Author’s response to reviews

Title: Allergic contact dermatitis of both eyes caused by alcaftadine 0.25%: A case report

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Author’s response to reviews:

(Reviewer 1):

The authors did not use any controls with the buffered solutions or the preservative. The patient may have become sensitized to the preservative from the most recent use of multiple ophthalmic agents.

➔ The concentration of benzalkonium chloride in alcaftadine 0.25% is 0.005%, which is very low, and other ophthalmic agents also have approximately the same concentration. Considering that the other ophthalmic agents she used, which also contained benzalkonium chloride, did not induce any allergic reaction, we could attribute alcaftadine 0.25% itself as the causative factor of allergic reaction.

It would appropriate to provide a photo of the 1+ patch testing.

➔ Figure 3 shows the 1+ patch testing, because lesion shows only well-bordered erythematous lesion.

What were other components of the panel used such as other ophthalmic agents?

➔ There were two other ophthalmic agents such as levofloxacin 0.5% (Cravit®; Santen Pharm. CO., Japan) and fluorometholone 0.1% (Fumelon®; Hanlim Pharm. CO., LTD., South Korea)

Line 19: Please clarify as to whether the effect to antihistamine agents -- oral or ophthalmic?

➔ We added ‘ophthalmic’ on manuscript.

Line 24: Patch test was performed... Was the patch test performed to individual components of the alcaftadine solution?
No. We directly applied all 3 ophthalmic agents to separate locations. LASTACAFT eye drops contain benzalkonium chloride 0.005% as a preservative; dibasic sodium phosphate hydrate; sodium phosphate, monobasic; purified water; sodium chloride; sodium hydroxide and/or hydrochloric acid (to adjust pH) other than alcaftadine. We confirmed that BAK was not causing positive result based on negative findings on area that other two eyedrops have been applied. Although we did not test all components individually, other buffer ingredients such as monobasic sodium phosphate, dibasic sodium phosphate, sodium chloride, sodium hydroxide are also included in other two eyedrops we tested. Taken all together, we concluded that alcaftadine caused allergic reaction.

Line 56: Patch does not produce a false positive ... The authors need to clarify as false positive such as irritant reactants are reported.

Concentration of drug is so important in irritant reaction. Benzalkonium chloride is a skin irritant (usually in 0.1%). But LASTACAFT only contains 0.005 % of benzalkonium chloride. So, Benzalkonium chloride can’t act as irritant. And also after we removed patches, skin lesion induced by patch remained for more than 1 week. Lesion induced by irritant disappears in 96 hours after patch is removed.


Reviewer 2 (Reviewer 2):

Please mention the dose of oral steroids used and the way tapering was carried out. Was any topical steroid used?

We added the dose of oral steroids used and the way tapering was carried out on manuscript. There was no topical steroid used.

Please mention how many months of follow up were available.

The patient was followed up for 2 months and mentioned on manuscript.

Please mention that the +1 positive result of the patch test in the case description and not in the discussion.

We presented +1 positive result of the patch test in the case description and not in the discussion.