OZURDEX

What is Ozurdex?

Ozurdex is a rod shaped implant, which is placed inside the eye in the vitreous cavity. It contains the steroid dexamethasone, which is slowly released into the eye. The implant is biodegradable; it slowly dissolves in the eye and does not need to be removed.

How does it act?

Steroids have an anti inflammatory effect, and block chemical pathways that lead to swelling or leakage from blood vessels. The implant continues to release the drug into the eye for 3-6 months and thus has a long lasting effect, compared to intravitreal steroid injection.

What are the indications for its use?

It is used to treat chronic cystoid macular edema (CME) due to causes such as retinal vein occlusions, diabetic macular edema or uveitis.

What is the procedure?

The implant is inserted into the vitreous cavity by a special syringe in the operation theatre, under local anesthesia.

What are the side effects?

The side effects are those due to intravitreal injection, and those associated with the steroid.

1. Due to injection – The implant insertion may be associated with eye infection (Endophthalmitis), eye inflammation or retinal detachment
2. Due to steroid – steroid insertion into the eye may lead to formation of cataracts or raised eye pressure (glaucoma)

What care needs to be taken after the injection?

The eye pressure needs to be monitored regularly, as steroids can cause rise in eye pressure.

How effective is Ozurdex?

The initial treatment for macular edema was intravitreal steroid (triamcinolone) injections, which was in practice for about 10 years. This injection has been gradually replaced over past few years by anti VEGF injections such as Lucentis and Avastin. Ozurdex being a slow release implant, continues to have effect for 3-6 months, and hence is a good option for treating macular edema, along with anti VEGF injections. However, it may need to be repeated after 6 months, once the effect of ozurdex is over.

Case treated with Ozurdex

A 69 year old male presented with history of decreased vision in both eyes since 3-4 months. He was a diabetic on treatment since 10-12 years and hypertensive since 2 years. He had been diagnosed with diabetic retinopathy in both eyes and Central Retinal Vein Occlusion in the left eye. He had already received 2 intravitreal avastin injections in both eyes and steroid injection once in both eyes. His vision was 6/36, < N 36 in RE and 6/18, N 12 in LE. Fundus showed diabetic maculopathy in both eyes and disc edema in left eye. OCT showed macular edema (swelling) in both eyes. He was given intravitreal steroid injection in LE, following which vision improved to 6/9, N8 and edema subsided. However 3 months later there was recurrent edema (swelling) and a month later the steroid injection was repeated. A week after the steroid vision in LE was still 6/24, N12 and edema persisted. A week later he was given intravitreal ozurdex injection. The vision improved to 6/18p, N6. This was maintained for 2 months, following which he was given 1 more steroid injection and later he underwent cataract surgery. This case illustrates the usefulness of all newer drugs like avastin, steroid, and ozurdex. However, it also shows its limited benefit and recurrence of disease in some patients.