Author’s response to reviews

Title: Spontaneous Reattachment of Dislocated Endothelial Graft After non-Descemet Stripping Automated Endothelial Keratoplasty: A Case Report

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Author’s response to reviews:

Dr Guangde Tu
Editor-in-Chief
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Re: Manuscript No. BOPH-D-17-00455
Spontaneous Reattachment of Dislocated Endothelial Graft After non-Descemet Stripping Automated Endothelial Keratoplasty: A Case Report

Dear Dr Tu,

It is my great pleasure to communicate with you again in relation to the peer review of our above-mentioned manuscript. First of all, I would like to thank the editor, and the reviewers with whose comments the great value of this paper increased immensely. Please note the following changes were made to the manuscript in accordance with the comments from the reviewers. We
believe that we have answered all reviewers’ questions in a satisfactory manner and that the paper will make an important and timely contribution to your journal.

We feel indebted to the editor and the reviewers, for the time and effort spent throughout the review process of this manuscript. We hope we were able to revise the paper in accordance with the reviewers’ expectations. Please note that we will remain open to further comments and suggestions from the reviewers. We are honored to be working on this paper with you throughout this revision process.

Sincerely yours,

Aya Kodama-Takahashi,

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To Reviewer 1:

Thank you very much for reviewing our manuscript. We have carefully revised our paper according to your comments.

Responses to Reviewer 1:

Comment #1:

This case report describes spontaneous reattachment of an nDSAEK graft that was 75% detached.
The major concern is that it is important to differentiate between partial and complete graft detachment. Partial DSAEK detachments usually spontaneously reattach, and spontaneous reattachment has even been reported in a few cases of complete DSAEK detachment (reference 6). Therefore, it is advisable to watch partial detachments for a month to see if they spontaneously reattach. If the detachment persists and is affecting vision at one month then air can be re-injected to prevent fibrosis and poor visual outcome (as observed in reference 7). This case report describes a large (75%) but partial nDSAEK detachment. Therefore, it’s not particularly surprising that it spontaneously reattached. The point of the article should be to call attention to the fact that partial detachments can be monitored up to a month for spontaneous reattachment.

Response:

We thank the reviewer for this helpful comment. We agree with the reviewer that the point of this article should be focused on calling attention to the fact that partial detachments can be monitored up to a month for spontaneous reattachment. As you will see in the revised manuscript, we described these points. (Page 6, Line 96-99 and Page 9, Line 138-148)

In our case, nDSAEK graft spontaneously reattached one month after surgery without immediate reoperations. This suggests, in case of partial detachment, a close observation could be an option among the treatments for graft dislocation in the early postoperative period after nDSAEK even the detachment is as large as 75% of the graft. However, persistent detachment causes poor visual outcome due to corneal fibrosis. Therefore, when the detachment persists and is affecting vision, then we should consider air-reinjection or re-operation to prevent corneal fibrosis.

Comment #2:

Please report whether the authors have had any cases of nDSAEK partial detachment that did not spontaneously reattach.

Response:

We thank the reviewer for this suggestion. The following sentence reporting our experience has been added to the BACKGROUND section. (Page 4, Line 55-57)

We have experienced several cases of nDSAEK graft detachment which did not spontaneously reattach, including cases with extensively dislocated graft and others with persisting folds and wrinkles in the transplanted graft.
Comment #3:

Please provide a reference for the double glide technique (line 86).

Response:

Thank you for your comment. We cited the following report in our manuscript. (Page 5, Line 72)
We changed reference numbers according to the order of citation.


Comment #4:

Line 92: please clarify whether the high vitreous pressure was caused by pupillary block. Was an inferior iridectomy or iridotomy performed?

Response:

We appreciated this suggestion for more detailed information regarding the procedure. We added information about the reason why the patients’ high vitreous pressure was caused, (The vitreous pressure was high because the patient felt extremely stressed and tense under local anesthesia. Pupillary block was not the reason.) and we performed the inferior iridectomy during the operation. We incorporated this content in the manuscript.

After making four venting incisions, we performed inferior iridectomy with a vitreous cutter. (Page 5, Line 70-71)

Because the surgery was carried out under local anesthesia and the patient appeared quite stressed and tense, we suspected that this might have caused the high vitreous pressure. (Page 5, Line 77-79)

Comment #5:

In lines 113-114, it would be helpful to clarify that recipient Descemet membrane and endothelium must be removed with Fuchs dystrophy to eliminate the guttae that distort vision.

Response:
Again, we appreciate this suggestion for more detailed information. We have added the following sentence to the discussion section. (Page 7, Line 100-102)

Fuchs corneal dystrophy is the leading cause for corneal endothelial dysfunction in Europe and North America and with Fuchs dystrophy, the recipient Descemet’s membrane and endothelium must be removed to eliminate the guttae that distort vision.

Comment #6:

Lines 143-144: please clarify whether this is referring to “decentration” or “detachment”. “Decentration” implies the graft complementely detached and moved off-center relative to the recipient cornea.

Response:

We appreciated your valuable comment. We agree with you and changed the manuscript. We changed the description “decentration” to “detachment” in the manuscript. (Page 8, Line 131, 132)

We also changed the description “dislocation” to “detachment”. (Page 2, Line 31, 32, 35)

To Reviewer 2:

Thank you very much for reviewing our manuscript. We have carefully revised our paper according to your comments.

Responses to Reviewer 2:

Comment #1:

Abstract: please reformulate the sentence “the dislocation was improved” to “the dislocation was resolved”.

Response:

We appreciate this comment for more accurate description. Accordingly, we have changed the description from “the dislocation was improved” to “the detachment was resolved” in the manuscript. (Page 2, Line 31) We presume “detachment” is more appropriate than “dislocation”.

Comment #2:

Fig 3, legend: please reformulate the sentence “Corneal edema was improved” to “Corneal edema was resolved”.

Thank you for your comment. We have reformulated the sentence “Corneal edema was improved” to “Corneal edema was resolved” in the manuscript. (Page 13, Line 223)

We hope that we have responded to all the points you raised and that our manuscript is now improved and appropriate to be published.