

Comments on: Long-term results of a single injection of intravitreal dexamethasone as initial therapy in diabetic macular edema

Dear Editor,

We read the interesting article by Mahapatra and Kumari describing the favorable outcomes following a single injection of dexamethasone as an initial therapy in diabetic macular edema (DME) published in the March issue.^[1] However, in an era when anti-vascular endothelial growth factor (anti-VEGF) drugs are frequently being used as the first-line treatment for DME, it would have been better if authors have conducted a randomized study comparing the outcomes following anti-VEGF and dexamethasone. Author's claim their study being the first to evaluate the role of dexamethasone as an initial treatment does not seem to be correct as there are studies comparing the outcomes following dexamethasone and anti-VEGF drugs used as an initial treatment for DME.^[2]

DME is known to have two phases, the initial VEGF-mediated phase and the late inflammation-mediated phase. Larger studies have shown that anti-VEGF drugs are more effective in initial phase of DME, while chronic DME responds better to intravitreal steroids.^[3] The intravitreal anti-VEGF injections in the initial stages of DME are shown to result in better functional outcomes compared to intravitreal steroids. Reduction in the severity of diabetic retinopathy or slowing its progression is the additional benefit of using intravitreal anti-VEGF.

Although authors have described the prolonged anatomical effect of intravitreal dexamethasone, various studies have shown a saw-tooth pattern after 3 months of injection, following which retreatment is usually required at 6 months.^[4] Authors also describe low-complication rate following single injection of dexamethasone, the point to consider here is that if

dexamethasone is used as an initial treatment, then patient will require multiple dexamethasone injections in long term once DME is mainly inflammation-mediated. Studies have shown a significantly higher incidence of ocular hypertension and cataract formation following repeated dexamethasone injections.^[5]

To conclude, based on available literature, we suggest that anti-VEGF should be preferably considered as the initial treatment modality for DME, whereas dexamethasone should be used for chronic DME. The role of dexamethasone as an initial treatment for DME should be limited only to specific indications.

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Conflicts of interest

There are no conflicts of interest.

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