COVID-19 Is Really Two Diseases – To Treat the Second One, You Have to Name It Correctly

by Daniel Cobb, DOM

COVID-19 starts out as an usually mild and rather benign viral infection. In conventional medicine, they either claim that "there is no treatment" or possibly use anti-viral pharmaceuticals. Then they wait for the virus to go away. Sometimes it works, and sometimes it doesn't in rather spectacular ways.

Those in the medical community have looked at the amputated limbs, the death count from fluid-filled lungs and blood clots, and they have set about trying to understand how a virus can cause all of this. Answers have been elusive. This is because the most damaging and deadly part of this syndrome is not caused by the viral infection. It is caused by the total depletion of blood levels of vitamin C.

The name of this second disease is "acute scurvy."

Scurvy in the Modern World

Most people think of scurvy as a disease of the past – before James Lind told the British Navy to keep limes on their ships. The common view is that, by the 19th century scurvy was nothing more that a subject in history books. But this is not true. Scurvy has always been with us. We are surrounded by scurvy without even knowing it, and the worst part of the COVID-19 crisis occurs because we simply can't believe that there is such a simple answer as taking vitamin C.

Vitamin C

In nutritional medicine, the definition of "vitamin C" varies. I want to be clear that my definition of vitamin C is L-ascorbic acid or any of the mineral ascorbates based upon L-ascorbic acid.

First I need to make a few points about vitamin C. Once vitamin C gets into the bloodstream, it has a half-life of about 30 minutes. It is gone in four hours.[1] The only place that vitamin C is stored in the body is the adrenal glands, and the amount that is stored there is mostly for use by the adrenal glands.[2]

Vitamin C has many uses in the body, but for the purposes of this article, I will highlight only three of them.

1. It fights infections. The white blood cells absorb the vitamin C, and as a result are able to spit hydrogen peroxide at the infecting microbes.[3]
2. Vitamin C is the body's number one antioxidant.[4] It neutralizes free radicals. Free radicals are atoms or molecules that are missing one or more electrons. They cause damage by stealing electrons from nearby atoms/molecules. This causes more free radicals. When vitamin C is acting as an antioxidant, it is neutralizing free radicals by donating one or two electrons without itself becoming a free radical.

   Free radicals are always being created in our bodies, but inflammation causes much higher levels of free radicals.[5] Infections cause inflammation. Therefore, a serious infection can generate troublesome levels of free radicals.
3. Vitamin C is used to create collagen fibers.[4] Vitamin C is not in the end product, but it is used to cross-link the fibers to make them much stronger and much more durable. Collagen fibers are, for example, found in skin, blood vessels, ligaments, tendons, cartilage, bones, and any tissue in the body that requires flexible strength.

Common Characteristics of a COVID-19 Infection

Many COVID-19 infections are of short duration and almost symptom-free.[7] However when this does not happen and the infection worsens, there are several common things that occur.

1. The most common dangerous symptom and cause of death is that the patient gets fluid in the lungs.[6] This limits the absorption of oxygen, and if this condition is not quickly reversed, it frequently results in death by the patient drowning in their own fluids.
2. The next most common dangerous symptom is diffuse blood clots.[8] At the beginning of the year, this was mostly found at an autopsy because it was an unexpected symptom, but now that it is more known in medical circles, it is more often found before death occurs. These blood clots are most often found in the small vessels. Of course, they can obstruct the flow of blood and cause serious problems anywhere they occur.
3. Most COVID-19 infections start off with a fever and the patient feeling a "just a bit" sick. They might think that they are going to have a mild case and be back to normal in a day or two. Many of these patients are better in a day or two, but not all of them. For those who do not recover quickly, there is very often a sudden worsening of their condition.[9]

How a COVID-19 Infection Affects Vitamin C Blood Levels

When you get a COVID-19 infection (or any infection for that matter), additional vitamin C is used to directly fight the

microbe. The worse the infection gets the more vitamin C is used for this purpose.

When you get a COVID-19 infection, there will be more inflammation in your body. This inflammation will generate more free radicals. Vitamin C will be used in greater amounts to neutralize these free radicals. As the infection gets worse, more and more vitamin C is used for this purpose.

Collagen and elastin fibers are constantly breaking down and being replaced. Vitamin C is being used in this process. The rate of usage of vitamin C for this purpose is not affected by the COVID-19 infection.

As long as the consumption of vitamin C remains at or close to the usage of vitamin C, then all Vitamin C functions will remain relatively "normal." However, as the infection continues, especially if the patient is not taking supplemental vitamin C, the requirements for vitamin C is likely to significantly exceed the supply. In this case, the blood levels of vitamin C will, for extended periods of time, be zero.

What Happens When Blood Levels of Vitamin C Are Zero?

The immune system will not be quite as effective in the absence of vitamin C. However, there are many other vitamins, minerals and plant-sourced molecules that are very useful in supporting the immune system. Your immune function will drop off a bit, but you will still be fighting the infection.

Your ability to neutralize free radicals will decrease in the absence of vitamin C. However, there are literally thousands of antioxidant molecules in a wide variety of foods. Your antioxidant capability will drop a bit, but you will still be neutralizing free radicals.

For the production of collagen fibers, there is no substitute for vitamin C. When vitamin C blood levels drop to zero, collagen fiber production drops to zero.[4]

In most cases, this is of little concern. Your skin might sag or wrinkle and your tendons and ligaments in your joints might not work as well if you tried to exercise. These problems are not life-threatening. However, there are two places in your body where collagen fiber production dropping to zero is life-threatening.

I will be making the case that the "significant downturn" that is common in COVID-19 patients directly follows when the vitamin C blood levels drop to zero. This is where we should acknowledge that there are two diseases in play. The first is the ongoing viral infection and the second is acute scurvy.

Collagen Fibers in the Alveolar Membrane

The alveoli are the location in the lungs at the end of the bronchioles. There is a very thin membrane around each of the alveoli.[10] This membrane has two purposes.

1. It is the location where gas exchange occurs. The CO2 needs to be passed from the body fluids to the lungs and the O2 needs to be passed from the lungs to the body fluids. This is via passive diffusion, and it needs to occur fast enough to keep us alive. To accomplish this, portions of this membrane need to be extremely thin.[10, 11]
2. This membrane needs to keep the body fluids on one side of the membrane and not let them into the air passages of the lungs. The only way to accomplish this with such a thin membrane is with the support of collagen fibers.[10]

Collagen fibers break down on a constant basis and need to be frequently replaced. Under normal circumstances, this is not a problem, but when the blood vitamin C levels drop to zero, this replacement stops. The alveolar membrane begins to weaken, and within a day or so becomes porous. Fluid starts to leak into the lungs, which inhibits the gas exchange.

This is the point at which ventilators become useful. They do get more oxygen into the blood, but they do not address the structural problem, which is the integrity of the alveolar membrane. In the absence of sufficient vitamin C, the membrane gets more porous, and in a few days, the patient drowns in their own fluids.

Collagen Fibers in Vascular Tissue

In a similar way, collagen fibers are important in the integrity of the walls of blood vessels. Their primary function is to keep the blood inside the blood vessel. The flexible strength of collagen fibers is a major part of this function.[12] These collagen fibers also need to be frequently replaced, and this is not normally a problem. However, when blood vitamin C levels drop to zero, the replacement of collagen fibers stops. The blood vessel walls become porous, and the result is bleeding. The normal response to bleeding is clotting.

COVID-19 patients are dying from connective tissue problems related to severe depletion of vitamin C levels.

The pathology of diffuse blood clots is that they impair blood circulation, oxygenation, the delivery of nutrients, tissue repair, and the removal of metabolic waste and CO2. Many COVID-19 deaths have resulted from these problems and their downstream effects.[8]

Current Medical Research on Blood Clots in COVID-19 Patients

Because the problem with diffuse blood clots in COVID-19 patients is a recently observed problem, it is only now getting the attention of medical researchers. There are research efforts going on across the globe. Most of these are still in process, but several have come out with preliminary results. The study results are that, yes, diffuse blood clots do commonly occur in severely ill COVID-19 patients. The recommendation is to use blood thinners to combat the blood clots.[13-15]

Of course blood thinners (anticoagulants) can address these blood clots, but when the cause of the blood clots tie back to bleeding caused by loss of integrity of the vascular walls, this constitutes a dangerous recommendation. The likely result would be a significant worsening of the bleeding and even more blood clots. From at least one source that I have found, this is exactly what is being observed.[16]

ARDS and DIC

My central premise in this article is that there are two stages in the progression of a COVID-19 disease scenario. The first stage is the plain infection. In the absence of multiple or severe underlying conditions (COPD, heart disease, etc.), it is unlikely to be life-threatening. The

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second stage is what happens when vitamin C blood levels start spending long periods at zero. What happens in the lungs and vascular tissue in this second stage has already been described as separate conditions. The fluid in the lung condition is named Acute Respiratory Distress Syndrome (ARDS).[6] The vascular tissue condition is named Disseminated Intravenous Coagulation (DIC).[17]

Because both of these conditions primarily occur in hospitals, they are not well known to the public; but hospital medical personnel are very familiar with them. There is an abundance of medical journal articles written on both of them. Looking through the available medical literature should easily confirm the correlation between DIC/ARDS and what happens in the advanced stages of COVID-19 disease.

The reason why DIC and ARDS are viewed as such mysterious and deadly diseases is a familiar problem. They should both be named "acute scurvy," but in an age where we believe that scurvy no longer exists, this has been difficult to do.

For background reading purposes, I want to direct you to my favorite two articles on DIC and ARDS. These are both found on the website of the Foundation for Alternative and Integrative Medicine. If you take the time to read them, you should read the DIC article first.

- DIC article link: https://www.faim.org/a-proposed-mechanism-for-disseminated-intravascular-coagulation.
- ARDS article link: https://www.faim.org/acute-respiratory-distress-syndrome-ards

Concluding Statement

COVID-19 is viewed as an infectious disease that has killed over 100,000 people in this country in the past few months. My purpose in writing this article is to point out that the infection, by itself, is killing only a small fraction of that total. What COVID-19 patients are dying from is connective tissue problems related to severe depletion of vitamin C levels. The key to reducing COVID-19 deaths is naming the disease correctly. If the second stage of COVID-19 were named "acute scurvy," then getting people to take 3 or 4 grams a day of vitamin C would be easy. With the current naming convention, vitamin C is viewed more as a distraction.

I have calculated the wholesale price of vitamin C recently based upon the retail purchase of vitamin C capsules from Swanson's Vitamins. For a gram dosage, the price comes out to be 4.3 cents. So, the material price in a hospital for the daily consumption of four grams ends up being just shy of 18 cents. I think it is rather surprising that, in most cases, you can provide more benefit to a severely ill COVID-19 patient with 18 cents worth of vitamin C that you can with a $50,000 ventilator.

Postscript

The COVID-19 infection stage can easily be prevented/treated/cured with the use of vitamin and minerals and a few other supplements. I like to use vitamins A, C, D, selenium, zinc, copper, iodine, and quercetin. Others may have different formulas that use herbs, homeopathic remedies, dietary recommendations, in addition to vitamins and minerals. All of these will also work. The COVID-19 infection is very easy to deal with through nutritional and alternative medicine. But that was not the subject for this article, so in a different document, I will address this other topic.

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