



Response to R. Mungmumpuntipanip and V. Wiwantikit

Correspondence to “Post-SARS-CoV-2 vaccination COVID toes and fingers”

Uwe Wollina

Received: 7 September 2022 / Accepted: 8 September 2022 / Published online: 7 October 2022
 © The Author(s), under exclusive licence to Springer-Verlag GmbH Austria, ein Teil von Springer Nature 2022

Dear Editor,

I very much appreciate the interest the observation of post-SARS-CoV-2 vaccination COVID toes and fingers has gained. R. Mungmumpuntipanip and V. Wiwantikit pointed to the important issue that before making a definitive diagnosis, other causes should be carefully ruled out. I completely agree. Dengue fever is the most frequent arboviral disease encountered in travelers, but global travel restrictions during the COVID-19 pandemic reduced this risk, at least in Europe [1].

The coinfection of patients with SARS-CoV-2 and Dengue virus is a particular problem in tropical countries and the diseases may show an overlap of cutaneous symptoms. Dengue fever is therefore also an important differential diagnosis in COVID-19 disease [2].

Dengue fever, as suggested by R. Mungmumpuntipanip and V. Wiwantikit, is a common diagnosis in other parts of the world but not in Saxony, in particular since both involved patients had never visited tropical countries. The Robert Koch Institute registered only 205 cases of Dengue fever in Germany in 2020 [3].

No symptoms or laboratory findings suggestive of another systemic infection were found. In our two patients, no other cause of COVID toes and fingers was evident apart from the vaccination against SARS-CoV-2.

However, future climate change and the invasion of vectors such as *Aedes* may increase the risk of vector-borne diseases in Europe as well. Medical doctors should be aware of this [4].

Conflict of interest U. Wollina declares that he has no competing interests.

References

1. Wilder-Smith A. Dengue during the COVID-19 pandemic. *J Travel Med.* 2021;28(8):taab183.
2. Polo-Martínez M, Campo-Jiménez R, Ariza-Arroyo A, Aparicio-Marengo D, Angulo-Romero H, Torres-Madrid C. Es posible la coinfección o un diagnóstico erróneo por dengue y COVID-19? Una revisión de reporte de casos [Is dengue and COVID-19 coinfection or misdiagnosis possible? A review on reported cases. *Rev Chilena Infectol.* 2022;39(2):167–73.
3. Robert-Koch-Institut. Infektionsepidemiologisches Jahrbuch meldepflichtiger Krankheiten für 2020.. https://www.rki.de/DE/Content/Infekt/Jahrbuch/Jahrbuch_2020.pdf?__blob=publicationFile. Accessed 9 Sept 2022.
4. Semenza JC, Paz S. Climate change and infectious disease in Europe: Impact, projection and adaptation. *Lancet Reg Health Eur.* 2021;9:100230.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Prof. Dr. U. Wollina (✉)
 Department of Dermatology and Allergology, Städtisches
 Klinikum Dresden, Academic Teaching Hospital,
 Friedrichstraße 41, 01067 Dresden, Germany
uwe.wollina@klinikum-dresden.de