Patients with a minimum corneal thickness less than 400 μm generally belong to advanced (stages III and IV) KC and were obviously excluded being out from CXL safety guidelines.[3]

In conclusion, I sincerely thank Kate et al for their valuable comments and for giving me the opportunity to provide 2 important final clinical recommendations:

1. Pediatric KC must be treated at diagnosis without awaiting progression. Progression will occur in almost 90% of the patients within 1 year according to the literature[4] and, in my experience, in almost 100% of the pediatric patients engaged in eye-rubbing and suffering from allergy.[5]
2. Allergy, eye-rubbing, and pediatric age increase the risk of faster KC progression and visual acuity deterioration, increasing the risk of corneal transplant. These patients require immediate CXL treatment without awaiting progression, closer follow-up, adequate medical therapy, and careful monitoring of the results.[5]

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Management of Type 2 Bubble Formed During Big-Bubble Deep Anterior Lamellar Keratoplasty

To the Editor:

We read with interest the article by Goweida et al[1] regarding the management of Descemetic "type 2" bubbles encountered during deep anterior lamellar keratoplasty (DALK). We would like to contribute 2 further points.

First, we would like to propose a fourth technique to those already succinctly described in the article, which is essentially a combination of "Descemet Membrane (DM) Baring DALK" and "Microbubble Incision DALK" techniques. After type 2 bubble creation, we perform a manual dissection until we reach the plane devoid of microbubbles, which we assume to be the pre-Descemetic layer. Ever mindful of "The enemy of good is perfect", we then perforate the ceiling of the bubble under viscoelastic protection to avoid its sudden collapse, inject viscoelastic into the bubble cavity to distance its floor and remove only the central 4 mm of pre-Descemetic layer. This diameter is sufficient to clear an optical zone large enough to prevent any visual disturbance even in scotopic conditions, and in fact postoperatively, we have not recorded any subjective complaints from any patient.

Second, we agree that even in the presence of an intact DM, double anterior chamber formation can indeed occur after a type 2 bubble. In fact, having recently performed multivariate regression analysis of intraoperative factors in almost 600 patients undergoing DALK surgery (article in press), we found that the occurrence of a type 2 bubble was the single highest predictive factor of postoperative formation of a double anterior chamber, independent of intraoperative DM perforation. For this reason, if a type 2 bubble is obtained, we suggest intracameral air fill for at least 2 hours at the end of DALK surgery as a prophylactic measure.

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Reply:

We thank Myerscough et al for their interest in our article. Regarding exposing Descemet membrane by excising 4 mm diameter of the central prepupillary stroma, we agree this technique is beneficial in cases with deep scarring and advanced macular dystrophy, where the pre-Descemetic stroma (PDS) is scarred or opacified by glycosaminoglycan deposits.[1] However, we would not