

Comparison of Ciprofloxacin 0.3% and Moxifloxacin 0.5% eye drops in bacterial corneal ulcers

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Abstract

Objectives: To compare the effect of Ciprofloxacin 0.3% and Moxifloxacin 0.5% eye drops in bacterial corneal ulcers.

Design: Prospective randomized trial

Place & Duration of Study: Ophthalmology department of Pakistan Institute of Medical Sciences, Islamabad. The total duration of the study was 18 months.

Patients & Methods: 100 patients of bacterial corneal ulcers were randomly assigned to two treatment groups: A (Ciprofloxacin 0.3%) and B (Moxifloxacin 0.5%) for the treatment of bacterial corneal ulcers. The outcome measures included size of epithelial defect, size of infiltrate and reaction in anterior chamber on day 1, 2 and 3 and week 1, 2 and 3 after the initiation of treatment. They were compared between the two study groups using Student t test and Chi-square test. SPSS version 13 was used for data entry and analysis.

Results: The mean age of patients in Group A was 37.6 (\pm 9.7 SD) years and in Group B was 37.4 (\pm 9.2 SD) years. There were 34 (68%) female and 28(56%) male patients in group A and B respectively. There were significant differences in terms of size of infiltrate (p value 0.030) and reaction in anterior chamber (p value 0.002) between the two study groups. A non-significant difference was observed in size of epithelial defect between the two groups (p value 0.158 after 2 weeks).

Conclusion: Our study showed that Moxifloxacin 0.5% is superior to Ciprofloxacin 0.3% eye drops in treating bacterial corneal ulcers in adult patients. *Al-Shifa Journal of Ophthalmology* 2014; 10(1): 36-42. © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.
