

Intravitreal Bevacizumab (Avastin) in the treatment of Proliferative Diabetic Retinopathy

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Abstract

Aims: To determine the effectiveness and safety of a single injection of intravitreal bevacizumab in the management of proliferative diabetic retinopathy.

Methods: This is a quasi-experimental study in which intravitreal injections of bevacizumab (1.25mg / 0.05ml) were given to patients of proliferative diabetic retinopathy at Al Shifa Trust Eye Hospital, Rawalpindi, Pakistan. These patients were then observed for a period of six months. Changes in best spectacle corrected visual acuity, intraocular pressure, neovascularization (at disc and elsewhere) were documented. Any ocular complications caused by the injection were also noted. Mc Nemar test and paired t-test were used for statistical analysis and p-value of ≤ 0.05 was considered significant.

Results: From January to July, 2008, 214 eyes of 179 patients with proliferative diabetic retinopathy were treated with intravitreal injection of avastin. Overall 149 eyes (69.6%) showed complete regression of neovessels, 48 eyes (22.4%) showed partial regression while 177 eyes (7.9%) showed no regression. In 97 eyes with NVDs, complete regression was achieved in 64.95%, partial regression in 24.74% and no regression in 10.30%. In 176 eyes with NVEs, there was complete regression in 80.68%, partial regression in 14.77% and no regression in 4.54%. The number of eyes with neovessels, NVDs, NVEs and vitreous hemorrhage was significantly reduced after intravitreal avastin injection. Ocular complications of any severity were noted in 9.3% eyes.

Conclusion: Intravitreal bevacizumab is an effective treatment for proliferative diabetic retinopathy. *Al-Shifa Journal of Ophthalmology 2014; 10(2): 62-72. © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.*
