

Survey on Usage of Weekly Hydroxychloroquine Prophylaxis against COVID19 amongst Healthcare Workers in India

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October 14, 2020

To the editor:

Covid19 pandemic started in Dec 2019 and has affected >10 million people (1). Despite usage of personal protective equipment many healthcare workers (HCW) have been affected globally with Covid19 and some have died (2-4). We need a chemoprophylaxis drug which can stop viral replication and hydroxychloroquine (HCQ) has been shown to do that in-vitro (5). There have been few studies on usage of HCQ for treatment of covid19 with mixed results (6-7). HCQ for post-exposure prophylaxis (a 5-day course) in a randomised control trial showed no benefit (8). Indian council of medical research (ICMR) had recommended weekly prophylaxis (400 mg once a week) for all HCW in contact or looking after proven Covid19 cases (9). As per a recent report from India 4 or more weekly HCQ doses give better protection against Covid19 in HCW (10). However, questions have been raised about safety & efficacy of HCQ as a prophylaxis for Covid19. We did a survey across 11 hospitals in 7 cities in India about HCQ prophylaxis amongst HCW.

A total of 301 HCW reported to be taking HCQ 400 mg once a week dose. Hospitals were located in big cities (Mumbai, Delhi, Kolkata, Hyderabad, Gurgaon, Jaipur, Bangalore) designated as Covid19 hotspots. Males were 186 and females were 115. Median age was 34 years (range 22-65 years). Doctors were 126, nurses were 169 and others were 6. All were working in hospitals treating Covid19 patients. Only 3 HCW stopped HCQ (1 due to headache and other 2 got bored). Median weekly doses taken were 9 (range 1-10). Nearly 50% (151/301) had taken HCQ weekly for 9 weeks. Side effects were seen in 17 people (nausea-7, gastritis-5, joint pain-1, sweating-1, constipation-1, vertigo-1 & headache-1). ECG was not done and G6PD assay was also not done for anyone. From drug interaction point of view, 11 HCW were on additional drugs. Amlodipine and losartan were being taken by 5 people each, 3 were on metformin, 1 on insulin and 2 were on other drugs. Four (1.3%) developed Covid19 within 2 weeks of starting HCQ and all had mild disease (fever and mild cough) and recovered fully. None needed oxygen or intensive care.

A total of 108 HCW were not taking HCQ working in the same hospitals. Median age was 32.5 years (range

23-64 years). Male to female ratio was 1:2. Doctors were 35, Nurses-66 and others-7. Amongst them 29 (27%) developed Covid19. All had mild symptoms but 2 needed oxygen and ICU stay. All recovered fully. So only 1.3% developed covid19 amongst HCW on HCQ prophylaxis vs. 27% in those not taking HCQ prophylaxis (p value <0.0001).

In conclusion, its feasible to give safely weekly HCQ prophylaxis to HCW. It seems to effective but a survey is not the best scientific approach to prove efficacy. A randomised controlled trial is needed to confirm efficacy of weekly HCQ amongst HCW.

Disclosure – All authors have nothing to declare.

Contribution – All authors have contributed to this manuscript.

Funding - Nil

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