



THE DANGEROUS CORONA VIRUS

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ABSTRACT

Coronaviruses (Covis), Positive Sensories RNA-Virus, Word Jenkenmark Dure Clubagtige Steckles What 'n Butenzewon Group RNA-Green Vanaf Hull Openerwalk Het N' Unique Replicas. Coronaviruses con n y vorskiedenis sieks Verorzak, Koi eVarkey by Van Enteritis, Tote Sugdier en Voices, n Van Dodelike Respiratory Infections Tot Boonstay Respiratory Infections. Here 'n Court Inducing Varin Coronavirus Besprique Word, Die Replicasi n Patojean Darwan, N Huidz Wurkomings - N Behendingstraaty. Own Besprike Oak Dye Vorcoms von Coronavirus in Hose Pathogen Acute Respiratory Syndrome (SARS-CoV).

Keywords- 2019-nCoV, SARS-CoV-2, COVID-19, WHO, pandemic, PHEIC, Pneumonia, Review.

CORONAVIRUS

Human coronaviruses belong to the genus Nidovirus, Family Coronaviridae, Subfamily Coronavirinae and Alfacoronavirus or Betacoronavirus. They usually cause epilepsy or gastrointestinal illness. The rapid emergence of corona virus associated with acute acute respiratory syndrome (SARS) in 2003–2004 has been noted in many ways, including neurologic manifestations (Weiss and Leibovitz, 2011). Coronavirus virions are spherical, 120–160 nm in diameter, and the outer envelope has 20-nm-long club-shaped projections, collectively resembling a crown or solar corona. The ssRNA + gene is located in a helical nucleocapsid with a diameter of 9–11 nm. At 27-32 kb, coronavirus genes are the largest of RNA viruses. They are non-segmented, 5-capped

and 3 dimensionally polyadenylated Coronaviruses attach to cell surface receptors and enter the cell at the plasma membrane or after endocytosis (Perlman and Netland, 2009). Replication occurs in the cytoplasm. After uncoating, gene replication occurs on double-membrane vesicles originating from the endoplasmic reticulum. Translated virus-specific RdRp, which transcribes viral genomic RNA to produce a full-length antigenome. A group of new positive-strand RNA and subgenomic mRNA is transcribed from the antigenome template. Each capped and polyadenylated mRNA produces a single polypeptide. Newly synthesized genomic RNA is included in virions that assemble on membranes between the endoplasmic reticulum and the Golgi. Mature virions develop by exocytosis after vesicular transport to the cell membrane. Coronaviruses are spread by respiratory aerosols and usually produce mild upper respiratory infections (Weiss and Leibowitz, 2011). They are referred to as etiologic agents of multiple sclerosis. Neurologic manifestations associated with SARS corona virus infections include axonopathic polyneuropathy, myopathy, and ischemic stroke. No vaccine or antiviral is available for human corona virus infections

Symptoms

Cold or flu-like symptoms usually begin two to four days after infection with the Coronavirus, and are usually mild. However, symptoms vary from person to person, and some forms of the virus may be fatal.

Symptoms include:

- Sneezing
- Runny nose
- fatigue
- Cough
- In rare cases, fever
- Sore throat
- Exacerbation of asthma

Human coronavirus cannot be cultivated in the laboratory easily, unlike the nasal virus, which is another cause of the common cold. This makes it difficult to gauge the impact of the Corona virus on national economies and public health.

There is no cure, so treatments include self-care and over-the-counter (OTC) medications:

- Rest and avoid excessive stress.
- Drink enough water.
- Avoid smoking and smoking areas.
- Take acetaminophen, ibuprofen, or naproxen to relieve pain and fever.
- Use a clean moisturizer or a cold mist evaporator.

The responsible virus can be diagnosed by taking a sample of respiratory fluids, such as mucus from the nose or blood.

Types

Different types of human coronavirus vary in the severity of illnesses they cause and how far they can spread.

There are currently seven recognized types of coronavirus that can infect humans.

Common types include:

- 229E (Corona alpha virus)
- NL63 (Corona alpha virus)
- OC43 (Corona Experimental Virus)
- HKU1 (beta corona virus)

The most dangerous types are MERS-CoV, which causes Middle Eastern respiratory syndrome (MERS), severe acute respiratory syndrome (SARS-CoV), the coronavirus responsible for SARS. In 2019, a dangerous new variety started to spread, but it still doesn't have an official name. Health authorities are currently referring to the novel Coronavirus 2019 (2019-nCov).

TRANSMISSION

There has not been a great deal of research on how a human corona virus spreads from one person to the next. However, it is believed that viruses are transmitted using fluid secreted from the respiratory system.

Corona virus can spread in the following ways:

- Coughing and sneezing without covering the mouth can disperse droplets into the air, spreading the virus.
- Touching or shaking hands with or shaking hands with the person with the virus, the virus can be transmitted from person to another.

People in the United States are more likely to get sick in winter or fall. The disease remains active during the rest of the year. Young people are more susceptible to infection with the corona virus, and people may have more than one infection during their lifetime. Most people will get at least one SK virus in their lifetime.

Corona virus is said to have the potential for mutation that makes it highly contagious.

To prevent cross-infection, be sure to stay home and relax while experiencing symptoms and avoid close contact with others. Covering your mouth and nose with a tissue or napkin while coughing or sneezing may also help prevent the spread of the Corona virus. Be sure to dispose of any used tissue and maintain hygiene throughout the home.

2019-nCov

In 2019, the Centers for Disease Control and Prevention (CDC) began monitoring the spread of the new coronavirus virus. Authorities first identified the virus in Wuhan, China. They named it the 2019 Corona Virus Novel (2019-nCov).

More than 1,000 people in China are infected with the virus. Health officials have identified several people with 2019-nCov around the world, including some individuals in the United States. On January 31st, 2020, the U.S. The virus moved from one person to another. The World Health Organization (WHO) has declared a 2019-nCov-related public health emergency.

Since then, 2019-nCov has begun to disrupt 24 other countries. In the United Kingdom, on February 10, 2020, a hospital in Brighton was temporarily closed after a staff member was infected with the virus. At the time of writing, they are one of eight people infected with the virus.

The first few animal and seafood markets are related to 2019-nCov. Initially it was said that animals transmit the virus to humans. However, those with the most recent diagnoses have no connection or are exposed to the market, claiming humans can spread the virus to each other.

Information about rare viruses nowadays. In the past, respiratory conditions originating from coronaviruses such as SARS and MERS have spread through close contact.

However, while some viruses are highly infectious, how quickly they spread is not clear with the corona virus.

Symptoms vary for someone with the 2019-nCov infection. It may produce little or no symptoms. However, it can also

cause serious illness and can be dangerous. Common symptoms include:

- Flu
- It is difficult to breathe
- Cough

It can take 2-14 days for someone to notice the symptoms after the infection.

No vaccine is currently available for 2019-nCov. However, scientists have replicated the virus. This will allow early detection and treatment of virus-infected people, but not for those who do not

Coronaviruses, Including Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS)

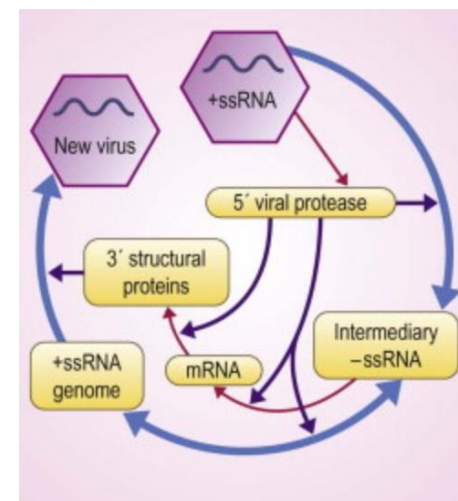
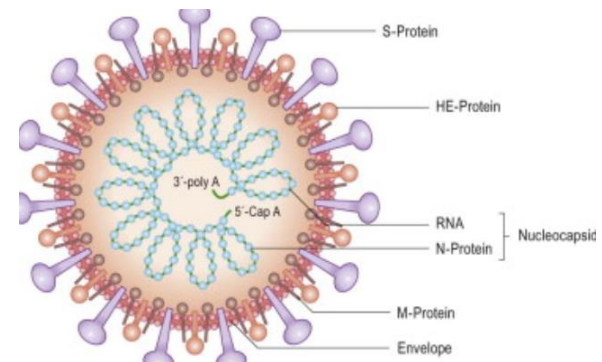
The Coronaviridae family, in order of Nidovirales, has two sub-families, Coronavirinae and Torovirinae. Coronaviruses (CoVs) are a large group of viruses that infect mammals and birds and produce a wide range of diseases. It is divided into four genera, two of which contain human viruses (see later). All human coronaviruses (HCoVs) are primarily respiratory pathogens. During the winter of 2002 to 2003, a new alarming disease emerged - severe acute respiratory syndrome (SARS), which was quickly attributed to a new coronavirus. SARS arose in the south of the People's Republic of China, with evidence that the virus was first derived from bats and transmitted to humans through an intermediary host, possibly palm civet or raccoon larvae (*Nyctereutes procyonoides*). SARS required a massive effort to identify cases and containment, and the last known case occurred in mid-2004. Upon return, the emergence of SARS is in line with what is known as CoVs as a group: they are important pathogens in animals that cause a wide variety of diseases through a wide range of mechanisms. Pathogenic, it has been observed that new species that recur frequently affect 4,5

Human coronaviruses

Coronary artery disease was first described in 1931, when the first coronavirus (HCoV-229E) was isolated from humans in 1965. Until the emergence of severe acute respiratory syndrome in late 2002, only two of the human coronavirus (HCoV) were known (HCoV-229E and HCoV-OC43). Once SARS-CoV virus was identified, two other human viruses were identified. There are three groups of coronavirus: group 1 (HCoV-229E and HCoV-NL63), group 2

(HCoV-OC43 and HCoV-HKU1), group 3 (no human coronavirus yet). SARS-CoV is further than the three groups, although some place it in Group 2.

SARS-CoV, NL63 (HCoV-NL63) and HCoV-HKU1 were first described in 2003, 2004 and 2005, respectively. However, the discovery of three new human coronaviruses does not necessarily represent a sudden increase in infections caused by the new coronaviruses. Only SARS-CoV was recently introduced to humans; two more have been circulating in humans for a long time. Respiratory viruses, HCoV-HKU1 and HCoV-NL63, which are often found during lower and upper respiratory infections, have spread throughout the world, favoring winter. These characteristics are not significantly different from the symptoms described for the "old" HCoV-229E and HCoV-OC43 viruses. This report provides an overview of current knowledge of the four human coronavirus that is now spreading among humans.



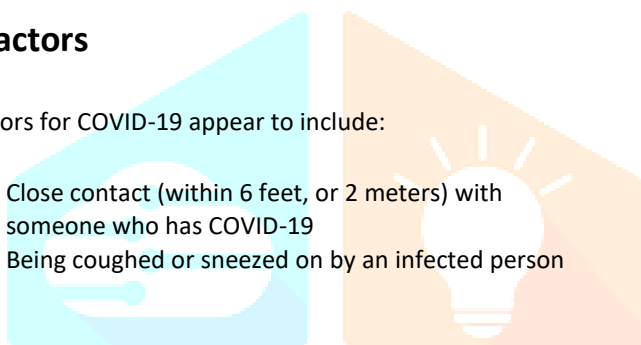
Order: Nidovirales
Family: Coronaviridae
Genus **species**

- Human coronavirus 229E
- Human coronavirus OC43
- Human coronavirus NL63
- Human coronavirus HKU1
- Severe acute respiratory syndrome coronavirus
- Human enteric coronavirus
- Human torovirus

Risk factors

Risk factors for COVID-19 appear to include:

- Close contact (within 6 feet, or 2 meters) with someone who has COVID-19
- Being coughed or sneezed on by an infected person

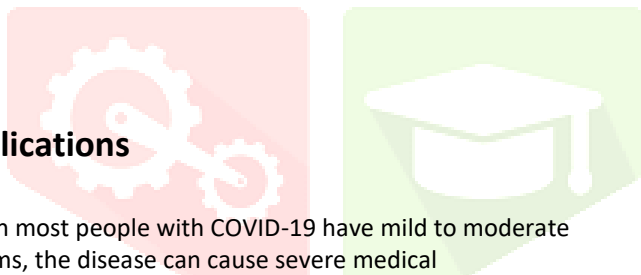


Complications

Although most people with COVID-19 have mild to moderate symptoms, the disease can cause severe medical complications and lead to death in some people. Older adults or people with existing medical conditions are at greater risk of becoming seriously ill with COVID-19.

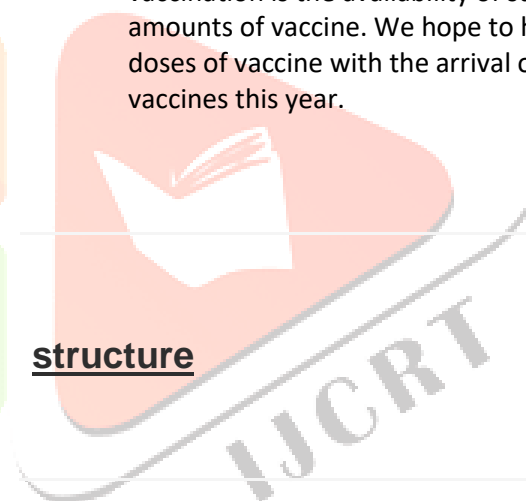
Complications can include:

- Pneumonia and trouble breathing
- Organ failure in several organs
- Heart problems
- A severe lung condition that causes a low amount of oxygen to go through your bloodstream to your organs (acute respiratory distress syndrome)
- Blood clots
- Acute kidney injury
- Additional viral and bacterial infections
- The Rhode Island Department of Health has a plan for distribution that will be followed in the state. The vaccine has been administered first to health care workers, nursing homes, and to



people living in areas of high transmission. Rhode Island’s plan is to vaccinate according to age and those with certain comorbidities which put them at higher risk of hospitalization. The main limitation to immediate widespread vaccination is the availability of sufficient amounts of vaccine. We hope to have more doses of vaccine with the arrival of new vaccines this year.

structure



Positive sense single stranded RNA

Genome ~30 000 nucleotides long

Pleomorphic viruses

80 × 160 nm diameter, with 12–24 nm surface projections (s)

Major proteins:

S – spike

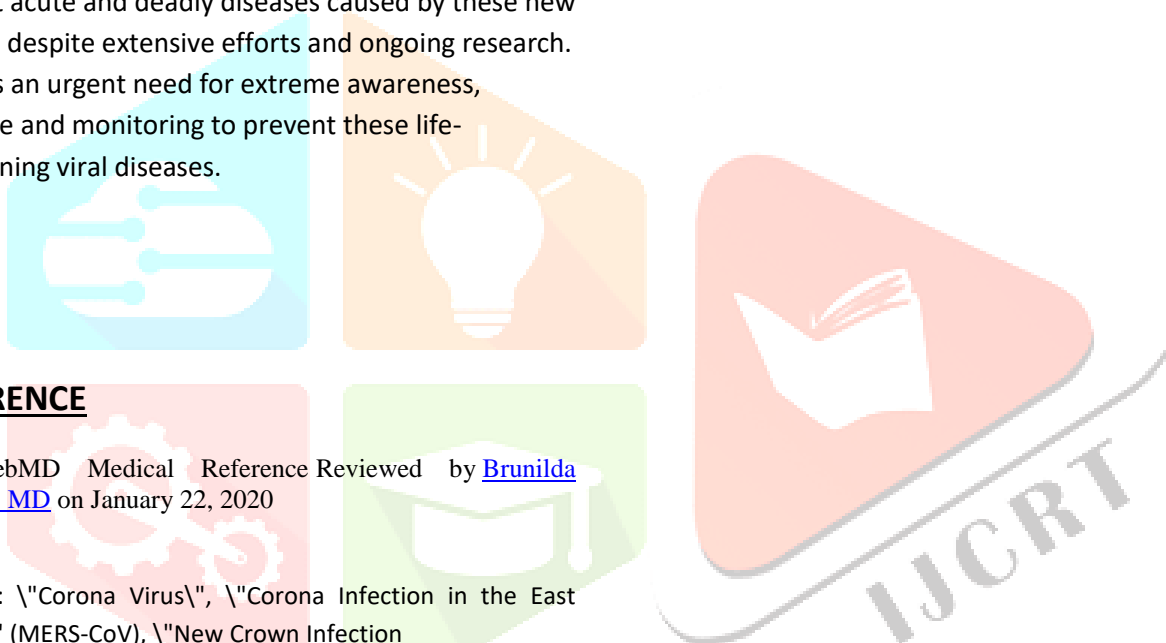
E – envelope

M – membrane

N – nucleocapsi

Conclusion

The new Millennium viruses cause serious illness and death. Modern PCR and virus coding technologies may not be able to provide early and accurate virus isolation. Molecular monitoring improves patient management and outcomes. Although there was an improvement in our knowledge of the Coronav virus, many inquiries were not answered, as were the absolute origin, potential transmission and careful treatment. More efforts are still needed to accelerate improved treatment and effective vaccination. However, specific medications are not yet available to treat these viral infections and specific vaccines to prevent acute and deadly diseases caused by these new viruses, despite extensive efforts and ongoing research. There is an urgent need for extreme awareness, vigilance and monitoring to prevent these life-threatening viral diseases.



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