

COVID-19 vaccines: A blessed warrior or a disguised enemyPriya¹, Ayush Kumar², Ainan Arshad³

Dear Editor, SARS-CoV-2, distinctly virulent virus responsible for causing the well-known pandemic COVID 19 extended all over the world and affected many individuals with varying degree of severity based on patient's characteristics such as comorbidities and age. Vaccines till today are one of the most effective strategies brought in affect for eliminating COVID-19, saving millions of lives each year. However, it is not without its shortcomings just like most of the pharmacological agents and some typical adverse effects include fever, lethargy, headache, muscular soreness, chills, diarrhoea, and discomfort at the injection site. Although the overall safety profile of these vaccines is extremely favourable for the general population, there are few significant adverse effects documented that require consideration. (Figure)

Benjamin et al. presented a case of multisystem inflammation and organ failure caused by an unknown mechanism that began soon after the first dose of BNT162b2 COVID-19 vaccination was administered to a previously healthy recipient.¹ Another incidence of drug-induced liver injury following the administration of the COVID-19 vaccine has been reported by Mann et al.² According to a descriptive investigation, the risk of myocarditis after receiving mRNA-based COVID-19 vaccinations particularly increased across several age and sex strata, with the risk being greatest after the second dose of immunization dose in adolescent boys and young men.³ The case series described by Lim et al mentions a new-onset of pathological findings seen in renal histopathology following COVID-19 immunization. The biopsy-proven diagnosis revealed the newly developed kidney diseases such as IgA nephropathy with painless gross haematuria, minimal change disease with nephrotic syndrome, thrombotic microangiopathy, and two cases of acute tubulointerstitial nephropathy with acute kidney injury.⁴ Another case series outlined an elevated incidence of neurological problems, such as Gullian Barre syndrome and Bells palsy followed by the administration of COVID-19 vaccinations.⁵

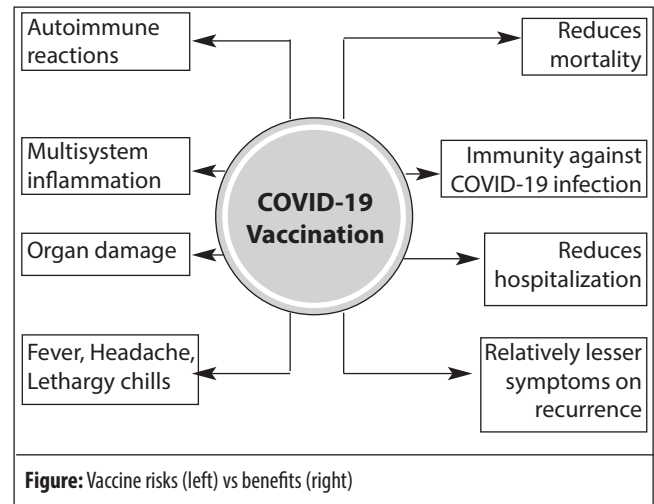
¹3rd Year MBBS Student, Dow University of Health Sciences, Karachi, Pakistan;

²3rd Year MBBS Student, Aga Khan University Hospital, Karachi, Pakistan;

³Department of Medicine, Aga Khan University Hospital, Karachi, Pakistan.

Correspondence: Ainan Arshad. e-mail: ainan_arshad@hotmail.com

ORCID ID. 0000-0002-9013-3899



Considering the aforementioned events, safety profile of COVID-19 comes into question. Current literature limits our knowledge to the exact pathophysiology causing these adverse effects and this demands the need for conducting extensive studies in order to avoid all the potential complications that we may be currently unaware of. In today's era, where almost everyone has received their booster shots, it is important that the population is aware and understands the possible risks so that they can give a thought for necessary precautions.

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