

ABSTRACT

Title of the abstract - Case – Control study for Ocular surface risk factors in Microbial Keratitis

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Degree Subject – M.S Ophthalmology

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Objectives : To determine decreased corneal sensation, adnexal inflammatory conditions, tear film abnormalities are risk factor for developing corneal ulcers. To find threshold value of corneal sensation for development of corneal ulcer.

Methods : A case control study was done in 55 cases and 55 controls who are age, sex and diabetes matched. Descriptive statistics were reported using Mean \pm SD and statistical significance was obtained with two independent sample t test. Categorical variables were reported using Frequency and Percentage and their statistical significance obtained using Pearson Chi Square test/ Fishers exact test as appropriate. Binary Logistics was done for to assess risk factors. Receiver operating characteristic curve was obtained to attempt to arrive at an ideal cutpoint of corneal sensation in controls.

Results : **Corneal sensitivities** in cases were lower as compared to controls(p – value = 0.003). **Meibomitis** was present in 40% of cases and 27.3% of controls (p –value = 0.158). **Blepharitis** was higher in cases (43.6%) as compared to controls (18.2 %) was statistically significant (p=0.004). Presence of **dry eye** was higher in controls (p value < 0.001) which was significant. A cut-off value of corneal sensation as measured could not be determined. **Conclusion :** Identifying and treating ocular surface risk factors prevent development of corneal ulcer and thereby the corneal blindness.

Keywords : corneal ulcer, risk factors, aesthesiometer, cochet bonnet, dry eye, meibomitis, blepharitis, TBUT, schirmers test