Comparison of Timolol alone with fixed combination of Latanoprost/ Timolol to control intra-ocular pressure in Primary Open Angle Glaucoma

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Abstract

Objective: To evaluate the effectiveness of Timolol only and fixed combination Latanoprost-Timolol in lowering intraocular pressure in patients with primary open angle glaucoma.

Study Design: Comparative Randomized Controlled trial

Methodology: This study was conducted at Institute of Ophthalmology, Mayo Hospital, Lahore over a period of one year from January 2012 to December 2012. Total 80 patients were selected by Non-Probability Purposive Sampling technique after fulfilling inclusion and exclusion criteria. After informed consent these patients were divided into two groups by random number table. Group-I consisted of 40 patients which were put on topical Timolol therapy one drop in each eye twice daily. Group-II consisting of 40 patients was put on topical fixed combination Latanoprost-Timolol therapy, one drop once daily in both eyes. On each follow-up visit all patients were assessed by monitoring intraocular pressure with Goldmann Applanation Tonometer. The follow up examinations were scheduled at one week, one month, and three months from the start of therapy. Later on, all patients were followed for at least 6 months and according to requirement they underwent modification in medication or surgical procedure.

Results: At the end of study, mean reduction of intraocular pressure from baseline in Group-I (using 0.5% Timolol twice daily) was 6.7 mm of Hg (27.57%) and the mean reduction of intraocular pressure in Group-II (using Fixed Combination Timolol-Latanoprost once daily) was 7.9 mm of Hg (32.24%). The effectiveness i.e. reduction of intraocular pressure by 30% from baseline was noted among 32.5% patients in Group-I and 70% patients in Group-II. **Conclusion:** Latanoprost-Timolol fixed combination is well tolerated, convenient and an effective ocular hypotensive agent than Timolol alone in lowering IOP in primary open angle glaucoma. *Al-Shifa Journal of Ophthalmology 2014; 10(1): 43-49.* © *Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.*