

## Juvenile systemic lupus erythematosus and COVID-19 vaccination

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To the Editor,

We would like to share ideas on the publication “New-onset of juvenile systemic lupus erythematosus following COVID-19 vaccination: First case report” [1]. De Carvalho et al. [1] reviewed adult cases of lupus onset following COVID vaccination and described the first juvenile SLE patient following the COVID-19 vaccine. The close temporal context, normalization of laboratory SLE-related parameters, and lack of additional trigger factors, according to de Carvalho et al. [1], support the possibility that the COVID-19 vaccination caused lupus in this case.

It can occasionally be challenging to identify the precise patho-immuno-pharmacological connection due to ignorance. It may be challenging to comprehend how persistent medical conditions impact clinical practice. Another factor that should raise questions is the previously unidentified COVID-19 [2]. The outcomes and the effectiveness of the vaccine may have varied at a previous COVID-19 incidence. Additionally, COVID-19 can directly cause juvenile SLE if there is a prior or concurrent asymptomatic COVID-19 [3]. Without the necessary laboratory testing, it is typically impossible to completely rule out the influence of earlier asymptomatic disorders.

Another important factor is genetics [4]. Depending on how the immune system reacts to particular hereditary components, vaccination side effects may vary. Conclusions about the clinical link would be greatly aided by examining the underlying genetic component. This issue should also be taken into consideration if additional research is intended.

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