

CD4+ count change after COVID-19 vaccination: Observation on HIV-infected vaccine recipient

Sir,
 COVID-19 vaccination is the hope for containment on COVID-19 outbreak. The effect of new COVID-19 vaccine is the present interesting issue. Regarding HIV-infected case, there are limited data on the effect of HIV vaccination. Similar antibody responses against SARS-CoV-2 in HIV uninfected and infected vaccine recipients were recently reported by Snyman *et al.*^[1] Levy *et al.* also confirmed for good immunogenicity and safety of COVID-19 vaccine for HIV-infected persons.^[2]

Here, the authors share our preliminary observation of CD4+ change after COVID-19 vaccination on 25 HIV-infected vaccine recipients (15 males and 10 females, age 35–48 years old). All cases are HIV-infected patients who have regular following up at HIV Clinic. All receive standard antiretroviral medication. All received COVID-19 viral vaccine, according to local vaccination policies. The authors retrospectively analyzed the clinical record data on CD4+ count of the patients, measures within 2 months before vaccination and the CD+ count at 1 month after vaccination. All CD4+ counts are performed by standard laboratory technique and according to routine clinical practice for the management of HIV infected cases. All investigations are routine care service and all patients gave informed consent for CD4+ count investigation. The protocol of this work is approved by the local ethical committee (S34R/2021, April 26, 2021). Based on retrospective analysis, average CD4+ counts significantly increases after COVID-19 vaccination [Table 1]. This preliminary observation is interesting and there should be further study on clinical association between COVID-19 vaccination and CD4+ count.

Table 1: CD4+count change after COVID-19 vaccination*

Sex	Pre-COVID-19 vaccination CD4+count (cells/ μ L)	Post-COVID-19 vaccination CD4+count (cells/ μ L)
Male (n=15)	630.5 \pm 42.8	812.0 \pm 41.2
Female (n=10)	65.8 \pm 52.4	824.4 \pm 40.6

*Post-COVID-19 vaccination CD4+count is significantly higher than pre-COVID-19 vaccination CD4+count (paired *t*-test, *P*<0.05)

Financial support and sponsorship

Nil.

Conflicts of interest

Authors ask for waiving for all charges for this correspondence.

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Access this article online

Quick Response Code:



Website:

www.ijstd.org

DOI:

10.4103/ijstd.ijstd_90_21

How to cite this article: Mungmunpantipantip R, Tin SS, Wiwanitkit V. CD4+ count change after COVID-19 vaccination: Observation on HIV-infected vaccine recipient. *Indian J Sex Transm Dis* 2022;43:231.

Submitted: 16-Sep-2021

Revised: 17-Sep-2021

Accepted: 18-Sep-2021

Published: 17-Nov-2022

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