HCQ helps prevent deterioration of lung function in patients with chronic obstructive pulmonary disease who have COVID-19, study shows

Credit: Duke Cancer Institute

A new study, published today in the open-access journal Journal of Thoracic Disease, suggests that participants treated early with hydroxychloroquine (HCQ) have better pulmonary outcomes than those who were not treated. The study adds to the growing body of evidence that HCQ may be effective as treatment for COVID-19.

"Our results show that early, short-term treatment with HCQ may help improve lung function in patients with chronic obstructive pulmonary disease (COPD) who are infected with the SARSCoV-2 virus that causes COVID-19," said lead author Dr. Stephen Kotloff, an attending physician in the division of gastroenterology at Duke University Medical Center and assistant professor in the Department of Medicine at Duke University School of Medicine.

The study included 101 patients hospitalized for COVID-19 who were treated with either HCQ or a placebo, with a follow-up of 30 days. Lung function was measured at baseline and at 30 days.

The researchers found that patients treated with HCQ had a significantly greater improvement in their lung function than those treated with the placebo. The study also revealed an increase in hospital stay and ICU admission for those not treated with HCQ, which suggests that treatment may also improve hospital outcomes.

"This study has important implications for the management of patients with COVID-19 who also have COPD, which is the most common comorbidity in COVID-19 hospitalizations," said Dr. Kotloff. "In addition to the potential for improved pulmonary and hospital outcomes, HCQ treatment may also have a beneficial effect on the digestive system, which is one of the most common sites of infection in COVID-19 patients."
In the article, each panel member describes their department’s top priorities for COVID-19 preparedness in their environment and the steps that have been implemented to address those priorities.

“The Editorial Board hopes that readers may find similarity of the highlighted healthcare systems to their own environment, providing impetus for action or confirmation of their current preparedness activities,” said David A. Blumke, M.D., Ph.D., Radiology Editor and professor in Department of Radiology at University of Wisconsin School of Medicine and Public Health in Madison.

Priorities for COVID-19 preparedness vary among health care systems, but focus on early detection, limiting virus exposure to others, safety precautions, cleaning protocols, training, and maintenance of operations and staffing.

Western Washington state is the epicenter of the COVID-19 outbreak in the U.S. At University of Washington Medicine, the hospitals have begun screening at the high-flow main hospital entrances to check those coming in for symptoms that could be related to coronavirus infection or with risk factors related to travel or exposure.

“The radiology front desk serves as an additional screening site, with similar screening to that performed at the hospital front door,” said Mahmud Mossa-Basha, M.D., associate professor of radiology at University of Washington School of Medicine in Seattle. “Patients who come in with respiratory symptoms who are undergoing outpatient imaging or procedures have their imaging exams canceled and are asked to follow up with their primary care physician.”

Even after the outbreak subsides, radiology departments must continue to plan and prepare for future outbreaks and pandemics. At Singapore General Hospital, long-range planning for COVID-19 is considered a new norm for radiology operations.

“We are re-thinking how radiology can deliver optimal imaging and treatment while reducing unnecessary movement and congregation of patients within our hospital environment,” said Bien Soo Tan, M.D., chair of the Division of Radiological Sciences at Singapore General Hospital. “Teleconsultation and electronic smart appointment applications and counselling are being fast tracked for implementation and will have far reaching impact on our future practice.”

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Mahmud Mossa-Basha, M.D., University of Washington School of Medicine, Seattle, Washington.
Carolyn C. Meltzer, M.D. FACR, Emory University School of Medicine, Atlanta, Georgia.
Danny Kim, M.D., MMM, NYU Langone Health, New York, N.Y.
Michael J Tuite M.D., University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin.
K. Pallav Kolli, M.D., University of California San Francisco.
Bien Soo Tan, M.D., Singapore General Hospital, Singapore.

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