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Letters to the Editor

Relapsed Disciform Stromal Herpetic Keratitis and mRNA COVID-19 Vaccination

Dear Editor,

We would like to share ideas on "Relapsed disciform stromal herpetic keratitis following mRNA COVID-19 vaccination [1]." We agree that the patient has relapsed disciform stromal herpetic keratitis. However, a causal interrelationship with coronavirus disease 2019 (COVID-19) vaccination remains an issue for further studies. COVID-19 vaccine might cause ocular adverse effects and herpetic keratitis might be a clinical problem following COVID-19 vaccination. Basically, immunological abnormality induced by vaccine might be a trigger factor for this adverse event. However, no data on abnormal immune parameter is available for finalized conclusion. For an eye complication after COVID-19 vaccination, it might be due to immunepathology, coincidence, or other pathophysiological process [2]. For a case with possibility of herpetic reactivation, other lesions at patients might also occur and it is useful to have a complete body examination of the patient. Finally, a medical disorder might concurrently occur after COVID-19 vaccination. For example, dengue is reported in vaccine recipient [3] and stromal keratitis is also a possible rare clinical problem induced by dengue [4].

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Author Reply

Dear Editor,

Thank you for the consideration of our article. Vaccination against COVID-19 is of interest to all healthcare workers during the pandemic period. Cases of recurrence in patients who previously had inflammation due to herpes virus infection have been reported not only in ophthalmology, but also in other medical fields [1,2]. However, in other cases, the specific immune mechanism is unclear.

As you pointed out, the timing of the outbreak may have been coincidental, independent of the vaccination. In this case, the patient's systemic immunological examination was not performed before and after vaccination. However, stromal keratitis recurred at about the same time after two vaccinations in a healthy adult woman with no other dis-

eases except a history of viral keratitis.

As the questioner stated, the detailed immune and pathological mechanisms related to the COVID-19 mRNA vaccination are unclear. However, in this case, we want to focus on the ongoing COVID-19 vaccination process, detailed questionnaires about the ophthalmic disease history before vaccination, and the patient's understanding. Eventually, a study elucidating the number of cases or related immunopathological relationships will be necessary.

However, in the COVID-19 pandemic situation, where mutations occur continuously and booster shots of existing vaccines or development and inoculation of new vaccines are expected to proceed accordingly, we report a case whose information would be helpful for patients. We thank Pathum Sookaromdee and Viroj Wiwanitkit for their interests in our case.

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