is Triamcinolone?**

Triamcinolone Acetamide (Kenalog) is a synthetic corticosteroid which can be injected via a very fine needle through the wall of the eye into the vitreous cavity. It then sits there as a deposit in the eye allowing the steroid effect to work on the macula over approximately a four month period.

Although injecting steroid into the eye is of course associated with some risks, as is any other surgical procedure, serious problems are rare. The steroid is injected into the eye as it is felt to have a far

greater effect when placed directly in contact with the retina and avoids many of the side effects associated with oral steroid use.

## **How does it work?**

Triamcinolone works by reducing inflammation and stopping fluid leaking out from abnormal or damaged blood vessels in the retina. As a result of these leaking vessels the macula often becomes swollen with an associated drop in vision. The duration of effect seems to be three to four months after which a repeat injection may be required although in many cases the leaking process can be switched off by the high dose of steroid used. This is particularly so with age related macular degeneration, where the combined use of steroid injection has decreased the numbers of PDT laser treatments required from six or seven to only two or three.

## **The procedure itself**

The steroid injection is carried out in the operating theatre to minimise the chance of any infection occurring during the process. The injection is given under a local anaesthetic and is not painful in any way. As the steroid is injected you may well notice some black floaters in the eye, or a cloud like effect, which is the steroid entering the eye. Vision is normally clearing by the day following surgery and you can resume normal activities although many patients notice the steroid as floaters in their eye for the first few weeks.

## **What are the risks involved?**

### **The recognised complications of this procedure include:**

1. High pressure in the eye - in up to 40% of patients the pressure in the eye may rise requiring the use of eye drops to bring it back down to normal levels. A pressure rise is usually painless and has not been associated with any adverse effects. For this reason the pressure is checked in the eye at one week, one month and three months following the injection.
2. Glaucoma - in approximately 1% of patients the pressure rise is more substantial and more prolonged drop use or possibly even surgery is required to drop the pressure back to within normal limits.
3. Cataract - there is some evidence to suggest that cataract formation is increased following intravitreal injection of steroid. The incidence increases with a greater number of injections. Cataract can be dealt with by routine surgery as required.
4. Endophthalmitis - there is a 0.5% risk of developing serious infection in the eye following an injection, which can result in visual loss. This is of course the most serious complication following intravitreal steroid injections and this is why every precaution is taken to avoid any infective risk while the procedure is carried out in the sterile operating theatre.
5. Bleeding and retinal detachment are unusual complications which may occasionally require treatment.

You will be asked to sign a consent form prior to the injection in the operating theatre stating that:

- a) you understand why the procedure is being performed;
- b) b) the expected outcome in your particular situation;
- c) c) the potential complications of the procedure.

If you have any further questions please do not hesitate to ask me or my team and we will of course do our best to answer them.

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**Disclaimer**

*The information provided in this document is intended as a useful aid to general practitioners, optometrists and patients. It is impossible to diagnose and treat patients adequately without a thorough eye examination by a qualified ophthalmologist, optometrist or your general practitioner. Hopefully the information will be of use prior to and following a consultation which it supplements and does not replace.*