

These Drugs Are Helping Our Coronavirus Patients

The evidence is preliminary on repurposing two treatments. But we don't have the luxury of time.

By

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A flash of potential good news from the front lines of the coronavirus pandemic: A treatment is showing promise. Doctors in France, South Korea and the U.S. are using an antimalarial drug known as hydroxychloroquine with success. We are physicians treating patients with Covid-19, and the therapy appears to be making a difference. It isn't a silver bullet, but if deployed quickly and strategically the drug could potentially help bend the pandemic's "hockey stick" curve.

Hydroxychloroquine is a common generic drug used to treat lupus, arthritis and malaria. The medication, whose brand name is Plaquenil, is relatively safe, with the main side effect being stomach irritation, though it can cause echocardiogram and vision changes. In 2005, a Centers for Disease Control and Prevention [study showed](#) that chloroquine, an analogue, could block a virus from penetrating a cell if administered before exposure. If tissue had already been infected, the drug inhibited the virus.

On March 9 a team of researchers in China [published results](#) showing hydroxychloroquine was effective against the 2019 coronavirus in a test tube. The authors suggested a five-day, 12-pill treatment for Covid-19: two 200-milligram tablets twice a day on the first day followed by one tablet twice a day for four more days. A more recent French study used the drug in combination with azithromycin. Most Americans know azithromycin as the brand name Zithromax Z-Pak, prescribed for upper respiratory infections. The Z-Pak alone doesn't appear to help fight Covid-19, and the findings of combination treatment are preliminary.

But researchers in France treated a small number of patients with both hydroxychloroquine and a Z-Pak, and 100% of them were cured by day six of treatment. Compare that with 57.1% of patients treated with hydroxychloroquine alone, and 12.5% of patients who received neither.

What's more, most patients cleared the virus in three to six days rather than the 20 days observed in China. That reduces the time a patient can spread the virus to others. One lesson that should inform the U.S. approach: Use this treatment cocktail early, and don't wait until a patient is on a ventilator in the intensive-care unit.

A couple of careful studies of hydroxychloroquine are in progress, but the results may take weeks or longer. Infectious-disease experts are already using hydroxychloroquine clinically with some success. With our colleague Dr. Joe Brewer in Kansas City, Mo., we are using hydroxychloroquine in two ways: to treat patients and as prophylaxis to protect health-care workers from infection.

We had been using the protocol outlined in the research from China, but we've switched to the combination prescribed in the French study. Our patients appear to be showing fewer symptoms.

Our experience suggests that hydroxychloroquine, with or without a Z-Pak, should be a first-line treatment. Unfortunately, there is already a shortage of hydroxychloroquine. The federal government should immediately contract with generic manufacturers to ramp up production. Any stockpiles should be released.

As a matter of clinical practice, hydroxychloroquine should be given early to patients who test positive, and perhaps if Covid-19 is presumed—in the case of ill household contacts, for instance. It may be especially useful to treat mild cases and young patients, which would significantly decrease viral transmission and, as they say, “flatten the curve.”

Emergency rooms run the risk of one patient exposing a dozen nurses and doctors. Instead of exposed health workers getting placed on 14-day quarantine, they could receive hydroxychloroquine for five days, then test for the virus. That would allow health-care workers to return to work sooner if they test negative.

President Trump touted hydroxychloroquine in his Thursday press conference as a potential treatment, which is a welcome move. And this isn't only about treatment. Rapid and strategic use of these drugs could help arrest the spread of the disease.

We have decades of experience in treating infectious diseases and dealing with epidemics, and we believe in safety and efficacy. We don't want to peddle false hope; we have seen promising drugs turn out to be duds.

But the public expects an answer, and we don't have the luxury of time. We have a drug with an excellent safety profile but limited clinical outcomes—and no better alternatives until long after this disaster peaks. We can use this treatment to help save lives and prevent others from becoming infected. Or we can wait several weeks and risk discovering we didn't do everything we could to end this pandemic as quickly as possible.

Dr. Colyer is a practicing physician and chairman of the National Advisory Commission on Rural Health. He served as governor of Kansas, 2018-19. Dr. Hinthorn is director of the Division of Infectious Disease at the University of Kansas Medical Center.