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ICMR Recommends Use of Hydroxy-Chloroquine

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Why in News

The National Task force for **COVID-19**, constituted by the Indian Council of Medical Research (ICMR), has suggested the **use of hydroxy-chloroquine** to contain the spread of SARS-CoV-2 (Coronavirus) for restricted populations.

Key Points

- **Hydroxy-chloroquine :**

Hydroxy-chloroquine is an **oral drug** used in the treatment of **autoimmune diseases such as rheumatoid arthritis**.

- Autoimmune diseases are in which the body's immune system attacks healthy cells.
- Rheumatoid arthritis is a chronic inflammatory disorder affecting many joints, including those in the hands and feet.

- **Hydroxy-chloroquine against COVID-19:**

- The drug shows antiviral activity **in vitro** against coronaviruses, and specifically, SARS-CoV-2 [the virus that causes COVID-19].
- Further, the study suggests that prophylaxis (treatment given to prevent disease) with hydroxy-chloroquine at approved doses could prevent SARS-CoV-2 infection and may help to improve viral shedding.
- Clinical trials are under way in China to know whether the drug can be used for treatment.

- **ICMR Recommended Use of Hydroxy-chloroquine:**
 - The restricted population for usage of hydroxy-chloroquine include, namely, **'Asymptomatic (showing no symptoms) Healthcare Workers'** and **'Asymptomatic household contacts'** of laboratory-confirmed cases.
 - The above mentioned population have been advised to use the hydroxy-chloroquine to **contain further spread of the pandemic.**
 - However, the drug is **not recommended** as a preventive healthcare in children under **15 years of age.**
 - ICMR also advised that placing healthcare workers under hydroxy-chloroquine treatment **should not instill a sense of false security** and they **need to follow all prescribed public health measures** such as frequent washing of hands, respiratory etiquettes, keeping a distance of minimum one metre and use of personal protective equipment, etc.
 - It has been also advised that the drug **should only be given on the prescription** of a registered medical practitioner.

Combination of Hydroxy-chloroquine with Other Drugs

- **Hydroxy-chloroquine and Chloroquine:**

A study suggests that **both hydroxy-chloroquine and chloroquine** have in vitro activity against SARS-CoV, SARS-CoV-2, and other coronaviruses, with hydroxy-chloroquine having higher potency against SARS-CoV-2.
- **Hydroxy-chloroquine with Azithromycin:**
 - The combination is hydroxy-chloroquine with azithromycin, a commonly used antibiotic.
 - The combination is expected to be efficient for virus elimination.

NOTE:

- **In vitro studies** are performed with microorganisms, cells, or biological molecules outside their normal biological context (such as in a test tube).
- In contrast to in vitro experiments, **in vivo studies** are those conducted in living organisms, including humans, and whole plants.

Indian Council of Medical Research

- Indian Council of Medical Research (ICMR) is the apex body in India for the formulation, coordination and promotion of biomedical research.
- Its mandate is to conduct, coordinate and implement medical research for the benefit of the Society; translating medical innovations into products/processes and introducing them into the public health system.
- It is funded by the Government of India through the Department of Health Research, **Ministry of Health & Family Welfare.**

Source:IE