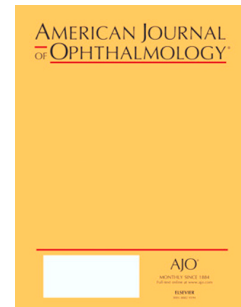


# Accepted Manuscript

Reduced Efficacy of Low-dose Topical Steroids in Dry Eye Disease Associated with Graft-versus-host Disease

Jia Yin, Ahmad Kheirkhah, Thomas Dohlman, Ujwala Saboo, Reza Dana



PII: S0002-9394(18)30125-9

DOI: [10.1016/j.ajo.2018.03.024](https://doi.org/10.1016/j.ajo.2018.03.024)

Reference: AJOPHT 10460

To appear in: *American Journal of Ophthalmology*

Received Date: 8 December 2017

Revised Date: 21 February 2018

Accepted Date: 11 March 2018

Please cite this article as: Yin J, Kheirkhah A, Dohlman T, Saboo U, Dana R, Reduced Efficacy of Low-dose Topical Steroids in Dry Eye Disease Associated with Graft-versus-host Disease, *American Journal of Ophthalmology* (2018), doi: 10.1016/j.ajo.2018.03.024.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**ABSTRACT**

**Purpose:** To compare the response of dry eye disease (DED) to treatment with topical steroid in patients with and without graft-versus-host disease (GVHD).

**Design:** Post-hoc analysis of a double-masked, randomized clinical trial.

**Methods:** This single-center study included 42 patients with moderate to severe DED associated with (N=21) or without (N=21) chronic GVHD. In each group, patients received either loteprednol etabonate 0.5% ophthalmic suspension or artificial tears twice daily for 4 weeks. Clinical data, including Ocular Surface Disease Index (OSDI) questionnaire, corneal fluorescein staining (CFS), conjunctival lissamine green staining, tear break-up time (TBUT), and Schirmer's test, were evaluated before and after treatment.

**Results:** There were no significant differences in signs and symptoms of DED between the groups at baseline. In non-GVHD patients receiving loteprednol treatment, the average OSDI score decreased by 34% from  $49.5 \pm 5.9$  to  $32.6 \pm 4.8$  (Mean $\pm$ SEM,  $P=0.001$ ) and the average CFS score decreased by 41% from  $5.6 \pm 0.6$  to  $3.3 \pm 0.9$  ( $P=0.02$ ). On the other hand, loteprednol treatment in GVHD patients resulted in minimal change in OSDI ( $59.2 \pm 6.7$  to  $61.1 \pm 7.1$ , 3% increase,  $P=0.66$ ) and CFS ( $5.5 \pm 0.5$  to  $5.3 \pm 1.1$ , 4% decrease,  $P=0.85$ ) scores. Treatment with artificial tears resulted in 22% decrease of OSDI ( $P=0.10$ ) and 32% decrease of CFS ( $P=0.02$ ) scores in non-GVHD patients, and had minimal effect in patients with GVHD.

**Conclusions:** DED patient with ocular GVHD have a less favorable response to a low-dose topical steroid regimen compared with those without ocular GVHD even with similar baseline disease severity.

Download English Version:

<https://daneshyari.com/en/article/8790554>

Download Persian Version:

<https://daneshyari.com/article/8790554>

[Daneshyari.com](https://daneshyari.com)