

2nd article

Comparative study On the Outcome of primary Pterygium Surgery using Bevacizumab versus Mitomycin C.

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Abstract

Purpose: To Compare preoperative Subconjunctival Bevacizumab injection and Intraoperative Mitomycin C application On the Outcome of primary Pterygium Surgery. **Methods:** Prospective, Randomized, Comparative Clinical Study was conducted on sixty eyes of sixty patients complaining of primary pterygium of variable duration. They were classified randomly into Two groups: Group (A) which received subconjunctival injection of bevacizumab 1.25 mg (0.05 mL) 2 weeks prior to surgery then was managed by pterygium excision with bare sclera technique, Group (B) which was managed by pterygium excision with bare sclera technique and Intraoperative application of Mitomycin C 0.02% for a duration of two minutes After medication administration, the ocular surface was copiously irrigated with balanced salt solution. Recurrence was considered when a fibro-vascular growth had occurred in the position of the previously excised pterygium crossing the limbus and extending onto the cornea for any distance.

Results: Mean follow-up time was 8.99 months in Group (A), 6.63 in Group (B) (range, 2 – 11 months), and the recurrence rate was (36.7)% (11 of 30 eyes) in Group (A), (13.33)% (4 of 30 eyes) in Group (B).

Conclusion: We concluded that a single preoperative subconjunctival injection of bevacizumab had decreased the recurrence rate after primary pterygium excision which seems to be marginally superior to bare sclera excision alone but does not give a more desirable recurrence rate, its use is associated with very little complications and high safety profile. Intraoperative application of Mitomycin C is effective in reducing the recurrence rate of primary pterygium but its use is associated with higher rate of postoperative complications which may be Vision-Threatening.