SCOPING REVIEW: HYDROXYCHLOROQUINE FOR TREATMENT OF COVID-19

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BACKGROUND

- Coronavirus infection has rapidly spread throughout the world and has infected more than 210 countries worldwide1.
- There has been no approved specific treatment for COVID-19 or a vaccine to prevent coronavirus infection2.
- Hydroxychloroquine has received attention as a potential therapeutic agent against COVID-19.

OBJECTIVE

- To analyze and summarize the evidence related to the use of hydroxychloroquine in the treatment of COVID-19.

METHOD

Scoping review, the method is an electronic literature search using the PubMed and Science Direct. The literature included in the search criteria was literature published from December 2019 to June 19, 2020.

Table 1. Study Design of Completed an Electronic Literature Searching

<table>
<thead>
<tr>
<th>No.</th>
<th>Author (Country)</th>
<th>Design</th>
<th>Participant</th>
<th>Inclusion Criteria</th>
<th>Intervention</th>
<th>Primary Outcome</th>
<th>Result of the primary outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gauret et al. (France) [3]</td>
<td>Open-label, non-randomized clinical trial</td>
<td>HCQ: 28 patients Control: 16 patients</td>
<td>HCQ 600 mg D1-D10, azithromycin 500 mg D1, 250 mg D2-D5, standard of care</td>
<td>Virologic clearance on D6</td>
<td>HCQ group: 70% (19/27) had negative RT-PCR on D6</td>
<td>Control group: 15.8% (2/16) had negative RT-PCR on D6</td>
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<td>2</td>
<td>Gauret et al. (France) [4]</td>
<td>Open-label, clinical trial</td>
<td>80 patients</td>
<td>HCQ 600 mg D1-D10 + azithromycin 500 mg D1, 250 mg D2-D5</td>
<td>Clinical outcome by 10 days; After 10 days, 2/80 patients were presumably contagious with Ct &lt; 34.</td>
<td>4.4% patients prolonged viral carriage</td>
<td>91.7% patients good clinical outcome and virological cure.</td>
</tr>
<tr>
<td>3</td>
<td>Pirnay et al. (France) [5]</td>
<td>Observational study</td>
<td>68 patients</td>
<td>HCQ 600 mg D1-D10 + azithromycin 500 mg D1, 250 mg D2-D5</td>
<td>Clinical outcome</td>
<td>89.7% patients were considered cured after clinical signs</td>
<td></td>
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<td>4</td>
<td>Million et al. (France) [6]</td>
<td>Uncontrolled non-comparative observational study, retrospective</td>
<td>1,061 patients</td>
<td>HCQ 600 mg D1-D10 + azithromycin 500 mg D1, 250 mg D2-D5</td>
<td>Viral clearance</td>
<td>4.4% patients prolonged viral carriage</td>
<td>91.7% patients good clinical outcome and virological cure.</td>
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<tr>
<td>5</td>
<td>Magagnoli et al. (USA) [7]</td>
<td>Retrospective study</td>
<td>807 patients</td>
<td>HCQ + AZT</td>
<td>Mortality</td>
<td>The risk of death from any cause</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Geleris et al. (USA) [8]</td>
<td>Prospective observational study</td>
<td>1,376 patients</td>
<td>HCQ 600 mg twice on D1, 400mg D2-D5 + AZT 500mg D1, 250mg D2-D5</td>
<td>Composite of intubation or death in a time-to-event analysis</td>
<td>There was no significant association between HCQ use and intubation or death (hazard ratio, 1.04, 95% confidence interval, 0.82 to 1.32).</td>
<td></td>
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</tbody>
</table>

RESULTS

CONCLUSIONS

- The use of hydroxychloroquine with azithromycin can be used as a short-term solution for alternative therapies to overcome the COVID-19 pandemic with close monitoring for side effects.

REFERENCE


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