

Hydroxychloroquine, a medication approved by the Food and Drug Administration (FDA) used to treat malaria, lupus, and rheumatoid arthritis, has made media headlines as a potential treatment for COVID-19. After initially allowing hydroxychloroquine to be used in hospitals to treat COVID-19 as part of an Emergency Use Authorization (EUA), the FDA has removed that allowance based on growing evidence that the medication is not effective and may cause more harm than good. At this time, there are no proven treatments for COVID-19, and no vaccine has been approved for the prevention of this disease.

Why was hydroxychloroquine considered as an option to treat COVID-19?

In tests done in a laboratory (not in humans or animals), some results showed that hydroxychloroquine deactivated some viruses, including the one that causes COVID-19. Hydroxychloroquine may also reduce inflammation, which is how the medication may help people with lupus and rheumatoid arthritis.

Clinical studies have been conducted in the United States, China, and France including several recent larger studies of patients with mild to moderate COVID-19 symptoms including patients requiring oxygen therapy. An early study from France suggested a possible decrease in the amount of virus in the body and a reduction in symptoms. The study design made it difficult to know if the results were due to hydroxychloroquine or other therapies patients received.

More recent studies in larger and sicker groups of people with COVID-19, including two completed in the United States, did not show a decrease in symptoms, decrease in ventilator use, shorter time to recovery, or an overall benefit compared with people who did not take hydroxychloroquine.

The National Institute of Health does not recommend using hydroxychloroquine for COVID-19. The Infectious Disease Society of America and the FDA recommend that hydroxychloroquine be used only as part of a clinical trial. Clinical studies are still being conducted to make sure the results we are currently seeing with hydroxychloroquine are correct.

Can hydroxychloroquine be used to prevent COVID-19?

A recent study of healthcare personnel concluded that hydroxychloroquine was not found to prevent COVID-19. Additional studies are underway in order to confirm these results.

What is an Emergency Use Authorization (EUA)?

In March 2020, the FDA granted an EUA for doctors to use hydroxychloroquine in hospitals for some people with COVID-19 who are not able to participate in a clinical study. According to the EUA, doctors may use hydroxychloroquine to treat hospitalized

Hydroxychloroquine and COVID-19

COVID-19 patients, and patients must be closely monitored because of the risks associated with this medication.

However, in June 2020, the FDA canceled the EUA based on additional review of the scientific evidence. The FDA has determined that hydroxychloroquine is unlikely to be effective in treating COVID-19. In addition, serious side effects like heart rhythm problems associated with hydroxychloroquine indicate that the potential benefits no longer outweigh the potential risks.

What are the risks of taking hydroxychloroquine?

COVID-19 patients may suffer life-threatening side effects when taking hydroxychloroquine. It can cause serious heart rhythm problems, called arrhythmias.

Patients who have health issues such as heart and kidney disease may be at increased risk of heart problems when taking hydroxychloroquine.

Additional side effects include vision problems, fainting or low blood sugar, seizures, and mood or mental health changes.

If I am currently taking or have taken hydroxychloroquine for COVID-19 what should I do?

If you are part of a clinical study, you should follow the directions provided by your study coordinator. If you have any questions, contact your study coordinator.

If you are on a course of hydroxychloroquine for the treatment COVID-19, then you should discuss your therapy plan with your doctor. The FDA suggests completing your course of therapy.

Mary Ann Kliethermes, Pharm.D., Director of Medication Safety and Quality at ASHP

Note: The information contained in this article is emerging and rapidly evolving because of ongoing research. Talk to your pharmacist or other healthcare provider if you have any questions about your medications, COVID-19, or other health issues.