# Comment on: Stromal rejection in penetrating keratoplasty following COVID-19 vector vaccine (Covishield) – A case report and review of literature

## Dear Editor,

The COVID-19 pandemic resulted in high mortality during the second wave, and the vaccine came as a savior. The vaccine has been reported to trigger a robust immune response, and whether or not the vaccine invites graft rejection remains a theoretical concern.<sup>[1]</sup> We read the important case report by Rajagopal *et al.*<sup>[2]</sup> on stromal rejection in penetrating keratoplasty following the COVID-19 vaccine, and we must congratulate the authors for reporting this case. However, we have a few critical observations and suggestions to make.

Firstly, the authors have reported graft rejection episodes after 6 weeks of the second dose of Covishield. There is a long duration between the second dose and clinical symptoms, which is the longest as per the literature reviews. This can probably be a systemic immune rejection. How did the authors rule that out?

Secondly, the first COVID vaccination history is also significant in this case. Did the patient have any ocular symptoms post first dose vaccination? Most patients had systemic symptoms such as fever, myalgia, and cough after the first vaccine due to robust immune response post COVID antigen administration. These symptoms could also potentially trigger a graft rejection episode.<sup>[3]</sup>

Thirdly, was the patient on a maintenance dose of steroids to prevent graft rejection?<sup>[4]</sup> Did the patient have a drug holiday that could have triggered the inflammatory cascade and stromal rejection episode? The treatment history of pre- and post-stromal rejection episodes is missing. Can the authors throw some light on this?

Lastly, the patient is a known case of Hodgkin's lymphoma. Was it ocular or systemic? Was the patient on any immunosuppressants currently? This can be another trigger for immunosuppression and graft rejection episodes. The authors have reported an interesting case; however, because the duration is long and the patient did not report any systemic symptoms, it can be merely a chance association. Once again, we congratulate the authors for bringing out this important case.

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#### **Conflicts of interest**

There are no conflicts of interest.

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