Effect of %0.01 topical mitomycin C in treatment of severe refractory vernal keratoconjunctivitis.

Abstract

Background and goals:
Corticosteroids and mast – cell stabilizers are commonly used in treatment of vernal keratoconjunctivitis, but regarding the side – effects of the agents and poor response in severe cases, in this study droplet of mitomycin- c 0.01% has been used to control the disease and determine it's efficacy on the treatment of vernal keratoconjunctivitis.

Methods:
In a clinical trial 40 patients was studied in two groups. 20 patients treated with mitomycin C 0.01% as case group and 20 patients treated with normal saline as control group 3 times daily in a 2 week period. Clinical symptoms (tearing, itching, mucosal discharge) and signs (papillae, micropannus, hyper injection, corneal involvements, limbus involvement ) were assessed and compared at the beginning of the study, 2 weeks & 4 weeks after treatment.

Result:
40 patients were studied including 31 men and 9 women with average of 14.65±3.8 years in case group and average of 16.2± 8.4 in control group. Average of disease duration in case group was 3.5±3.2 years and in control group was 15± 4.6. comparing the severity of sings and symptoms 2 weeks after treatment in two groups, there was a statistically significant difference just in the tearing(p=0.029) and the size of papillae(p=0.006). There was no significant difference on other signs and symptoms between two groups. it wasn’t seen any side – effect to drugs in patients during the treatment.

Conclusion:
This study showed that use of topical mitomycin C along with usual drugs reduces the severity of tearing and the size of papillae, also comparing with placebo, mitomycin C causes more relief in other signs and symptoms that was studied, however this difference was not statistically significant.
Key words: