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Review Article

### Corona Virus an Overview and Review of Literature

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#### **Abstract**

There is a grade of sundry virus (virus) breed that prompt pestilence influence in mammals and birds. These are RNA viruses. In humans, they are foster by respiratory tract infections, which are mostly within due limits in intensity but sometimes fatal. Diseases of the upper respiratory tract. No vaccine (antiviral) or antiviral is not present at the time to obviate them, and the human depends on its immune system for treatment and disease symptoms mammals and bird. The 2019 Novel Corona virus originating from Wuhan city of China is an example of viruses of the same group, whose suppuration is posthaste emerging in the 2019-20 period as the 2019-20 Wuhan corona virus ebullition. Recently the WHO named it COVID-19. In Latin language, "corona" means "crown", and the thorn-like structures surrounding the particles of the virus have a crown-like shape in the electronic micrograph that it was named. The proliferate of the corona virus was declared a public health emergency of international concern by the World Health Organization, a type of emergency which is the sixth emergency by the WHO Corona virus name. Understand the signs of COVID-19 so you can get medical help if you need it. The three key things to look for are fever, coughing, and shortness of breath. You already may have coughing and shortness of breath because of your COPD. COPD typically doesn't give you a fever. If you run a temperature, about 100.4 F or above, along with other COVID-19 symptoms, call your doctor.

Keywords: COVID-19; Wuhan; COPD

### Nomination

In Latin language, "corona" means "crown", and the thorn-like structures surrounding the particles of the virus have a crown-like shape in the electronic micrograph that it was named. At the time of solar eclipse, if the moon covers the sun, a ray appears around the moon, it is also called corona. Wuhan Institute of Chinese Academy of Sciences and Hubei Provincial centre for Disease Control and Prevention, Wuhan Institute of China Academy of Sciences and Hubei Provincial Centre of Wuhan Institute.

### **Virology**

Virus classification

Group: Group IV

Subject: Virus

World: Riboviria

Union: Undecided

Gan: Nedovirales

Total: Coronaviridae

Subcutaneous: Ortho corona virinae

# Figure a

#### COVID-19

Lung disease causing chronic respiratory disability in majority of people. Surveys of people with chronic lung disease by British Lung Foundation suggest that 90% of chronic lung disease is due to chronic airflow obstruction. Exercise parochialism a characteristic and troubling manifestation of this disease, is because of peripheral muscle weakness, de-conditioning, impaired gas exchange in lung and peripheral muscle. Coronavirus disease 2019 (COVID-19) is an evolving conveyable disease that dramatically spread all over the world in the early part of 2020. No studies have yet summarized the potential severity and mortality risks caused by COVID-19 in patients with chronic obstructive pulmonary disease (COPD) Although COPD ubiquitousnesse in COVID-19 cases was low in current reports, COVID-19 contamination was associated with sizeable grievousness and mortality rates in COPD COVID-19 infection is associated with significant severity and mortality in COPD. There was also increse risk of severe disease and mortality.

- Sore throats.
- More coughing.
- New types of coughing.
- Changes in phlegm colour or amount.
- More wheezing.
- Lower blood oxygen levels at rest.
- Increased oxygen use.
- More use of rescue inhaler.

# Figure a

#### **Epidemic**

Scientists managed to segregate a tensity of the corona virus and published the genetic sequence of the virus to laboratories throughout the world could swiftly expand PCR techniques to infection by the virus. To achieve success in doing as soon as possible. The WHO has praised the Chinese for their swift efforts. The genome sequence of 2019-nCoV is 75-80 percent identical to that of SARS-CoV, and more than 85 percent identical to many bat corona viruses. Migration, the virus shake out to other Chinese territory care in early January and mid-January 2020. Cases began to be detected in other countries by international travellers usually in major trade partner countries, Thailand (13 January); Japan (15 January); South Korea (20 January); Taiwan and the United States (21 January); Hong Kong and Macau (22 January); Singapore (23 January); France, Nepal and Vietnam (24 January); Australia and Malaysia (25 January); Canada (26 January); Co. an estimate Based on reporting and assuming a 10-day delay between infection and detection, researchers at North eastern University and Imperial College London estimated that the number of actual infections at the time of reporting could be 10 times higher than confirmed. The corona virus is common in various species of animals. Sometimes these animal viruses spread to humans. The corona virus is mainly spread through air droplets fomite when an infected person coughs or sneezes within a range of about 3 ft (0.91 m) to 6 ft (1.8 m). Nearby objects and surfaces also fall, after touching these surfaces or objects, their nose, eyes, or mouth are touched by the hands. Those who have been in the air near an infected person.

### **Symptoms**

Its symptoms are similar to those of common cold - fever, fever and cough. So it is difficult to tell through its symptoms whether it is a flu symptom or corona virus! The most common symptoms of COVID-19 are fever, fatigue, and dry cough and headache. As well as 1 in 6 persons found infected, it was observed that he was seriously ill and had trouble breathing. It is also observed that these symptoms are usually mild and start slowly. Some people get infected but no one in them. It has been seen that the treating personnel usually treat patient on long tern invasive ventilation. Pulmonary Hygiene is not observed at all resulting in nosocomial secondary infection of lungs causing pneumonia whichis susceptible to any antibiotic, antifungal or antivirus drugs leading to multi organ failure and finally death. Hence observation of pulmonary hygiene in cases on invasive ventilation is must.

# The diagnosis

Upper respiratory secretions (specimen from nose or throat should be sent for evaluation. Additional samples such as serum, Broncho alveolar lavage, tracheal aspirate, urine and faces may also absent for testing. Samples should be stored at 2 - 8°C. These samples should be subjected to RT-PCR assays. On 15 January 2020, WHO published a protocol for testing COVID 19 (COVID-19). Since then, several other testing protocols have been proposed, and published by WHO. There is no specific treatment (antiviral drug) for infection with this virus. Therefore only supportive treatment can be offered. Paracetamol for fever, anti- allergic, hot saline gargle and steam inhalation (as this virus does not survive up to 35°C. Sore throat and antibiotics and other adjunctive therapy for pneumonia IV fluids, oxygen, etc.). More than 80% of patients are mildly ill and are self -limiting The death rate is between 2-3%. This is 2003 SARS (MR: 10%) or 2012 MERS (MR:A strong immune system can protect you from corona virus infection Experts say that it depends on how strong or weak a person's immunity power is. The WHO and the Center for Disease Control (CDC) have stated that the two major classes of people who are more prone to infection are either elderly or underling medical conditions (underlying medical conditions - diabetes, heart disease, lung disease etc.) Are the ones. People who are elderly and have a weak immune system Antibiotics won't help because they treat bacteria, not viruses. If you hear about people with COVID-19 getting antibiotics, it's for an infection that came along with the disease. People with severe symptoms need to be cared for in the hospital. The antiviral medication called remdesivir (Veklury) is the first medication to get FDA approval for treatment of patients hospitalized with COVID-19. Originally developed to treat Ebola, evidence shows that those treated with remdesivir recovered in about 11 days compared to 15 days for those treated with a placebo. Many clinical trials are under way to explore treatments used for other conditions that could fight COVID-19 and to develop new ones. For instance, trials are under way for tocilizumab, another medication used to treat autoimmune conditions. And the FDA is also allowing clinical trials and hospital use of blood plasma from people who've had COVID-19 and recovered to help others build immunity. You'll hear this called convalescent plasma. Currently, evidence of its effectiveness is limited. Early in the pandemic, the anti-malarial drugs hydroxy chloroquine and chloroquine were considered as possible treatments. The FDA later rescinded an emergency use order because studies found that the drugs were ineffective and the risks outweighed the benefits. A variety of steroid medications are being used including dexamethasone which is used to treat conditions such as arthritis, blood/hormone/immune system disorders, allergic reactions,. More studies on effectiveness are still being conducted.

#### **Cleanliness**

People who suspect they are infected should wear a surgical mask (especially in public places) and visit a doctor for medical advice. Wearing masks to limit the amount of droplets that can spread while talking or sneezing and coughing can help reduce transmission of infection. If a mask is not available, someone experiencing respiratory symptoms should cover a cough or sneeze with a tissue, and immediately discard the tissue in the trash, and on their hands.

The WHO recommends the following best methods for mask use:

- Apply the mask carefully to cover the face and nose and tie securely to minimize any gaps between the face and the mask; When using, avoid touching the mask;
- Remove the mask using the appropriate technique (do not touch the front but remove the lace from the back);
- After removing the mask or whenever you inadvertently touch the mask used, wash your hands with alcohol-based hand sanitizer or soap and water (boiled).

Healthcare professionals directly interacting with patients suspected of having 2019-nCoV are also advised to use respirators, at least as NIOSH certified N95, EU standard FFP2 or equivalent, in addition to other personal protective equipment.

#### Contact is a person who is involved in one of the following:

- Providing direct care for COVID-19 patients without proper personal protective equipment (PPE).
- Living in the same environment as the 19 patients of COVID (including workplace, classroom, domestic functions).
- Traveling together in close person (within 1 meter) with a symptomatic person who later tested positive for COVID - 19.

#### High risk contact

Contact with confirmed case of COVID - 19 Open Covid outdoor in every hospital so that public can approach doctor. Start an awareness campaign about the reach of Covid- 19 outdoor for any medical problem. Don't ignoreanyminormedical problemas itcanbeCovid 19. Train the doctor in outdoor to screen for Covid patients and treat them according to the stage of diseases. Admit those cases which have comorbidity specially diabetes if they are in the third stage of the disease. The patient in first and second stage of the disease shall be home isolated if there oxygen level is above 80% and be given Ivermectine 12 mg and Prednisone 10 mg day and twice daily for 10 days. They shall be advised to lie in prone position with a pillow under the chest and do deep breathing exercises. They should measure their 02 level regularly and come to hospital if feel any problem Rest of the patient without any sign or symptoms shall be given Ivermectine 12 mg two tablet to be taken on first and third day. The most important thing is that no one should be given steroids in first five days of the disease. Vaccine/Vaccination should be carried out in planned manner but it is not going to affect the present morbidity and mortality. There is great hue and cry, as well as, exorbitant demand for oxygen because hospital are following the norms of less than 94% oxygen saturation requires oxygen which should now be changed as we have treated cases up to 75 oxygen saturation at home isolation without oxygen. Cases up to 80% oxygen saturation can be treated in home isolation and if the need be given portable oxygen can of 12 it forintermittent oxygen supplementation especially when they move around for routine natured call. It will reduce the oxygen demand to a large scale.

The crisis of beds, strict no The main emphasis of this concept is early diagnosis, but, how it can be achieved as we have acutely shortening testing infrastructure. To overcome this hurdle we consider all population 18yr and above as susceptible population and start a preventive program. We are giving below a preventive treatment protocol which is based on pathophysiology of the diseases; The main emphasis of this concept is early diagnosis, but, how it can be achieved as we have acutely shortening testing infrastructure. To overcome this hurdle we consider all population 18vr and above as susceptible population and start a preventive program. We are giving below a preventive treatment protocol which is based on pathophysiology of the diseases the proposed treatment protocol for prophylaxis and early treatment is being given below: The objective of this protocol is prophylaxis, early diagnosis and treatment of the cases and checks the progression of the disease to a stage where it needs hospitalization means treating most of the cases outside the hospital thus limiting the loads of hospitals and preventing the death.

#### Vaccine research

Many organizations around the world are developing vaccines or testing antiviral drugs. Center for Disease Control and Prevention (CDC) Navel dksjksu Many organizations around the world are developing vaccines or testing antiviral drugs. The Centres for Disease Control and Prevention (CDC) has started developing vaccines against Navel dksjksuk virus and is testing the effectiveness of an existing drug for pneumonia. A team at the University of Hong Kong has announced that a new vaccine has been developed, but needs to be tested on animals before clinical testing can be done on humans. Now available vaccine of India covaxin, covishield, sputnik v vaccine covaxin is first vaccine in India.

#### Simple precaution

You can prevent getting infected with COVID-19 by taking a few simple precautions:

- Clean your hands regularly with alcohol based hand sanitizer.
   Why? Washing your hands with a hand sanitizer or soap kills viruses that may be on your hands.
- Maintain a distance of at least 1 meter (3 feet) between you
  and someone coughing or sneezing. Why? When someone
  coughs or sneezes, they sprinkle small droplets in their nose
  or mouth, which may contain the virus.

- 3.Avoid touching the eyes, nose and mouth with your hands.
  Why? The hands touch several surfaces, where corona viruses
  may be present. Through hands you can spread this virus to
  the eyes, nose or mouth. From here, the virus can enter your
  body and make you vulnerable to Kovid-19.
- Make sure that you and the people around you follow the respiratory hygiene. This means, to prevent droplets from spreading with a tissue or handkerchief when coughing or sneezing.
   Then throw the used tissue into the trash immediately:
- Avoid touching your nose, mouth and eyes with your hands as it proposes to spread the virus.
- Avoid close contact with a person with fever or cough (minimum 3 feet difference).
- Avoid crowded places like bus stand, mall, railway station, fair, festival
- While coughing or sneezing covers your face with a handkerchief, villagers can use towels to wrap around their face, girls can use a scarf for this purpose, all equally effective.

#### Conclusion

Outbreak Areas Stay home when you feel unwell. If you have fever, cough and difficulty breathing, take care of your health. Going anywhere for investigation. Follow the instructions of your local health authority National and local authorities will have the most information about the status of infection in your area. This will enable you to quickly reach the right health facility. This will also take good care of your health and help prevent the virus from spreading.

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