

Bevacizumab (Avastin) as an Adjunct to Vitrectomy in the Management of Severe Proliferative Diabetic Retinopathy: A Prospective Case Series

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Abstract

Purpose: To evaluate the role of preoperative intravitreal bevacizumab as an adjunct to vitrectomy in diabetic eye disease. **Methods:** Twenty eyes of 18 patients were recruited and underwent a single intravitreal injection of bevacizumab 1.25 mg 1 week prior to vitrectomy. Fundus fluorescein angiography (FFA) was done before and 1 week after injections. Best corrected visual acuity (BCVA) and ophthalmic evaluation were done before, 1 week after injections, 1 day, 1 week and monthly for 3 months after vitrectomy. **Results:** The mean age was 47.7 ± 10.39 years. The male:female ratio was 2:3. Mean preinjection BCVA (logMAR) was 1.460 ± 0.439 . FFA showed a dramatic reduction in dye leakage 1 week after injection. Intraoperative bleedings were minimal in most cases (85%, n = 17). Postoperatively, 16 patients had no bleeding (80%), 4 had minimal bleeding (20%), and 1 had recurrent fibrovascular proliferation (5%). The mean BCVA on day 1, week 1, months 2 and 3 after surgery were 1.645 ± 0.422 , 1.300 ± 0.413 , 1.065 ± 0.538 and 1.065 ± 0.538 logMAR, respectively (p = 0.078, 0.123, 0.002 and 0.002, respectively). **Conclusion:** Bevacizumab administered prior to vitrectomy was well tolerated and was particularly useful during surgery.

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