

Title	Evidence summary: Chloroquine and hydroxychloroquine use in people with COVID-19
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Requesting Area	COVID-19. Comité de Crisis en Salud Pública Keralty
Name	COVID-19. Comité de Crisis en Salud Pública Keralty
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Questions:

- 1. Should chloroquine or hydroxychloroquine be used prophylactically in patients with COVID-19?*
- 2. Should chloroquine or hydroxychloroquine be used in the treatment of patients with COVID-19?*

Methodology:

A Rapid Systematic Review was conducted (Manual de Revisiones Sistemáticas Rápidas). Global Institute for Clinical Excellence. 2019)

Key Words: COVID 19, coronavirus, chloroquine, SARS-CoV-2

Types of study: Clinical Practice Guidelines, Scientific Society Consensus, systematic reviews of the literature (RSL), meta-analyses, clinical trials and other primary studies

Information Sources: Pubmed, EMBASE, Scopus

Background Information: Recent publications have drawn attention to the potential benefit of chloroquine, a widely antimalarial medicine used in the treatment of patients infected with the new emerging coronavirus (SARS-CoV-2). The aim is to review the existing and growing literature in recent days on the effectiveness of chloroquine in the management of COVID-19 along with antiretrovirals and the discussion that arises about the prophylactic use of chloroquine.

Context: Clinical studies have demonstrated the activity of chloroquine phosphate in in vitro and the animal model as an antiviral against the SARS virus and avian influenza. In fact, it appears that chloroquine may exhibit antiviral efficacy by increasing the endosomal pH required for virus/host cell fusion (1, 2, 3). In addition, chloroquine shows to interfere with the glycosylation of SARS COVID-19 cell receptors. Chloroquine also has immunomodulatory activity, which may amplify antiviral activity in vivo (6, 7).

The medicine has good tissue penetration even after oral administration at a dose of 500 mg. An expert panel in China summarized the results of the use of chloroquine in the treatment of acute COVID-19 infection, suggesting that the use of the medicine is associated with the clinical success rate improvement, a hospitalization reduction and the patient results improvement (3,4,5). The panel recommends the use of the medication at a dose of 500 mg /12h for 10 days. Alternatively, if chloroquine is not available, hydroxychloroquine 200 mg /12h can be used. The working group spoke against the possibility of using chloroquine/hydroxychloroquine in prophylaxis for COVID-19.

Evidence Summary:

Question 1. There is not currently evidence of efficacy of chloroquine in the prophylaxis of COVID-19 disease.

Question 2. At present, chloroquine is used according to the consensus of Chinese, Italian and Spanish scientific societies in mild, moderate and severe cases of pneumonia caused by the new coronavirus and in patients who have no contraindications for chloroquine.

Recommendations:

1. There is no currently evidence of efficacy of chloroquine in the prophylaxis of COVID-19 disease, therefore this strategy is not recommended.
2. It is suggested to consider chloroquine phosphate, 500 mg (300mg chloroquine base) orally twice a day for 10 days for patients diagnosed as mild, moderate and severe cases of pneumonia by the new coronavirus and with no contraindications for chloroquine.

References:

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