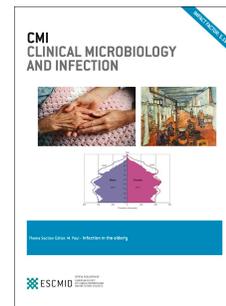


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Re: 'Effect of hydroxychloroquine with or without azithromycin on the mortality of COVID-19 patients' by Fiolet et al

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Effect of hydroxychloroquine with or without azithromycin on the mortality of COVID-19 patients: a systematic review and meta-analysis : genuine analysis or cherry- picking ?

To the Editor,

We read with interest the paper by Fiolet et al, entitled “Effect of hydroxychloroquine with or without azithromycin on the mortality of COVID-19 patients: a systematic review and meta-analysis” recently published in the Clinical Microbiology and Infection journal 2020 (1).

Further to this article we performed an extensive literature review, which depicted many other studies dealing with the same topic, that were published in good quality peer-reviewed journals. But regrettably, they were not considered by the authors despite (as they have stated) having performed an extensive research of the papers, as mentioned in their material and methods section (1).

The essence of a systematic review is to take into account all the data in order to make a rigorous open and fair -minded synthesis on the topic. At least three meaningful studies that meet the inclusion / exclusion criteria and were in favor of the efficacy of hydroxychloroquine and azithromycin on COVID- 19 patients have been discarded (2-4). This approach is more akin to cherry- picking than to a true systematic review without a priori considerations.

Furthermore, the authors in their article acknowledge that only one study included non-hospitalized out- patients. Fiolet et al stated : "Despite our inclusion criteria that did not specify the stage of the disease, all the studies were conducted with hospitalized patients except the RCT by Skipper et al. RCT" (1). In Skipper's study, although the difference was not statistically significant due to a small number of patients included (5), there were twice as many hospitalized patients in the placebo group (4 hospitalizations out of 231 patients with hydroxychloroquine versus 10 hospitalizations out of 234 patients with placebo). Last but not least, only 34 % of

those patients received appropriate PCR SARS-CoV-2 testing, which adds to confusion.

Heart rhythm disorders might be prevented in the hospital environment by monitoring with ECG and serum potassium measurement. The “Recovery” study did not meet the inclusion criteria as non-PCR-tested patients have been included (6). In addition, the doses of hydroxychloroquine given to COVID-19 patients in this study (2400mg on the first day, followed by nine days at 800mg/day) were high and thus potentially toxic.

We are looking for appropriate clinical trials or a thorough systematic review and meta-analysis to close the French and worldwide debate on whether treating patients with hydroxychloroquine / azithromycin at the early phase of COVID 19 infection improves their outcome.

Keywords

Hydroxychloroquine, azithromycine, COVID-19, coronavirus, meta-analysis

Conflict of interest disclosure

The authors (AL, PYM, CP) have nothing to disclose.

Authors' contributions

AL : Conceptualization, Writing original draft

PYM : Writing, review and editing

CP : Supervision

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