The Etiology of COVID-19

What are coronaviruses?
- A family of viruses that have the ability to cause disease in both humans and animals.
- Typically infect animals such as camels, bats, and cats, but can mutate and evolve to infect other hosts like humans.
- Named for their crown-like projections on the surface of the virus seen under an electron microscope.
- All have similar symptoms can which include fever, cough, shortness of breath, can progress to pneumonia, and can progress to death.

Examples of Coronaviruses

Middle East Respiratory Syndrome (MERS)
Originated in camels and evolved to infect human hosts.
Spread to over 25 different countries beginning in 2012.

Severe Acute Respiratory Syndrome (SARS)
Originated in a small mammal, possibly bats, and evolved to infect human hosts.
Spread to 27 different countries beginning in 2003.

What is COVID-19?
COVID-19 is the disease caused by a new strain of SARS known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Current research shows that this new strain may have used an intermediate host before it emerged to infect humans.

Sources: Center for Disease Control and Prevention (cdc.gov) and the National Foundation for Infectious Diseases (nfid.org)
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