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Review Article

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CHLOROQUINE/HYDROXYCHLOROQUINE USAGE OF SARS COV-2 AFFECTED PREGNANT WOMEN

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TEXT

The COVID-19 pandemic made pregnant women a high-risk category of infection. Given the protocol that has been established, first-line treatment is based on Chloroquine (Nivaquine) 500mg ×2/D during 10 days or hydroxychloroquine sulphate (Plaquenil) 200 mg ×3/D for 10 days. In association with: Azithromycin 500 mg at D1 then 250 mg from D2 to D7.

Hydroxychloroquine (HCQ), rather than CQ, could be considered as a potential therapeutic alternative for these patients, given its safety profile in pregnancy for two purposes: Firstly, it is a molecule derived from chloroquine (CQ). It is more polar, less lipophilic, and has more difficulty diffusing across cell membranes, including the placenta. Secondly, HCQ has less tissue accumulation compared to CQ, and therefore tends to produce fewer dose-dependent adverse effects.

This may account for the lower risk of adverse events that CQ has on fetal development.

Furthermore, the value of prescribing HCQ (in low doses) for autoimmune disease during pregnancy is partly related to its potential inhibitory effect on the production of type I interferon, which also appears to be beneficial to the fetus in the context of COVID-19, and thus prevents the development of congenital heart.

In terms of human tolerance, studies using hydroxychloroquine sulfate throughout pregnancy have shown no increase in the rate of birth defects or spontaneous abortions. Nevertheless, the difference between the two requires prudence in the extrapolation of data.

According to learned societies recommendations related to the protocol for the therapeutic use of Hydroxychloroquine in SARS CoV-2 infection, Hydroxychloroquine should not be used during pregnancy unless clinically justified.

In view of the lack of data on reproductive toxicity and teratogenicity, health authorities also recommended effective contraception as a precautionary measure in men and women of childbearing age during treatment and for up to 8 months after cessation of treatment.

CONCLUSION

In conclusion, Hydroxychloroquine in the management of SARS CoV 2 infection in a pregnant woman can be considered as a treatment option during all trimesters of pregnancy. However, taking into account international recommendations and in the absence of context-specific studies and official guidelines in this regard:

- A case-by-case assessment of the benefit/risk ratio of this prescription by the attending physician is required for mild to moderate cases.
- In these situations, maternal-fetal monitoring of the adverse effects is necessary, at pre and post-natal period.

CONFLICT OF INTEREST

The authors declares that there is no conflict of interest.

AUTHORS' CONTRIBUTION

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

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ETHICS STATEMENT

This article does not contain any studies with human participants or animals performed by any of the authors.

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