

# Comparison of efficacy of intravitreal avastin alone with combination of intravitreal avastin and peribulbar triamcinolone in diabetic macular edema

Yaseen Lodhi<sup>1</sup>, Adnan Aslam Saleem<sup>2</sup>, Danish Gani<sup>3</sup>, Nadeem Qureshi<sup>2</sup>

## ABSTRACT

**Background:** Bevacizumab and triamcinolone acetonide (TA) are both common choices for treatment of diabetic macular edema (DME), but the comparative efficacy of combined or separate applications is still debatable.

**Purpose:** To compare the efficacy of intravitreal injection avastin alone with combined intravitreal injection of avastin and peribulbar triamcinolone/ posterior sub tenonkenacort (PSTK) in patients of diabetic macular edema.

**Methods:** The study was carried out in the vitreoretina department of Al-Shifa Trust Eye Hospital, Rawalpindi. Main outcome measure was improvement in number of Snellen visual acuity lines one month after treatment in this randomized clinical trial.

**Results:** Thirty five patients were studied in both groups. All but 2 patients completed the follow-up. At baseline mean BCVA  $\pm$ SD was  $0.8712 \pm 0.28685$  log MAR of Snellen letters in the avastin alone group. In avastin + PSTK group, baseline mean BCVA  $\pm$ SD was  $0.8371 \pm 0.33267$  log MAR of Snellen letters. The follow up BCVA  $\pm$ SD was  $0.5541 \pm 0.31255$  in the avastin only group compared to  $0.5406 \pm 0.31255$  in the avastin + PSTK group. This shows significant improvement in visual acuity (p-value < 0.001) in their respective groups. When comparing both groups using the independent t-test, the p-value came out to be 0.790, showing there is no significant difference in VA improvement when subtenon triamcinolone is added to intravitreal avastin.

**Conclusion:** Intravitreal bevacizumab injection alone in a concentration of 1.25mg / 0.05ml in patients with DME resulted in significant improvement in BCVA. Intravitreal avastin when given with posterior subtenon triamcinolone in a dosage of 4mg/.1 ml (40mg/ml) also showed significant improvement in BCVA but this improvement was not statistically significant. *Al-Shifa Journal of Ophthalmology 2016; 12(1): 9-15. © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.*