

# Association between Dry Eyes and Anti-glaucoma Medications: A Case Control Study

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## Abstract

### Objective:

To identify the association between dry eye syndrome and anti-glaucoma medications, to detect the effect of duration of anti-glaucoma medications use on producing symptoms of dry eye and to compare the frequency of dry eye symptoms in anti-glaucoma medications users and control group.

**Subjects and Methods:** A case control study at the Glaucoma department of Al-Shifa Trust Eye Hospital Rawalpindi, in which hundred patients on anti-glaucoma medications and hundred controls were enrolled. Tear break up time (TBUT), Schirmer test and Tear meniscus height were used to evaluate dry eye. All the information was recorded on a structured proforma and data was analysed using SPSS version 13.

**Results:** In results of TBUT, 78% dry eyes were found in cases and 30% in control group. Schirmer test results showed 62% dry eyes in cases and 34% in control group. Tear meniscus height showed 85% dry eyes in cases and 37% in control group. Results were statistically significant with  $P < 0.005$ . Regarding the duration of use, 34% dry eyes were found in Glaucoma patients using medications for 2-3 years and 75% in those who were using medicines for more than 5 years and results were statistically significant with  $p < 0.005$ .

**Conclusion:** This study concludes that there is an association between the use of anti-glaucoma medications and dry eyes. Increase in duration of medications use leads to increase in symptoms of dry eye. *Al-Shifa Journal of Ophthalmology 2016; 12(3), 164-169. © Al-Shifa Trust Eye Hospital, Rawalpindi.*

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