

LETTER TO THE EDITOR

Comment on “Oral lichen planus following the administration of vector based COVID-19 vaccine (Ad26.COVS.2.S)”. Authors' reply

Dear Editor,

We would like to respond to the comment of Mungmunpantipantip and Wiwanitkit (Mungmunpantipantip & Wiwanitkit, 2021) to our letter entitled “Oral lichen planus following the administration of vector based COVID-19 vaccine (Ad26.COVS.2.S)” (Troeltzsch et al., 2021). It has to be highlighted that the occurrence of oral lichen planus (OLP) in timely association with the COVID-19 vaccination Ad26.COVS.2.S is merely a clinical observation and detailed immunologic analyses were not performed. Extensive research on the immunologic mechanisms of COVID-19 vaccines showed an intense and durable activation of humoral and cellular immunologic pathways (Barouch et al., 2021) that are also implicated in the pathomechanism of OLP (Nogueira et al., 2015).

Different or multifactorial causes for the development of OLP in the presented case are conceivable. Rheologic changes of the blood in the wake of COVID-19 vaccinations are mentioned as possible underlying causes in the comment of Mungmunpantipantip and Wiwanitkit (Mungmunpantipantip & Wiwanitkit, 2021). The evidence for this theory is very limited but it might serve as an additional, underestimated factor in the etiology of OLP. There is a significant risk of OLP development in patients suffering from chronic Hepatitis C (Gill et al., 2016). In those patients, both diffuse immune system activation and an increase of blood viscosity due to mixed cryoglobulinemia are observed (Gill et al., 2016). Further research will be warranted to further explore the exact underlying mechanisms.

The aim of our letter to the editor was to encourage the scientific community to screen patients presenting with (extensive) OLP lesions for a possible timely association with a COVID-19 vaccination to increase the body of knowledge in this field.

KEYWORDS

Ad26.COVS.2.S, COVID vaccine, COVID-19, oral lichen planus

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CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

Matthias Troeltzsch: Conceptualisation, Literature review, Writing of original manuscript; Ronald Berndt: Literature review, manuscript review; Markus Troeltzsch: writing of original manuscript

PEER REVIEW

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