

Letter to the Editor

Side effects to BNT162b2 can be severe

Dear Editor,

We read with interest the article by Garcia-Araiza et al¹ about a digital survey among 946 vaccinees recruited from the personnel of a military hospital in Mexico. It was found that 77% (84%) of those without a previous SARS-CoV-2 infection (group-1) and 86% (89%) of those with a previous SARS-CoV-2 infection (group-2) had some mild side effects after the first (second) jab with the Pfizer vaccine¹. It was concluded that side effects after vaccination with BNT162b2 are mild and transient¹. The study is appealing but raises concerns and comments.

Surprisingly, no severe side effects were reported, although real world data about the side effects of the BNT162b2 vaccine include severe adverse reactions requiring hospitalisation after the first or second jab of the vaccine². Severe side effects previously reported include Guillain-Barre syndrome², venous sinus thrombosis³, acute disseminated encephalomyelitis (ADEM)⁴, cranial nerve neuritis⁵, multiple sclerosis⁶, myasthenia gravis⁶, pericarditis⁶, polyarthritis⁶, or synovitis⁶. The study is biased towards reporting only mild side effects as those hospitalised for their side effects were possibly not able to react to the electronic request. Therefore, the study should also include all vaccinees that were hospitalised within the investigational period after their vaccination not to miss those with severe adverse reactions.

A further limitation of the study is that those with headache were not further investigated¹. Not only should the severity of headache be assessed but also the etiology of headache clarified. Adverse reactions going along with headache include encephalitis, venous sinus thrombosis, reversible cerebral vasoconstriction syndrome, cerebral bleeding, or cerebral vasculitis. These differentials need to be appropriately excluded.

Overall, the interesting study has limitations which challenge the results and their interpretation. The apparent absence of severe side effects requires re-evaluation of the data.

Conflict of Interest

The Authors declare that they have no conflict of interests.

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Consent for Publication

Availability of data and material. All data reported are available from the corresponding author.

Authors' Contribution

JF: design, literature search, discussion, first draft, critical comments, FS: literature search, discussion, critical comments, final approval.

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