QTc interval prolonged in some hospitalized with COVID-19
28 April 2021

Geoffrey A. Rubin, M.D., from the Vagelos College of Physicians and Surgeons at Columbia University in New York City, and colleagues conducted a cohort study involving 3,050 patients aged 18 years and older who underwent severe acute respiratory syndrome coronavirus 2 testing and had electrocardiograms (ECGs) from March 1 through May 1, 2020.

Overall, 965 patients had more than two ECGs and were included in the study; 76.0 and 24.0 percent were with and without COVID-19, respectively. The researchers found that by two-day and five-day multivariable models, COVID-19 infection was associated with significant mean QTc prolongation from baseline. Compared with COVID-19-negative status, COVID-19 infection was independently associated with a modeled mean 27.32 millisecond

(HealthDay)—COVID-19 infection is associated with significant mean QTc prolongation at days 2 and 5 of hospitalization, according to a study published online April 23 in JAMA Network Open.

increase in QTc at five days. Compared with patients without COVID-19, more patients with COVID-19 not receiving hydroxychloroquine and azithromycin had QTc of 500 milliseconds or greater (25.0 versus 10.8 percent). In a multivariable analysis, QTc prolongation was seen in association with age 80 years and older versus younger than 50 years, severe chronic kidney disease versus no chronic kidney disease, elevated high-sensitivity troponin levels, and elevated lactate dehydrogenase levels.

"COVID-19 infection was independently associated with longer modeled QTc intervals from baseline, and patients at higher risk were 80 years or older, had elevated high-sensitivity troponin, or had significant kidney dysfunction," the authors write.

Several authors disclosed financial ties to the biopharmaceutical and medical device industries.

More information: Abstract/Full Text
Editorial

Copyright © 2021 HealthDay. All rights reserved.