Evaluation of outcome of posterior sub tenon (PST) injection of triamcinolone acetonide in macular edema

Shah Md Rajibul Islam and Shah Md Bulbul Islam
Bangladesh

Aim: Aim of this study is to evaluate the outcome of injecting triamcinolone acetonide (Trialon) in the posterior sub tenon space in patients with macular edema.

Materials & Methods: This purposive longitudinal study was conducted upon 278 patients during the period of 2012 to 2014. A single injection of 40 mg triamcinolone acetonide (Trialon) was given in the posterior sub tenon space with all aseptic precaution as an outpatient procedure. Baseline and post injection visual acuity, intraocular pressure and central macular thickness were recorded. Visual acuity and intraocular pressure were re-evaluated at day 15, 30 and 45. OCT macula was re-evaluated at day 45. Peri and post injection complications were noted.

Result: Age range was from 45 to 65 years (54.17±5.52 years). 60% were male and 40% were female. 73.02% were diabetic, 53.59% were hypertensive and 17.26% had uveitis. 50% patients had both diabetes and hypertension; 12.94% patients had diabetes and uveitis; 11.51% had hypertension and uveitis; and 7.91% had all three (diabetes, hypertension and uveitis). 50% were diagnosed as diabetic macular edema, 33.45% were retinal venous occlusive disease and 16.55% were cystoid macular edema due to uveitis. There was a significant improvement in visual acuity at day 45. Elevation of intraocular pressure was transient. 8.63% patients had sustained elevated IOP and needed single medication (Timolol) for IOP control. No patient needed surgery. Change in macular thickness was also significant (from baseline 489.23±58.23 µm to 330±71.83 µm at day 45). There were 10% cases of sub-conjunctival hemorrhage, 40% patients reported discomfort and heaviness in the first week which resolved spontaneously.

Conclusion: Posterior sub tenon triamcinolone acetonide is a simple and effective outpatient procedure with minimal cost. Its judicious use in case of macular edema is promising with minimal adverse effects.

dr_rajibul_islam@yahoo.com