

Hydroxychloroquine and chloroquine can be element of danger in treatment of COVID -19

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Abstract: As per WHO, COVID 19 is announced as pandemic diseases and marked as red alert, which is caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). Presently it's the main cause of morbidity and the great challenge to the healthcare workers globally. As, till now no specific drugs or vaccine has been invented to cure this virus, but it is preventable and controllable by various guidelines as provided by clinical management. Various researches, news articles and clinical case studies shows that the various repurposed drug are used to treat the COVID-19 patients and various antiviral therapy, antibiotics, systemic and anti-inflammatory drug are used. The drug named HCQ and CQ is one of the combination therapy and emergency drug which was proven by United states, Food and Drug Administration, due to its antiviral properties but some of the evidence shows that its adverse effect can be a problem while treating COVID 19 patients. As, per uncontrolled studies it shows that these two drugs are the effective drug against COVID 19 but the publishing journal's society suggest that its "does not meet the society expected standard", and the short time treatment with this drug may lead to long term QT. This review, highlights the studies which shows that Treatment with these two drugs can lead to comorbidities in COVID-19 patients, due to their adverse effect, and will focus on the causes of adverse effect although, various clinical trials are under process to check the efficacy of these two drugs. Hopefully, this review will provide the valuable knowledge about the risk factors and the benefit of using these two drugs in the treatment of covid-19.

Table: The articles involved in this review

TITLE NAME	AUTHORS NAME	Findings
Comorbidities and multi-organ injuries in the treatment of COVID-19	Tianbing Wang, Zhe Du, Fengxue Zhu, Zhaolong Cao, Youzhong An, Yan Gao, *Baoguo Jiang	This research showed that patients who are suffering from severe diseases and come in contact with COVID 19 should be evaluated differently and to these patients the effective treatment should be provided
An Update on Current Therapeutic Drugs Treating COVID-19	Renyi Wu ¹ & Lujing Wang ¹ & Hsiao-Chen Dina Kuo ¹ & Ahmad Shannar ¹ & Rebecca Peter ¹ & Pochung Jordan Chou ¹ & Shanyi Li ¹ & Rasika Hudlikar ¹ & Xia Liu ^{1,2} & Zhigang Liu ^{1,3} & George J. Poiani ^{4,5} & Louis Amorosa ⁵ & Luigi Brunetti ^{4,6} & Ah-Ng Kong ¹	This review provide the updated treatment for the COVID-19 for examples different types of drugs therapies with its pon's and con's
Caution needed on the use of chloroquine and hydroxychloroquine for coronavirus disease 2019	Stephan D. Fihn, MD, MPH ^{1,2,3} ; Eli Perencevich, MD, MS ^{4,5,6} ; Steven M. Bradley, MD, MPH ^{6,7}	In this paper the various paper were shown which shows that HCQ AND CQ drug is recommended as the emergency treatment for treating COVID-19 patients.
Effect of high vs low doses of chloroquine diphosphate as adjunctive therapy for patients hospitalized with severe acute respiratory syndrome coronavirus 2 (SARS	Mayla Silva Borba, MD ^{1,2} ; Fernando Almeida Val, PhD ^{1,2} ; Vanderson Souza Sampaio, PhD ¹ Gabriela Fonseca	Study shows that higer dosage of CQ given to critically ill patients can cause adverse effect, and study was mainly focusing on severe diseased patient not non sever.

References:

1. Wang, T., Du, Z., Zhu, F., Cao, Z., An, Y., Gao, Y., & Jiang, B. (2020). Comorbidities and multi-organ injuries in the treatment of COVID-19. *The Lancet*, 395(10228), e52.
2. Wu, R., Wang, L., Kuo, H. C. D., Shannar, A., Peter, R., Chou, P. J., ... & Poiani, G. J. (2020). An Update on Current Therapeutic Drugs Treating COVID-19. *Current Pharmacology Reports*.
3. Fihn, S. D., Perencevich, E., & Bradley, S. M. (2020). Caution needed on the use of chloroquine and hydroxychloroquine for coronavirus disease 2019. *JAMA network open*, 3(4), e209035-e209035