

Intraocular Steroid Implants

Many different diseases cause swelling in the retina, particularly the center of the retina, which is called the macula. Macular swelling (“edema” is the medical term for swelling in tissues), or macular edema, is a major cause of vision loss in our patients. Thankfully, much of this swelling is reversible, and as the swelling improves, so too does vision typically improve. Multiple diseases that affect the blood vessels in the retina cause macular edema: diabetic retinopathy, retinal vein occlusion, and non-infectious inflammation in the eye (called “uveitis”).

Macular edema is caused by diseased, dysfunctional blood vessels that leak fluid into the retina. In the last decade or so, a number of new drugs have been developed that treat it by blocking a hormone that causes these blood vessels to become leaky, called VEGF. These drugs include Avastin, Lucentis, and EYLEA. They can be quite effective, but they do not always last very long or completely resolve the problem, and some patients need injections every single month for months on end. Some edema is particularly

stubborn, perhaps because there is more underlying inflammation (or perhaps for other reasons), and in those cases injecting steroid into the eye can be very effective.

One of the major problems with intraocular steroid injections is that the first one developed, called triamcinolone (brand name: Kenalog or Triesence), didn’t last very long in the eye. Swelling would decrease or even completely go away but would come right back in six weeks or so. Now there are two longer-lasting steroid implants that can be injected into the eye with local anesthesia right in the office. The first is called Ozurdex (generic name: Dexamethasone). It is a tiny, little white pellet, a few hairs thick and only a few millimeters long, that gets injected into the eye and slowly releases a nice, steady dose of steroid over about four to six months. It is FDA-approved for macular swelling from diabetes, retinal vein occlusion, and uveitis. For patients who need multiple, recurrent injections of Ozurdex, there is now an implant that lasts three years! It is called Iluvien (generic name: Fluocinolone

Acetonide). It is FDA-approved for macular swelling from diabetes, but it stands to reason that it should be effective for retinal vein occlusion and for uveitis too. Clinical trials are under way to get FDA approval for those problems as well.

Steroids are not all good news: they can accelerate cataract formation and increase eye pressure, which in the long run can lead to glaucoma. Thus, these are not good drugs for anyone with significant glaucoma. However, overall these are exciting developments that we hope will improve the quality of our patients’ vision and decrease the burden of their care because of their longer-lasting effects.

by: *Harpal Sandhu, MD*

To schedule an appointment at the Kentucky Lions Eye Center, please call 502-588-0588.

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