Editorial

Differences in levels of plasma, salivary, and nasal antibody to SARS-CoV-2 (Covid-19) after Covid-19 vaccination and during natural infection

Volume 9 Issue 4 - 2022

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Received: December 19, 2022 | **Published:** December 23, 2022

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Cellular or antibody responses is measured in the most studies of immunity to SARS-CoV-2 (COVID-19).[1] Nevertheless, if ever SARS-CoV-2 (COVID-19) present in the plasma, the infectious virus is rarely infects the nasal and conjunctival mucosal surfaces.[1] In COVID-19-infected-unvaccinated and unvaccinated-COVID-19-uninfected individuals, the levels of nasal and salivary anti-spike antibody correlated significantly with plasma antibody.[1,2] The reported mean correlations for titers in plasma and saliva for IgG and IgA were moderate (p = 0.55; 95 % CI : 0.38-9.73) and weak (p = 0.28; 95 % CI : 0.12-0.44), respectively.[2] A previous systematic review demonstrated that previous-COVID-19-infected-vaccinated individuals demonstrated boosting anti-spike antibody levels in the nose or saliva less than in plasma.[1]

In conclusion, potent immune response induced by COVID-19 mucosal vaccines at the sites of SARS-CoV-2 (COVID-19) infection is urgently needed. Persistent mucosal antibody may not indicate persistent increase of SARS-CoV-2 plasma antibody levels.

Acknowledgments

None.

Conflict of interest

There are no conflicting interests declared by the authors.

References

1. Cohen JI, Dropulic L, Wang K, et al. Comparison of levels of nasal, salivary, and plasma antibody to SARS-CoV-2 during natural infection and after vaccination. *Clin Infect Dis*. 2022.
2. Guerra ENS, De Castro VT, Dos Santos JA, et al. Saliva is suitable for SARS-CoV-2 antibodies detection after vaccination: a rapid systematic review. *Front Immunol*. 2022.