Abstract

Background

Covid-19 a highly transmissible preventable viral infection that is symptom managed. The viral infection leads to respiratory and cardiovascular complications that is now known to cause long-term effects even after mild disease.

Objective

To assess if COVID-19 increases the risk of developing a cardiovascular disease and determine what cardiovascular events patients are more at risk for depending on the studied population.

Methods

This study utilized a retrospective chart review to obtain information about cardiovascular complications brought on by a COVID-19 infection in symptomatic patients presenting to one of the hospitals in St. Louis, United states between October 2021 to December 2021. Follow up ended at the time of discharge or death whichever came first. Cumulative incidence was estimated using descriptive statistics.

Results

The study included a total of 48 patients both inpatient and outpatient visits. Median age was 42 years for the overall population. The study recorded a 4% incidence rate of cardiovascular disease. The mortality rate was 2% overall. There was a high chance of mortality with mechanical ventilation. Of the studied population, 93.3% self-identified as black/African American. A proportion of 87.5% were unvaccinated against COVID-19.

Conclusion

COVID-19 infection at whatever severity may increase the incidence of developing a cardiovascular disease. Severe infection may accelerate the diagnosis as symptoms appear sooner compared to mild disease. Further studies exploring into cardiovascular outcomes over a longer study period could help accelerate diagnosis and improve post-covid care.