

Evidence of protective effect of hydroxychloroquine to prevent COVID-19

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We would like to share ideas on the report on “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 against COVID-19 is an interesting issue in clinical rheumatology. In a recent publication, the observation on extremely low rate of COVID-19 among patients with rheumatic disease and received hydroxychloroquine therapy trigger the global interest of clinical efficacy of hydroxychloroquine [2]. Some researchers expressed the ideas that here is no evidence on the protective effect of hydroxychloroquine to prevent COVID-19 [2]. Romão et al. recently reported two SLE patients who got stable hydroxychloroquine medication [3]. This data can show that SLE patient with hydroxychloroquine medication 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 hydroxychloroquine but also several classic drugs require clinical trials for management of COVID-19. COVID-19 pandemic is a global problem and requires urgent global solutions. Sometimes, it might lack for the complete process of clinical trials before the use of drugs in clinical practice. Hydroxychloroquine is a classical drug with many data on its safety. This drug might be safer for management of COVID-19 than newly available antiviral drugs. We should have further data collection on the usefulness of hydroxychloroquine against SARS-CoV2. Recently, there are some new evidences on the effects on hydroxychloroquine against COVID-19. In a recent publication from France, combined hydroxychloroquine and azithromycin in early COVID-19 is safe and can result in a lower mortality rate [4]. Nevertheless, another publication from the USA showed a neutral effect of hydroxychloroquine [5].

An important consideration is on the dosage of hydroxychloroquine. The baseline dose of hydroxychloroquine to the SLE patient might not sufficient for management or prevention of COVID-19. A higher dose might be required. This is the same consideration as an increased dose of antiretroviral drugs is required for management of COVID-19 [6]. In a recent report from China, Yao et al. recommended for “*a loading dose of 400 mg twice daily of hydroxychloroquine sulfate given orally, followed by a maintenance dose of 200 mg given*

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twice daily for 4 days is recommended for SARS-CoV-2 infection [7].” Therefore, new evidences are interesting and there might be a possible protective effect of hydroxychloroquine to prevent COVID-19 if the proper dose is administered.

Conflict of interest

None

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