

# Hydroxy chloroquine (HCQ): A positive prospective against the treatment of corona disease during the pandemic of COVID -19

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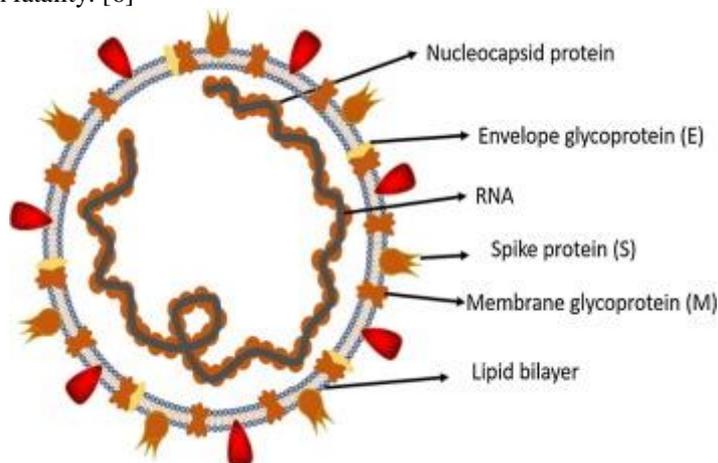
**Abstract:** Present research based on hydroxychloroquine with the help of corona viruses. Hydroxy chloroquine is most effective medicine in malaria disease. But now time this drug recently used is corona infection. Corona disease is caused by severe acute respiratory syndrome coronaviruses -2(SARS-COV-2), Hydro chloroquine is effective in inhibiting SARS-COV-2. Hydroxychloroquine can prevent the corona infection.

Corona virus is a very harmful for human in recent time. More than 1 lakh people infected in while countries and 7000-9000 peoples died after spread corona virus. Corona virus is spread from in the central Chinese city of Wuhan, primary cause infectious in birds and mammals but in recent day these infections in human. It causes a variety of disease in mammals and birds but in last few decades, has shown to be capable of infecting humans as well. Various symptoms shown in 2003 of severe acute respiratory syndrome. Recently, middle -ease respiratory syndrome (MERS) and unknown pneumonia, were identified dec.2019-jan.2020 in Wuhan municipal health commission. On 15<sup>th</sup> march to 14april closed the market and high alert while countries because these are affected 9000-10,000 peoples. Corona virus is a acquiring disease, these infections transmitted to one people to others peoples.

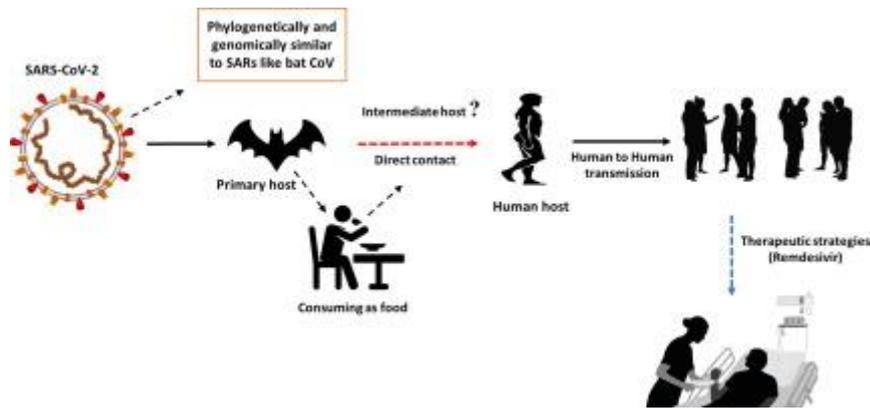
**Keywords:** Corona virus, respiratory syndrome, Hydroxychloroquine

## INTRODUCTION

Outbreak of a novel coronavirus in nov-Dec. 2019. First reported of severe acute respiratory syndrome -2(SARS-2-COV-2) in Wuhan, china 2019. Corona virus is rapidly spread in while countries. Corona virus is also called as novel (new) coronavirus.[1] Corona virus is very harmful for human in recent time. 1000 cases per day found in currently number of peoples and death above 10,000 in while countries. Corona virus is a novel infections and spread rapidly. [2] Since December 2019, an outbreak of new human corona virus has spread in Wuhan countries and this virus is rapidly spread in various countries and caused 10,000 cases and deaths.[3] Corona virus is derived from the Latin word corona, meaning crown or Halo , corona virus (COVs) is primarily caused in birds and mammals animal but now coronavirus is rapidly spread in human . 10,000-12,000peoples dies. [4] Corona virus is highly transmitted and pathogenic viral infection, this infection is caused by severe acute respiratory syndrome (SARS- COVS-2).[5] The severe acute respiratory syndrome (SARS- COVS-2), and influenza A, H1N12009 and middle east respiratory syndrome corona virus (MERS-COV) cause acute lung injury (ALI) and acute respiratory distress syndrome (ARDS) which leads to pulmonary failure and results in fatality. [6]



Graphical abstract: corona virus spread this picture.[7]



#### TYPES OF CORONA VIRUS: SYMPTOMS:

Four types of coronavirus.

- i. Alpha corona virus ( $\alpha$ -COVs)
  - ii. Beta corona virus ( $\beta$ -COVs)
  - iii. Gama corona virus ( $\gamma$ -COVs)
  - iv. Delta corona virus ( $\delta$ -COVs)
- i. **Alpha corona virus:** these types of virus are classifying into various types like FCOV, FECOV (Felene enteric corona virus), FIPV (Feline infectious corona virus), TGEV (transmissible gastro -enteritis), PEDV (procine epidemic diarrhoea virus)
  - ii. **Beta corona virus:** these viruses spread through birds and mammalian ex. Mice and human with severe acute respiratory syndrome.
  - iii. **Gamma corona virus:** these are spread by birds
  - iv. **Delta corona virus:** these types are found in 2012, spread with 50percent mammalian. [8,9,10]

Symptoms of COVID -19 are –

- a. Difficulty in breathing
- b. High fever
- c. Cough
- d. Dry mouth
- e. Dry salivary gland
- f. Arthritis and
- g. Skin lesions

Other symptoms are found on reported such as lungs.[11]

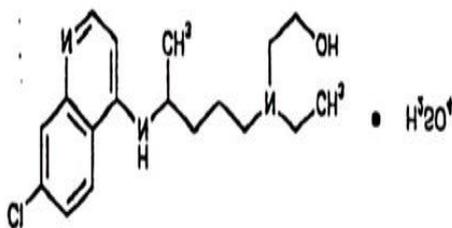
#### TREATMENTS:

Hydroxychloroquine (HQ) is a white colour crystalline powder, it is soluble in in water and in soluble in chloroform, alcohol and ether. hydroxychloroquine is an aminoquine like chloroquine. HQ is mainly prescribed medication in the treatment of malaria, rheumatoid arthritis, chronic discoid lupus erythematosus and systemic lupus erythematosus. HQ used for prophylaxis of malaria in regions where chloroquine resistance is unlike. Hydroxychloroquine is granted approved on 18 April ,1955 by FDA.[12]

**Due to COVID-19, the FDA has issued an emergency use of hydroxychloroquine.**[13]

The chemical name of hydroxychloroquine sulphate: 2- [4- [(7-chloro-4-quinoly) amino] pentyl] ethyl amino] ethanol sulphate [1:1]

Structure: [14]



Hydroxychloroquine have been used in the treatment of malaria disease but now used in the treatments of COVID-19, are time to develop, a clinical trial and these are effective in COVID-19, because its having antiviral activity. HQ used in the HIV with combination of other medicine.[15] 11 Feb. 2020 international committee taxonomy of viruses (ICTV) decided the name the virus is severe acute respiratory syndrome COVID-2 (SARS-COV-2). corona virus is a severe acute respiratory syndrome -2 infection, todays date these have been over 20,000 and 28,000 deaths due to COVID -19 in UK alone. HQ such treatments will take time to

develop and became available for widespread use. Hydroxychloroquine inhibit the severe acute respiratory syndrome -2 (SARS-COVS -2).[16] HQ is widely available, internationally indications, safe and effective in some international guidelines to treat COVID-19. HQ blocks the production of interleukin-6 and other pro inflammatory cytokines which are the key of mediators of ADRS. [17,18,19,20]

#### PRECAUTION OF CORONA VIRUS:

- i. Wash your hand properly.
- ii. Regularly handwash thoroughly with soap and water for 20sec. or 70percent based on alcohol sanitizer.
- iii. Maintain the social distancing
- iv. Avoid crowded places
- v. Avoid attending events, prayers and parties.
- vi. Avoid touching the body part like eyes, nose, mouth because contaminated hands can transfer the virus to your body (nose, eyes, mouth)
- vii. Cover your mouth
- viii. Show the various symptoms, quickly check the doctor and with ANM on any queries you have on how to protect yourself.[21]

**CONCLUSION:** In recent years corona has emerged as a serious disease in the world. unfortunately, 35 lakh peoples affected this virus and death rate is increase. present time no vaccine in the world. there is need improvisation of available marketed drug hydroxychloroquine, Hydroxychloroquine is granted approved on 18 April ,1955 by FDA is effective in corona virus. Hydroxychloroquine lifesaving drug used in the treatment of COVID -19. I need hydroxychloroquine drug for better treatment for COVID-19.

Conflict of interest: no conflict of interest

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