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COVID-19
How can I cure thee? Let me count the ways.

Commentary by Thomas E. Levy, MD, JD

(OMNS July 18, 2020) Probably never before in history has anything or any event mixed fact, fiction, fear, and confusion like the COVID-19 pandemic of 2019-2020. Political and medical "experts" have been in abundance, primarily regurgitating the same message as though it was something new every time they get interviewed: wash your hands, maintain social distancing, and wear a mask as much as possible. And the public and the news media always take great comfort that an "expert" told them the truth. Trouble is, you can always find another "expert" of equal credentials who will offer a completely contradictory perspective. Understandably, this generates much of the fear and confusion noted above. The good hygiene and virus avoidance advice noted above is helpful, although it is probably a bit overblown when discussing how important a mask is in preventing virus transmission, especially outdoors. It seems ludicrous to mandate mask wearing at all times, indoors and outdoors, although this is being given consideration by some governmental (and medical) authorities at the time of this writing. However, this advice only scratches the surface with regard to the numerous options available to avoid contracting this infection, or to even cure it. There is no point in suffering from misguided advice when COVID-19 can be prevented or reliably cured in short order. As will be clearly explained in this article, nobody needs to die from COVID-19, or even to suffer needlessly (as many virus victims have remained quite ill for months before finally recovering).

While still unknown to most practitioners of traditional, or "modern" medicine, acute viral syndromes, COVID-19 included, can all be easily prevented most of the time. And when such viruses do get a foothold in the body, they are still easily eradicated if the patient is not too close to death before receiving any of a large number of treatments established to be effective. Many doctors get attacked for promoting treatments as cures for afflictions that are traditionally considered to be incurable. Certainly, it is true that some treatments promoted as being reliable cures are either fraudulent or of only nominal benefit. However, failing to assert the validity of a true cure for a medical condition is just as detrimental to the health of an ailing patient as it is promoting a false cure. Many doctors know of highly beneficial treatments that cure or vastly improve medical conditions that are little affected by traditional therapies. Yet, fear of license revocation for telling the truth about inexpensive and natural therapies that cannot be protected by patents keeps most health care practitioners from promoting those beneficial therapies. Nothing is ever embraced, and seemingly not even ***permitted***, that would take away large profits from pharmaceutical companies, hospitals, and even many of the doctors themselves. Whenever you are absolutely stupefied and cannot figure out why a valuable treatment is not being used, just take the time to identify, expose, and analyze the money trail that is involved with the prescription drugs and/or overall treatment protocol that would be displaced. [1] The reason for the avoidance or suppression of that therapy will then become apparent.

To be perfectly clear: The health of the patient must always be the primary concern whenever rendering medical care.

There exists a first amendment right in the United States that permits free speech, including the writing of books and articles. This right has even protected authors that openly provide information on how to make bombs and promote terrorism. One can only hope that discussing inexpensive and effective medical treatments will continue to receive the same protection. However, it is very clear that this right is rapidly disappearing, in light of the open suppression of free speech that has been occurring for some time, but especially in the last few months. In light of this, then, the information in this article is being presented.

There already exist numerous ways to reliably prevent, mitigate, and even cure COVID-19, including in late-stage patients who are already ventilator-dependent. Some of the modalities have already been proven to work, although not in the classic "prospective double-blind, placebo-controlled trials" conducted on hundreds to thousands of patients. A perceptive clinician realizes that one overwhelmingly impressive case report where an agent or intervention promptly and unequivocally reverses the condition of a rapidly declining patient back to good health simply cannot be dismissed and disparaged as anecdotal and irrelevant. Furthermore, it is the existence of such cases and unequivocally positive responses that makes it completely ***unethical*** to put other patients into placebo-controlled trials when the treatment is dramatically beneficial to most patients and harmless to all. Allowing patients in the placebo group to suffer greatly and even die under such circumstances can never be justified.

Unfortunately, even when multiple scientifically-sound clinical studies actually do get conducted and reported on inexpensive, nontoxic, and highly effective therapies, those therapies rarely get utilized clinically. Although there are many examples of such therapies, an especially noteworthy example of the suppression of good medicine is seen with vitamin C. The continued avoidance of the use of intravenous vitamin C, especially in septic patients in the intensive unit, [2] stands out as a clear example of flagrant malpractice. Conservatively, thousands of ICU patients around the world, on a ***daily*** basis, would be saved or at least spared substantial suffering with a simple protocol utilizing intravenous vitamin C. And the morbidity and mortality of many different infections and toxin exposures outside of the ICU setting would also be readily mitigated and even resolved with vitamin C-based protocols. But this is not happening, even though the literature has unequivocally indicated the clinical importance (and safety) of vitamin C for over 80 years. [3]

The following therapies can be used, and many have been used, to prevent and treat COVID-19 (and many other infections, viral or otherwise). Not all of them have been equally well-documented or proven as being effective. Some have strong literature, research study, and clinical support. Others represent simply logical applications of treatment protocols that have already been proven to be highly effective in eradicating other viral infections and should be expected to have comparable effects on the COVID-19 virus. The treatments described below are categorized as having the ability to **prevent**, to **improve** and to **cure** COVID-19 and other viral syndromes.

Vitamin C (prevents, improves, cures)

Vitamin C has been documented to readily cure all acute viral syndromes in which it has been adequately dosed. As the ultimate virucide, vitamin C has been documented to inactivate/destroy every virus against which it was tested *in vitro* (in the test tube). Similarly, vitamin C has consistently resolved nearly all acute viral infections in patients treated with sufficient doses. [1,3] Vitamin C has cured Zika fever, another epidemic virus that struck in 2016. [4] Along with hydrogen peroxide, intravenous vitamin C has also been documented to be highly effective against the debilitating pain of Chikungunya virus. [5] Intravenous vitamin C has also resolved influenza. [6] A high degree of protection against infection by many other pathogens is also achievable with a variety of treatments featuring oral forms of vitamin C.

In an ongoing clinical study on hospitalized COVID-19 patients, a combination of vitamin C, methylprednisolone, heparin, and thiamine has already resulted in a dramatic decrease in hospital mortality rate. [7]

Vitamin D (prevents, improves)

Vitamin D has been clearly documented to strengthen immune function and decrease the risk of infection from any pathogen, including the COVID-19 virus. Patients with the highest vitamin D levels have shorter and less symptomatic courses of infection. While vitamin D has not been demonstrated to cure viruses as a monotherapy, maintaining an adequate level of vitamin D is vital for both preventing the contraction of infectious diseases as well as for recovering more rapidly from such infections, with a clear decrease in mortality rate. [8] In a recent study not yet published, Indonesian researchers studied the effects of vitamin D on mortality in 780 patients hospitalized with COVID-19. They found that nearly all (98.9%) of COVID-19 patients with vitamin D levels below 20 ng/ml died. Yet, less than 5% with substantially higher levels of vitamin D died. Consistent with these findings, it has been shown that the most life-threatening complication of COVID-19 infection, acute respiratory distress syndrome, occurs much more readily in the presence of a vitamin D deficiency. [9] Clearly, vitamin D supplementation should be part of any treatment protocol for COVID-19 or any other infectious disease.

Zinc (prevents, improves)

Zinc is needed inside the virus-infected cells to stop virus replication by inhibiting viral RNA polymerase. It is a possibility that many of the younger individuals that are either killed or made severely ill by COVID-19 are chronically zinc-depleted due to inadvertently zinc-deficient diets. Since supplemental zinc has only a limited ability to reach the cytoplasm of cells due to its ionic nature, zinc ionophores (agents that complex with zinc and transport it into the cell) are known to be good general antiviral agents. Quercetin is one such supplement, and it can serve as a good adjunctive agent to any COVID-19 treatment protocol. [10] Chloroquine, discussed below, is also a zinc ionophore, perhaps explaining its potent anti-COVID-19 effects.

Magnesium Chloride (prevents, improves, may cure)

Magnesium, especially as magnesium chloride, has been documented to have substantial antipathogen properties, and it has been reported to cure poliovirus infections as a monotherapy when ingested orally. [11] While it remains unclear what an aggressive regimen of this agent would do as a monotherapy for COVID-19, it can be expected to be a positive adjunctive agent in any COVID-19 prevention or treatment protocol.

Ozone (improves, cures)

Ozone is probably the single most potent antipathogen agent available today. It readily eradicates all pathogenic bacteria, fungi, viruses, and protozoa. It has many routes of administration and can be utilized as an effective monotherapy, although it positively supports all treatment protocols in an adjunctive and usually synergistic fashion as well. [12] Ozone has been documented to cure advanced cases of Ebola virus, for which there are still no known effective mainstream medical therapies. [13] For someone with ready access to ozone, different applications of ozone could certainly be used to prevent COVID-19 and other respiratory viruses as well. However, with the other simple and effective antiviral measures listed in this article, using ozone for prevention is not really needed.

Hydrogen Peroxide (prevents, improves, cures)

Hydrogen peroxide has been used for many years as a monotherapy as well as part of many different treatment protocols for a wide variety of infections. A clinically effective dose will typically cost less than a dime. During a severe epidemic of influenza in 1919 a protocol of intravenous hydrogen peroxide given only to the most severely ill patients dramatically decreased the death rate. [14]

Due to its well-documented and potent antipathogen properties, along with producing no toxic byproducts upon killing pathogens, hydrogen peroxide is now being proposed in the literature for an off-label use via oral and nasal washing, a regimen of gargling, and administration via nebulization immediately upon symptom appearance with the presumptive diagnosis of COVID-19. [15,16] Impressive anecdotal evidence already indicates that this application, especially via nebulization, appears to be a powerful preventive and even curative therapy against all respiratory-acquired infections, viral or otherwise.

In addition to nebulization with hydrogen peroxide, a large number of other agents can also be nebulized that have pathogen-killing and mucosal cell-healing properties, including, but not limited to: DMSO, magnesium chloride, sodium ascorbate [vitamin C], nascent iodine, sodium chloride, sodium bicarbonate, zinc chloride, glutathione, and N-acetyl cysteine.

Hyperbaric Oxygen (may improve, may cure)

Hyperbaric oxygen therapy is the breathing of pure oxygen inside a chamber that is pressurized between 1.5 to 3 times normal atmospheric pressure. It has been documented to consistently help eradicate deep-seated and otherwise non-healing wounds and infections. [17] Ozone therapy, which has destroyed all viruses and pathogens against which it has been tested, has been shown to share some mechanisms of action with hyperbaric oxygen therapy. This certainly raises the reasonable possibility that hyperbaric oxygen might also be a very effective antiviral therapy in addition to its established antibacterial effects. [18]

Ultraviolet Blood Irradiation (improves, may cure)

Also known as photo-oxidation therapy, ultraviolet blood irradiation therapy has been effectively treating infections for many decades now. In a series of 36 cases of acute polio (spinal type), the blood irradiation treatment was successful in curing 100% of these patients. Viral hepatitis and bacterial sepsis were also found to be very effectively treated with ultraviolet blood irradiation. [19] This irradiation therapy would likely be equally effective against any other pathogens, especially viruses.

Chlorine Dioxide (improves, cures)

Chlorine dioxide has long been recognized as a powerful antimicrobial agent. It has been around for over 100 years, and it is used both to purify water and to purify blood to be used for transfusion. As a therapeutic agent for infectious diseases, it has been given both orally and intravenously with great effect, and it has been shown to be very effective against COVID-19 as well. [20,21] Dr. Andreas Kalcker directed a clinical study with doctors in Ecuador on COVID-19 patients using oral and intravenous chlorine dioxide. 97% of over 100 COVID-19 patients were vastly improved with clear remission of the severest symptoms after a four-day treatment regimen with chlorine dioxide. No deaths were reported. Oftentimes a dramatic clinical response was seen after only 24 hours. [22] A clinical study on the effects of oral chlorine dioxide on COVID-19 patients in Colombia was initiated in April of this year. [23]

Dexamethasone (improves)

Early findings in the Randomized Evaluation of COVid-19 thERapY (RECOVERY) Trial in the United Kingdom indicate that the addition of dexamethasone significantly improved clinical outcome in COVID-19 patients. A 35% reduction in death was seen in treated patients already dependent on mechanical ventilation, and a 20% reduction in death was seen in the treated patient group just receiving supplemental oxygen therapy. [24] This response of COVID-19 patients on ventilators is very consistent with the benefits of dexamethasone seen with acute respiratory distress syndrome unrelated to COVID-19. [25]

Budesonide (may prevent, improves, may cure)

Budesonide is a corticosteroid approved for inhalation via a nebulizer (Pulmicort Respules), and it is primarily used for persistent asthma and asthma exacerbations in children and infants as young as 12 months. [26,27] Dr. Richard Bartlett, a West Texas physician, has treated several dozen COVID-19 patients as of mid-June with nebulized budesonide, and he has asserted that all have promptly and dramatically responded positively and none have died. Sequential, or even combined, nebulizations of budesonide and hydrogen peroxide would appear to have great potential for a safe and rapidly effective treatment for any respiratory virus, including COVID-19. The hydrogen peroxide would serve to promptly kill the virus in the airways, and the corticosteroid would relieve the COVID-19 inflammation ("cytokine storm") and the associated shortness of breath. Nebulized budesonide has also been shown to be an effective treatment for preventing fungal infections of the nose and sinuses. [28]

Patients already on mechanical ventilation can also benefit greatly from the direct nebulization of therapeutic agents through the endotracheal tube. [29,30] This can certainly be done with budesonide [31] and hydrogen peroxide as well. Too many ventilator-dependent patients are left to eventually overcome the virus with whatever remaining immune capacity they have. Having a treatment that can directly attack the virus present in the lungs while relieving the inflammation with a resultant improvement in oxygenation should result in many of these patients getting weaned off the ventilators and eventually recovering completely. To date, being hospitalized with COVID-19 and eventually ending up on a ventilator still appears to be a death sentence for the vast majority of such patients.

Convalescent Plasma (improves, may cure)

Convalescent plasma is plasma collected from individuals who have recovered from an infectious disease resulting in the formation of antibodies. Depending on the severity of COVID-19 infection and the inherent immune capacity in a given patient, the transfusion of convalescent plasma from recovered COVID-19 patients has nearly always significantly reduced the viral load and clinically improved the patient. When the viral load is lowered dramatically, a clinical cure can be expected. A significantly improved survival rate has been seen in COVID-19 patients who have received convalescent plasma therapy. [32,33]

Chloroquine and Hydroxychloroquine (prevents, improves, cures)

I have had the opportunity to see clear-cut and dramatically positive clinical responses in six individuals with rapidly evolving symptoms consistent with fulminant COVID-19 infection treated with oral chloroquine phosphate. In these individuals (ranging from 35 to 65 years of age), therapy was initiated when breathing was very already very difficult and continuing to worsen. In all six, significant improvement in breathing was seen within about four hours after the first dose, with a complete clinical recovery seen after about an average of three days. The oldest individual had a pulse oximeter reading of 80 before the first dose of chloroquine, and the reading improved to 94 after about four hours as the labored breathing eased. The rapidity with which the shortness of breath evolved in all these individuals strongly suggested that respiratory failure secondary to COVID-19-induced acute respiratory distress syndrome was imminent. The chloroquine dosing was continued for several days after complete clinical resolution to prevent any possible clinical relapse. While a large, definitive study on chloroquine and COVID-19 remains to be completed, there is already a great deal of published evidence supporting its effectiveness and overall safety. [34,35] Also, a recent clinical trial demonstrated that hydroxychloroquine given with azithromycin eradicated or significantly decreased measured viral load in respiratory swabs. [36]

Both chloroquine and hydroxychloroquine are old drugs that are very safe at the doses shown to be effective in treating COVID-19, and they are both recognized as having significant nonspecific antiviral properties. Also, chloroquine, and probably hydroxychloroquine as well, are zinc ionophores, [37,38] which is likely the reason why they have such significant antiviral properties. As noted above in the discussion on zinc, agents that greatly facilitate zinc transport inside virus-infected cells rapidly accelerate virus destruction and clinical resolution of the viral infection. Many clinicians now feel that chloroquine and hydroxychloroquine therapy for COVID-19 and other viruses is optimized by concomitant zinc administration. [39,40] Certainly, there is no good reason to avoid taking zinc with these agents.

As might be expected, drugs as potently antiviral to COVID-19 as chloroquine and hydroxychloroquine would be expected to be effective preventive agents as well, particularly in the setting where exposure is known or strongly suspected to have taken place, or in a setting where repeated and substantial exposure will reliably occur, as in COVID-19-treating hospitals. [41,42] Many front-line health care workers are on such preventive protocols. But many of the physicians who are taking one of these agents to prevent COVID-19 infection are still resistant to

giving it to infected patients. This is difficult to logically reconcile if patient welfare is of the uppermost concern.

Radiotherapy (improves, cures)

In a recent pilot trial at Emory University, five nursing home patients hospitalized with COVID-19 were given a single treatment of low-dose radiotherapy over the lungs. All five patients had radiographic evidence of pneumonia and required supplemental oxygen. All five were felt to be deteriorating from a clinical perspective. The radiotherapy consisted of a 10- to 15-minute application of 1.5 Gy (150 rads). Four of the five patients were noted to have a rapid improvement in their breathing, and clinical recovery was seen to occur between 3 and 96 hours post-irradiation.

General Recommendations

While many supplement regimens can be used for COVID-19 prevention, such regimens should include at a minimum vitamin C, vitamin D, magnesium chloride, and zinc. Any of many additional quality nutrient and antioxidant supplements can be added as desired, largely dependent on expense and personal preference.

Nebulizations of powerful antipathogen agents, especially hydrogen peroxide, can readily prevent respiratory viral infections like COVID-19 from taking hold, and initiating such nebulizations even after an infection has been contracted will still make a substantial contribution to a more rapid and complete recovery.

As noted earlier, interventions such as ozone and ultraviolet blood treatments have the potential to be effective monotherapies, although it is always a good idea to accompany such treatments with the baseline supplementation regimen and nebulizations as mentioned above.

In the hospitalized setting, intravenous vitamin C and dexamethasone should always be part of the treatment regimen. Nebulizations with hydrogen peroxide and budesonide can accelerate recovery substantially. Also, patients already on ventilator support should always be given vitamin C and dexamethasone along with these nebulizations in addition to anything else felt to be indicated by the attending physician.

Low doses of hydroxychloroquine or chloroquine along with zinc should always be given in the setting of high-risk exposure. Azithromycin can be taken with these agents as well. Higher doses of these agents should always be part of any regimen in the treatment of a suspected or diagnosed COVID-19 patient, whether asymptomatic or already in the hospital.

Recap

While the politics of the COVID-19 pandemic are beyond the scope and aim of this article, there remain ***no*** valid medical reasons for not using any of the agents or interventions itemized above for either preventing or treating COVID-19 patients. Furthermore, many combinations of these treatments can be applied, depending on their availability and the clinical status of a given patient. Traditional medicine insists on "proof" of any therapy before it is used routinely, even though this standard of proof is never actually obtained for many of the usual prescription drug approaches to infections and other diseases. When an agent is inexpensive, virtually harmless, and with substantial evidence of providing benefit, there is no justification for a physician to refuse or even actively block its administration to a patient otherwise assured of prolonged suffering and likely death (as with hospitalized COVID-19 patients on ventilation support).

With the treatment options available, there is no good reason for most people to even contract COVID-19, and there is certainly no good reason for anyone to die from this virus, much less have a prolonged clinical course of infection with a great deal of needless suffering.

Please note: **None of the information in this article is intended to be utilized by anyone as direct medical advice. Rather, the article is intended only to make the reader aware of other treatment possibilities and documented scientific information that can be further discussed with a chosen health care professional.**

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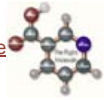

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