Corona Virus (COVID-19) and Drug Treatment General Information: Review

Keywords: COVID-19, coronavirus, precautions, plasma therapy, treatment, drug used

ABSTRACT

COVID-19 is an epidemic disease which spread in many countries. It is transmitted primarily through respiratory droplets or contact with contaminated surfaces. Spread of disease and the treatment on the patient at present time is given in this article. Plasma therapy and its short information is included which is related to viral diseases. Precautions to avoid the COVID-19 are also included in this article.
INTRODUCTION

The common cold also known as nasopharyngitis, acute viral rhinopharyngitis, is a viral infectious disease of the upper respiratory system, caused by rhinoviruses and coronavirus. The coronavirus is an epidemic type of disease which is spread by contact with infected person or contaminated surfaces. To avoid the transmission people keeps movement restriction partial closure or closure of schools and businesses, quarantine in specific geographic areas and international travel restriction.

A cluster of Pneumonia of unknown etiology was reported in Wuhan city, China on 31 December 2019. On 7 January, Chinese authority identified a new type of coronavirus as is different from any other human coronaviruses discovered so rare.

Epidemiological evidence shows that 2019 novel coronavirus can be transmitted from one individual to another, in the previous outbreaks of other corona coronaviruses such as MERS-COV and SARS, human to human transmission most community their droplets, personal contact, and contaminated objects.

COVID-19 outbreak was declared as pandemic by WHO on 11 March 2020.

TREATMENT USED FOR VIRAL INFECTION:

Many of antiviral drug treatment is given to the virus infected patient also for COVID-19 Infection. The world suffering from various dangerous diseases like Malaria, Ebola, Acute respiratory syndrome and Middle respiratory syndrome.

Nowadays the vaccine is not available so the treatment for COVID-19 patients is by antiviral drugs, anti-inflammatory drugs, antimalarial drugs.

1 HYDROCLOROQUINE

OUTCOMES: It is preferred to over chloroquine as they are equally effective as antimalarial drug but it have more safety profile.

DRUG CATEGORY: Antimalarial, Antiviral.
2 HYDROCLOROQUINE AND CHOLOQUINE

OUTCOMES: It is safe and effective for viral infection. It is effective for coronavirus treatment.

DRUG CATEGORY: Antimalarial, Anti-inflammatory.

3 OTHER DRUGS:

Lopinavir, Ritonavir, Covifar, Fabiflu, Cipremi, Methylprednisolone.

NEW TREATMENT FOR CORONA

PLASMA THERAPY

PLASMA:

Plasma is the almost clear liquid part of the blood. It is the single largest component of human blood, comprising about 55 percent, and contains water, salts, enzymes, antibodies and other proteins.

ROLE:

It helps in blood clot, support immunity, carries water, salts and enzymes. It takes nutrients, hormone, and proteins to part of the body that need it.

HOW IT CAN BE USED

Experts believe transfusion of convalescent plasma, taken from a person who recovered from coronavirus could help critically ill patients. So, for there has been no definite research on the therapy effectiveness in taking coronavirus or on drug drawback.

THE THERAPY

Entails giving patients a transfusion with plasma or serum from these who have developed antibodies to virus or bacteria.

This process grants the patients some passive immunity.
Convalescent blood is an option if there are no medication or vaccine to treat an infectious disease.

The first valid trial was done in 1892 for Diphtheria, using serum from animals.

**SIDE EFFECTS**

In case of Dengue, Convalescent serum was found to make patients worse, as it led the virus to replicate. No definite studies exist showing effectiveness.

There could be transfusion associated reaction unknown pathogens could be transferred into a patient during transfusion.

**HOW IT WORKS**

As people fight the COVID-19 virus, they produce antibodies that attack on the virus. These antibodies are secreted by immune cells known as B lymphocytes, found in plasma or liquid part of blood which helps the blood clot when needed and support immunity.

Once a person has recovered, he or she develops antibodies that will stay in the blood used for the fight with virus it gets isolated and insert into another infected patient it develops the other antibodies and fight with the virus.
PRECAUTIONS TO AVOID COVID-19

- Clean your hand with soap and water or an alcohol-based hand rub.
- Maintain a safe distance from anyone who is coughing or sneezing.
- Wear a mask when physical distancing is not possible.
- Don’t touch your mouth, eyes or nose.
- Cover your mouth and nose with your bent elbow or a tissue when you cough or sneeze.
- Stay home if you feel unwell.
- If you have a fever, cough and difficulty breathing, seek medical attention.

RESULT AND DISCUSSION:

Stop of spread coronavirus disease is important in present day, but there is no available of any vaccine for the COVID-19. There is some drug therapy is available to reduce the effect of coronavirus disease. The available antimalarial, anti-inflammatory, antiviral drugs which can be used for the treatment disease. The plasma therapy also effective for some patients against the coronavirus.

CONCLUSION

COVID-19 or novel coronavirus disease is an epidemic type of disease. It infects our upper respiratory track. It transmitted through infected patient to the healthy person. Present days no any vaccine to prevent the coronavirus is available. But some medicament is used to control the coronavirus. Also, the new therapy is available to control the corona disease. Use of medicament and therapy help to control the symptoms of coronavirus. Also, the precautions are given to the people to avoid the infection of virus.

REFERENCES

1) https://www.who.int/emergencies/disease/novel.coronavirus.2019
3) http://lm.timesofindia.com
4) WHO information pdf about COVID-19
6) Public Service Announcement by Ministry of Health and Family Welfare Government of India who.int