Outcomes of COVID-19 Hospitalization in Kidney Transplant Recipients: A Single Center Experience

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Introduction
COVID-19 infection is associated with worse outcomes in kidney transplant recipients (KTRs). Despite wide availability of safe and effective vaccines, transplant recipients are disproportionately affected. We aim to investigate our center’s experience with COVID-19 hospitalization in KTRs and measure their clinical outcomes.

Methods
• Retrospective observational cohort
• KTRs who were admitted with COVID-19 infection between March 2020 and January 2022
• Patient characteristics and outcomes were collected via chart review

Results
• 186 patients COVID-19 +
• 114 (61%) hospitalized
• 53 (46%) vaccinated, 61 (54%) unvaccinated
• Baseline characteristics between vaccinated and unvaccinated patients were similar
• 24 deaths during admission, 7 within 90 days (27% mortality)
• There was a trend towards lower mortality in vaccinated patients (10/53 (19%) vs. 21/61 (34%), p=0.06)
• Return to dialysis was significantly lower in vaccinated patients (9/53 (17%) vs. 21/61 (34%), p=0.03)

Conclusion
COVID-19 infection is associated with higher mortality in KTRs with a mitigating effect from vaccination. Decreased dialysis requirement in vaccinated but hospitalized KTRs with COVID-19 infection likely reflects less severe infection, indicating that vaccination confers some amount of allograft protection. Every effort should be made to encourage and educate KTRs regarding COVID-19 vaccination including booster doses in order to reduce morbidity and mortality.

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