## **COMMENTARY**

# Coronavirus 19 (some thoughts about the Disease)

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#### Introduction

Patients who have a positive laboratory test for Coronavirus 19 (COVID-19) may not be so similar. Some may be symptomatic with a positive test, while others can be asymptomatic yet have a positive test. Some are at higher risk to develop symptoms e.g., the elderly, women, and patients with preexisting diseases, such as uncontrolled hypertension, diabetes, and congenital heart disease.

# **Defining the Disease**

Defining the disease is not an easy task. It is mainly a clinical diagnosis, but there are some laboratory tests that may be positive and patients may not have any symptoms. Symptoms may include fever and/or easy fatigue, and may be linked to factors such as exposure to patients or to areas where the condition is prevalent. Other factors may include exposure to persons who have had a blood test or nasal swab that is positive for COVID-19.

There have been many "cases" of COVID-19 documented by laboratory tests and reported in the USA. I have no idea how many patients have been admitted to the hospital but it is possible that those who had a positive test may not have had any symptoms of the disease and yet they are counted as "cases".

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# **End Points of Studies Against COVID-19**

Death is the primary end point (usually in the elderly but not limited to them) and while there are many other secondary endpoints, such as rehospitalization, most are trending in the right direction. Although one death is still unacceptable, the number of deaths is markedly below the number of "cases" reported. Maybe it's because with a positive test and no symptoms some do not have the disease but may be prone to the disease.

#### What is Needed

The main requirement in the battle against COVID-19 is more information: a better understanding of the pathophysiology of the disease, improved prevention with vaccines, and treatment with steroids and other current antiviral therapies is necessary. We are getting there, slowly but steadily, especially with vaccines, and scientists are working hard to characterize the disease. Other studies have included the use of high dose steroids, antiviral drugs and studies of exercise focusing on stability and flexibility. Combining the knowledge from these studies will give scientists much of the required information to understand and overcome the disease.

# What Should be Done in Addition to a Vaccination?

During this pandemic I think most agree that we should wash hands frequently and especially before seeing a patient who is symptomatic or if there is contact with anyone who tested positive, and is asymptomatic. We should keep a social distance 6-12 feet when in a crowd and wear a mask when appropriate.

## **What About a Vaccine**

A vaccine is now available. It may not be 100% effective to prevent the disease. However, in addition to preventing disease in a high percentage of patients, it may attenuate symptoms and shorten

the duration of the disease. In addition to vaccination please do not stop using the recommendations by scientists to continue the standard ways to prevent or at least reduce the symptoms of COVID-19 i.e. wash hands frequently, maintain social distancing, wear masks and do not travel (stay home). Don't give up on prevention and children and teachers go back to school. It is not clear from the science whether two masks should be worn at all times.