

COVID-19 Antibody Titres Following Completion of Second Dose SARS-CoV-2 Vaccination Among the Kidney Transplant Recipients.



<u>Tan JY¹</u>, Jalalonmuhali M¹, Jamal I-Ching Sam², Rajasuriar R¹, Ng KP¹, Yahya R³, Lim SK¹.

Department of Medicine, Faculty of Medicine, University Malaya.
 Department of Medical Microbiology, Faculty of Medicine, University Malaya.
 Department of Nephrology, Hospital Kuala Lumpur.

Introduction

Kidney transplant recipients (KTRs) are at higher risk of severe illness from COVID-19 infection. They are associated with poorer clinical outcomes, increased morbidity, and mortality. The reported mortality rate for KTRs ranges between 16.9% and 24% in COVID-19 positive patients, which is three- to fourfold higher than the general population [1-3]. Previous studies reported a rapid loss of serum antibody levels and attenuated response to influenza vaccination among these patients [4].

Results

A total of 193 patients were recruited. Mean age of the healthy cohort was 46.54 ± 12.26 years old and 46.86 ± 10.76 years old in the KTRs group.

Gender Distribution

Objective

To evaluate the efficacy of SARS-CoV-2 vaccination among KTRs.

Results

A Prospective Study Cohort (17 May to 03 September 2021)







KTRs were predominantly male gender (58.9%) which in contrast to healthy cohort, they were mainly female gender (78.8%).

Centre (UMMC)



Hospital Kuala Lumpur (HKL)



Antibody titres (pre- & postvaccination) analysis were performed using Elecsys Anti-SARS-CoV-2 assay Blood samples were taken pre-vaccination and 28 ± 10 days after 2nd dose of

All patients were vaccinated

with 2 doses of SARS-CoV-2

28 days

after 2nd dose

mRNA vaccines.





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Antibody Response	Antibody Titres
No	< 0.4 U/mL
Low	> 0.4 to 50 U/mL
Moderate to High	> 50 U/mL

No to Low
Moderate to High

The mean antibody level in the healthy cohort was 249.49 \pm 3.64 U/mL whereas it was 46.72 \pm 86.70 U/mL in the KTRs (p < 0.05).

Conclusion

110.0%

KTRs were observed to have a much lower antibody response at 28 days post-vaccination.

References:

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