COVID-19 infection outcome in African American Renal Transplant recipients: Detroit Medical Center

Claudia Jarrin Tejada MD
Mareena Zachariah MD

Wayne State University School of Medicine

Angela Cruz MD
Detroit Medical Center - Wayne State University

Shakir Hussein MD
Detroit Medical Center - Wayne State University

Elizabeth Wilpula PharmD
DMC Harper Hospital

See next page for additional authors

Follow this and additional works at: https://digitalcommons.wayne.edu/som_srs

Part of the Infectious Disease Commons, Nephrology Commons, and the Virus Diseases Commons

Recommended Citation
Jarrin Tejada, Claudia MD; Zachariah, Mareena MD; Cruz, Angela MD; Hussein, Shakir MD; Wilpula, Elizabeth PharmD; Meeks, Nicole; Wolff, Jeffrey A. MSN, AGACNP-BC; and Chandrasekar, Pranatharthi MD, "COVID-19 infection outcome in African American Renal Transplant recipients: Detroit Medical Center" (2021). Medical Student Research Symposium. 103.
https://digitalcommons.wayne.edu/som_srs/103

This Research Abstract is brought to you for free and open access by the School of Medicine at DigitalCommons@WayneState. It has been accepted for inclusion in Medical Student Research Symposium by an authorized administrator of DigitalCommons@WayneState.
Authors
Claudia Jarrin Tejada MD; Mareena Zachariah MD; Angela Cruz MD; Shakir Hussein MD; Elizabeth Wilpula PharmD; Nicole Meeks; Jeffrey A. Wolff MSN, AGACNP-BC; and Pranatharthi Chandrasekar MD
COVID-19 infection outcome in African American Renal Transplant recipients: Detroit Medical Center

**Background:** Transplant recipients are more vulnerable to infections including COVID-19, given their comorbidities and chronic immunosuppression. Most preliminary care series report rapid clinical progression and higher mortality compared to the general population.

**Methods:** Retrospective study at Harper University Hospital - Detroit Medical Center. Twenty-five renal transplant recipients (RTR) presenting consecutively with COVID-19 symptoms and positive NP swab PCR for SARS-CoV2 between 03/01/2020 - 05/01/2020 were included. Data on demographics, clinical presentation, laboratory findings, management and outcomes were collected.

**Results:** Patients had a median age of 56, all African American and deceased donor transplant recipients. Most had hypertension (96%), about half (52%) had diabetes, 64% had pulmonary disease including obstructive sleep apnea, COPD and pulmonary hypertension. Most common presenting symptom was dyspnea (64%), followed by fever and cough (56%) and diarrhea (56%). Half of patients had multifocal opacities on initial chest x-ray (52%). Immunosuppression with tacrolimus and low dose prednisone was continued, while mycophenolate mofetil was held on admission. Following institution guidelines, hydroxychloroquine was given to 32% who met criteria for risk of severe disease, while 48% received both hydroxychloroquine and steroids. Prophylactic anticoagulation was given to 80% of patients, while therapeutic coagulation to 8%. Oxygen supplementation given to 60% of patients and one patient required intubation. Three patients (12%) were admitted to intensive care, of which one expired. Treatment with mycophenolate was reintroduced based on resolution of symptoms and laboratory parameters.

**Conclusion:** COVID-19 infected RTR in this cohort had lower mortality of 4% (n=1) compared to State-wide mortality of 10%. Clinical presentation was similar to non-immunocompromised hosts, but diarrhea was common. Despite multiple co-morbidities and chronic immunosuppression, our patient cohort had favorable outcome and lower mortality compared to other series. Exact reasons for this optimal outcome are unclear.

**Keywords:** COVID-19, kidney transplant, immunocompromised