

Low hospitalization rate without severe arrhythmias: a prospective survey on 350 patients early home treated with hydroxychloroquine during COVID-19 pandemic

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To the Editor

Hydroxychloroquine (HCL) alone or/and azithromycin has been shown to be effective to avoid further unfavourable clinical evolutions in coronaravirus disease-2019 (COVID-19) diseased patients particularly when administered early at home.¹ The rationale is to block the inflammatory process development that is the main cause of serious coronavirus body damage through an antiphospholipid antibodies reduction.²

Methods

General practitioners (GP) in Rimini, an Italian country with more than 2000 COVID-19 cases and over 500 hospitalizations, were invited prospectively by the Primary Care Department to treat all patients with a framework of recent fever more than 37.5° and at least two of the following: symptoms of cooling, cough, anosmia, tachipnea (>22/min), marked asthenia together with high resting heart rate (>90/min) with HCL therapy at home (400 mg twice a day on the 1st and 200 mg twice a day from 2nd to 6th days). Therapy was started without waiting for nasopharyngeal swab results. GPs, according to clinical judgement, were allowed to add azithromycin 500 mg/day.

After 1 month (April 2020) there was a GP call to assess their protocol adherence and to respond to the survey questions; 110 doctors (about 130 000 assisted patients) actively participated. Questions asked were about the number of treated patients, those subsequently hospitalized and the type and number of adverse events. Any evidence of specific cardiovascular complications, in particular severe arrhythmias and/or possible related symptoms, was also requested. Sixty-five doctors completed the survey.

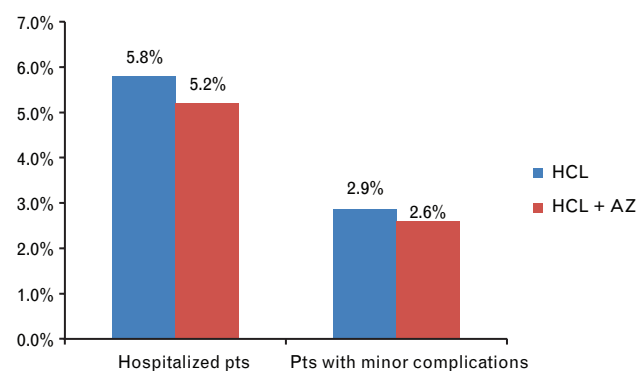
Results

Fifty-eight GPs treated 350 patients with HCL at the first flu symptoms; in 76 of those azithromycin was also associated. Of the 274 patients treated with HCL only, 16 patients required subsequent hospitalization (5.8%). Minor complications (mainly gastrointestinal, diarrhoea) were found in eight patients (2.9%), none of whom had to interrupt treatment. No major cardiac complications were found. Of the 76 patients treated with the association, 4 patients were hospitalized (5.2%). Minor complications occurred in only two patients (2.6%) (Fig. 1). There were no reports of any major arrhythmias, syncope or sudden death.

Comments

The current small observational study of real flu affected patients in this area of high epidemic coronavirus outbreak, despite the study limitations, has shown that early, short duration HCL administration alone or/and azithromycin at home was safe and accompanied by a low hospitalization rate. These observations contrast with the negative results coming from advanced disease studies on patients already hospitalized.³ Mehra *et al.*,⁴ in a multinational register retrospectively recording 96 000 hospitalized patients, did show HCL (\pm azithromycin)

Fig. 1



Reported percentage of patients hospitalized and with adverse events after HCL alone or HCL + AZ early administered therapy.

negative data. Hospital survival was negatively affected and the frequency of ventricular arrhythmias was relatively high. That was a large study but retrospective and dealing only with a late treatment initiated after hospitalization. Data on possible QT interval prolongation and on arrhythmias were lacking. Despite those important study limitations as a consequence WHO first and Italian AIFA, 1 day later, temporarily suspended ongoing trials with HCL until safety data could be reviewed. The present not controlled but prospective data show instead lack of severe complications and low hospitalization rate when HCL is given precociously once flu-like symptoms appear, also with azithromycin addition and for up to 1-week duration. We believe our observations, by documenting safety and low hospitalization rates after a ramped-up immediate therapy, are of primary importance that looks to be a winning strategy to prevent a large inflammation explosion as the main cause of deadly complications.^{5,6} Ongoing randomized trials, if still available, will give us possible scientific confirmations of these preliminary prospective data.

Acknowledgements

Conflicts of interest

There are no conflicts of interest.

References

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