

## COVID-19: Hydroxychloroquine With or Without Azithromycin



Hydroxychloroquine and azithromycin have been used to treat COVID-19 patients, but there is very little evidence with respect to the safety and efficacy of this treatment strategy.

Hydroxychloroquine has antiviral effects, and combined with azithromycin, it was believed that it could decrease SARS-CoV-2 viral load (based on results from a small, nonrandomised study). Based on this evidence, some practitioners have used hydroxychloroquine plus azithromycin in patients with COVID-19. Some national regulatory agencies have also authorised its use in hospitalised COVID-19 patients. However, observational studies suggest no benefit of this treatment strategy, and previous randomised, controlled trials also show no benefit of hydroxychloroquine for either postexposure prophylaxis or treatment of coronavirus disease.

*You might also like:* [From Hydroxychloroquine and Remdesivir to Plasma Administration](#)

A multi-centre, randomised, open-label, three-group, controlled trial was conducted across 55 hospitals in Brazil, with 667 hospitalised COVID-19 patients who were receiving either no supplemental oxygen or a maximum of 4 litres per minute of supplemental oxygen. Of the three groups, the first group (229 patients) received standard care, the second group (221 patients) received standard care plus 400 mg hydroxychloroquine twice daily and the third group (217 patients) received standard care plus 400 mg hydroxychloroquine twice daily plus 500 mg azithromycin once daily for 7 days.

The primary outcome of the study was clinical status at 15 days, which was assessed using a seven-level ordinal scale with higher scores indicating a worse condition. The safety of the therapy was also assessed. Secondary outcomes included clinical status at 7 days, and this was evaluated using a six-level ordinal scale.

Findings of the study show that compared with standard care, the odds of having a higher score on the seven-point ordinal scale at 15 days were not affected by hydroxychloroquine alone nor by the combination of hydroxychloroquine and azithromycin. There were no significant differences in any of the secondary outcomes. More adverse events were reported in the group of patients who received hydroxychloroquine plus azithromycin or hydroxychloroquine alone compared to those who received azithromycin alone or none of these drugs. QT interval prolongation and elevation of liver-enzyme levels were more frequent in patients who received hydroxychloroquine alone or with azithromycin compared with those who did not receive either of these drugs.

These findings show that the use of hydroxychloroquine, with or without azithromycin, in mild-to-moderate COVID-19 hospitalised patients did not improve their clinical status at 15 days as compared with standard care.

Source: [NEJM](#)

Image Credit: iStock

Published on : Tue, 28 Jul 2020