Subconjunctival Bevacizumab versus Mitomycin C adjunctive to trabeculectomy in primary open angle glaucoma

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Abstract

This study is to compare the efficacy and safety of Mitomycin C versus Bevacizumab as adjunctive to trabeculectomy in primary open angle glaucoma. A prospective, comparative, open-label study was conducted at Assiut University Hospital in Egypt from January 2014 to November 2016. 30 eyes from 30 patients with uncontrolled primary open angle glaucoma were enrolled. 15 eyes underwent trabeculectomy with subconjunctival Bevacizumab injection (1.25 mg/0.05 mL) and 15 eyes underwent trabeculectomy with MMC (0.02% for 3 minutes). The primary outcome measure was IOP while the secondary outcome measures were number of IOP lowering medications and bleb morphologic features (based on the Indiana Bleb Appearance Grading Scale). Follow-up times were six months. The mean preoperative IOP in the Bevacizumab group decreased from 29.80±2.83 mmHg with 2.67±0.98 anti-glaucoma medications to 14.13±5.58 mmHg with 1.00±1.13 anti-glaucoma medications at the last visit ($P<0.001$ and $P<0.001$, respectively). The mean preoperative IOP in the MMC group decreased from 28.40±2.06 mmHg with 2.40±0.99 anti-glaucoma medications to 12.27±4.85 mmHg with 0.87±1.06 anti-glaucoma medications at the final visit ($P<0.001$ and $P<0.001$, respectively). There was no statistically significant difference in the IOP between the two groups at the last visit ($P<0.250$). The cumulative probabilities of total success at the last follow-up according to Kaplan-Meier analysis were 86.7% and 79.9% in MMC and Bevacizumab groups, respectively.

Biography

Islam Goda has completed his Master's degree in Ophthalmology from Assiut University and currently has a Registered Doctorate degree in Assiut University, Egypt.

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