

Correspondence

To the Editors

Antimalarial drug prophylaxis and paediatric COVID-19 in malaria endemic area

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Dear Editors,

Hydroxychloroquine (HCQ) and chloroquine (CQ) are classic drugs that have been widely used for a very long time. In general, HCQ and CQ are used for malaria treatment and prophylaxis in tropical endemic areas¹. Additionally, they are used for management of systemic lupus erythematosus and other rheumatological disorders.

In the present COVID-19 crisis, HCQ and CQ have been widely studied for effectiveness in management of the infection. Meo SA, *et al* suggested the use of HCQ for high risk and outpatient COVID-19 cases². At present, HCQ and CQ are already recommended and used for COVID prevention in some developing countries such as Sudan and India³. It is generally recommended for COVID-19 cases who have no co-morbidities and who are immunocompetent⁴. Nevertheless, the lack of data on HCQ and CQ use in healthy people is an important consideration. Indeed, there is an important common use of HCQ and CQ in healthy subjects for malaria chemoprophylaxis. The antimalarial prophylaxis is recommended for any local people, including children, in malarial endemic areas⁵.

Previous studies of efficacy of HCQ and CQ as COVID-19 chemoprophylaxis are mainly from the non-tropical countries where malaria is rare⁶. In a recent report from a tropical country, Brazil, the effect of HCQ in COVID-19 was inconclusive⁷. Further studies are required. Here, we would like to discuss the epidemiological record of COVID-19 in Indochina, where malaria is highly endemic. Of interest, the COVID-19 situation in Indochina is not serious when compared to Western countries. Also, the disease is usually not severe. In Myanmar where there are many cases of COVID-19, very few cases occur in the highly endemic malarial areas. In those areas, such as Kayah State, antimalarial prophylaxis is generally used and local children regularly received the prophylactic drugs⁴. There is no report of paediatric COVID-19 in that state. Similarly, in Thailand, Laos and Vietnam, although there are many COVID-19 patients, there are few paediatric cases and there are usually no paediatric cases in the

malarial endemic areas. A recent report showed that a COVID-19 paediatric case showed dramatic improvement after HCQ therapy⁸. The report on a simulation study from the Netherlands also supports the use of an adjusted dose of CQ for treatment of paediatric COVID-19⁹. The observation on the real situation of use of HCQ and CQ among healthy children in this area might be a useful clue for further study on the effects of the drugs in the present COVID-19 crisis.

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