



INTRAOCCULAR PRESSURE RESPONSE AFTER INTRAVITREAL INJECTION OF TRIAMCINOLONE ACETONIDE

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Purpose: To investigate the intraocular pressure (IOP) response after intravitreal injections of triamcinolone acetonide as treatment of intraocular neovascular or edematous diseases.

Methods: The prospective consecutive non-comparative interventional case-series study included 71 patients (75 eyes) with progressive exudative age-related macular degeneration (n=64 eyes) or diffuse diabetic macular edema (n=11 eyes), who received an intravitreal injection of 25 mg triamcinolone acetonide. Mean follow-up time was 6.86 ± 2.52 months.

Results: An IOP rise to values higher than 21 mm Hg was observed in 39 (52%) eyes. Elevation of IOP occurred about two months after the injection. Preoperative predictive factor for the rise in IOP was younger age ($p=0.013$). It was statistically independent of refractive error, presence of diabetes mellitus, and indication for the injection. In all but one eye, IOP could be lowered to the normal range with topical medication. In the eyes with an elevation of IOP, IOP normalized about six months after the injection, without further medication. Eyes undergoing repeatedly intravitreal injections of triamcinolone acetonide showed only an elevation of IOP, if after the first injection a rise of intraocular pressure had occurred.

Conclusions: After intravitreal injections of 25 mg of triamcinolone acetonide, an IOP elevation can develop in about 50% of eyes, starting about one to two months after the injection. In the vast majority, IOP can be normalized by topical medication, and returns to normal values without further medication about 6 months after the injection. Intravitreal triamcinolon may be further evaluated for its use in filtering surgery.