The Journal of Rheumatology 2020;47:10
doi:10.3899/jrheum.200638
First Release June 15 2020

The Journal of Rheumatology

Letter

Evidence of Protective Effect of Hydroxychloroquine on COVID-19

To the Editor:

We would like to share ideas on the report "Hydroxychloroquine in Patients with Rheumatic Disease Complicated by COVID-19: Clarifying Target Exposures and the Need for Clinical Trials"[1]. Balevic noted that "well-designed clinical trials that include patients with rheumatic disease are urgently needed to characterize the efficacy, safety, and target exposures for hydroxychloroquine[1]." The effect of hydroxychloroquine (HCQ) against the coronavirus disease 2019 (COVID-19) is an interesting issue in clinical rheumatology. In a recent publication, the observation of an extremely low rate of COVID-19 among patients with rheumatic disease who received HCQ therapy triggered global interest in the clinical efficacy of HCQ[2]. Some researchers expressed the idea that there is no evidence that HCQ can prevent COVID-19[2]. Romão, *et al* recently reported on 2 patients with systemic lupus erythematosus (SLE) who got stable HCQ medication[3]. These data can show that SLE patients taking HCQ might develop COVID-19, but it cannot conclude on the protective effect of the drug.

New data are required for any new drugs for management of COVID-19. At present, not only HCQ but also several classic drugs require clinical trials for management of COVID-19. The COVID-19 pandemic is a global problem and requires urgent global solutions. Sometimes, the complete process of clinical trials might not take place before the use of drugs in clinical practice. HCQ is a classic drug with much data on its safety. This drug might be safer for management of COVID-19 than newly available antiviral drugs. We need further data on the usefulness of HCQ against SARS-CoV-2. In a recent publication from France, combined HCQ and azithromycin in early COVID-19 was safe and could result in a lower mortality rate[4]. But another publication from the United States showed a neutral effect of HCQ[5].

An important consideration is the dosage of HCQ. The baseline dose of HCQ for the patient with SLE might not be sufficient for management or prevention of COVID-19. A higher dose might be required. And an increased dose of antiretroviral drugs may be required for management of COVID-19[6]. In a recent report from China, Yao, *et al* recommended a loading dose of 400 mg twice daily of HCQ sulfate given orally, followed by a maintenance dose of 200 mg twice daily for 4 days for SARS-CoV-2 infection[7]. These new studies are interesting, and there might be a protective effect of HCQ on COVID-19 if the proper dose is administered.

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