

Front Line COVID-19 Critical Care Consortium

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Front Line COVID-19 Critical Care Consortium urges immediate adoption of early intervention protocol to prevent mortality and reduce the need for ventilators from COVID-19 disease.

April 6, 2020, New York, NY: —Five leading critical care specialists, who together have formed the **Front Line COVID-19 Critical Care Consortium**, have released a protocol for treating patients who arrive in hospitals with COVID-19. Based on available research, the experience in China reflected by the Shanghai expert commission, and their decades-long professional experiences in Intensive Care Units around the country, the five experts strongly urge fellow physicians to immediately adopt a change in strategy by delivering powerful therapies earlier in the disease course, prior to admission to the ICU or the need for a mechanical ventilator. Based on early experiences with this more aggressive approach, they predict that early adoption of the protocol will reduce ICU admissions, obviate the need for mechanical ventilators, and most importantly, save many lives.

“If you can administer ascorbic acid and corticosteroids intravenously starting in the Emergency Room and every 6 hours thereafter while in the hospital, the mortality rate of this disease and the need for mechanical ventilators will likely be *greatly* reduced,” says Dr. Pierre Kory, the Medical Director of the Trauma and Life Support Center and Chief of the Critical Care Service at the University of Wisconsin in Madison. He explains that *it is the severe inflammation sparked by the Coronavirus, not the virus itself, that kills patients*. Inflammation causes a new variety of Acute Respiratory Distress Syndrome (ARDS), which damages the lungs.

The typical treatment for ARDS is to put patients on a mechanical ventilator, but Dr. Paul E. Marik, of the Eastern Virginia Medical School, says that should be the very last resort. Of the 7 COVID-19 patients Dr. Marik has treated with this protocol in the ICU, all survived. One other COVID-19 patient died of a pre-existing heart condition and gastro-intestinal bleed. Of the 24 seriously ill COVID-19 patients that Dr. Joseph Varon has treated with this protocol in Houston’s United Memorial Medical Center, ALL survived. The experts all emphasize that early intervention is critical in preventing the deterioration and death that has been described across the world once patients enter the ICU. After observing minimal improvements or recoveries in the first of New York’s Northwell Health Care system’s many dozens of patients, Northwell’s critical care specialists found that by changing their therapeutic strategy towards initiating the combination of high-dose ascorbic acid and corticosteroids earlier in the disease course, the need for mechanical ventilation has been greatly reduced.

Some doctors may question the introduction of corticosteroids in the treatment of a severe viral syndrome. However, the two largest studies involving more than 7,000 patients with SARS or H1N1 pneumonia clearly demonstrated a significant reduction in mortality. Dr. Umberto Meduri, Professor of Medicine at the University of Tennessee Health Science Center in Memphis, says corticosteroids are critical for controlling the inflammatory storm caused by this novel virus. Ten randomized studies have proven safety and efficacy in non-viral acute respiratory distress syndrome (ARDS). Corticosteroid treatment was associated with a seven day reduction in duration of mechanical ventilation and a 30% reduction in mortality. Positive results in treating COVID-19 are reported from China. Guidelines for China, Korea, and Italy include corticosteroid treatment. Dr. Meduri adds, “There is no justification based on available evidence and professional ethics to categorically deny the use of corticosteroid treatment in the severe life-threatening ‘cytokine storm’ associated with COVID-19. Misinformation

about the only anti-inflammatory treatment available for this 'cytokine storm' has resulted in COVID-19 patients dying from massive inflammation without receiving an effective and safe anti-inflammatory treatment. Mortality for ventilating patients is 50% — unacceptable.”

New York internist, Dr. Keith Berkowitz says, “Given the dire circumstances in New York State, with almost 122,000 confirmed cases of COVID-19 and 4,159 deaths, it is imperative that every hospital immediately adopt this safe, low-cost and highly effective treatment protocol, but they must implement it BEFORE the ICU, not after they reach the ICU because, in this disease, the organ damage tends to be so severe that patients rarely recover at that point.” Dr. Howard Kornfeld, President of the Pharmacology Policy Institute, adds, “This protocol will not only save patients’ lives, it will also lessen the danger to the doctors and nurses who treat them by decreasing the need for mechanical ventilators.” The physicians agreed that while randomized controlled trials, in normal circumstances, might be considered, that this protocol must be instituted now and should be studied with observational and epidemiological strategies. Dr. José Iglesias from the Department of Critical Care, Community Medical Center, Toms River, New Jersey, advocates for early intravenous ascorbic acid (IVAA) as well as corticosteroids in COVID-19 hypoxemic pneumonia and comments, based on his recently published randomized controlled trial of 137 patients (*Chest*, in press) that “IVAA in sepsis significantly reduced the time to the resolution of shock.”

- *Betsy Ashton, writer, former consumer correspondent, CBS News, governor and past president, Silurians' Press Club, director and past president, New York Deadline Club,*
- *former V.P. Sigma Delta Chi Foundation.*

The Front Line COVID-19 Critical Care Consortium

COVID-19 TREATMENT PROTOCOL

In all COVID-19 hospitalized patients, the therapeutic focus must be placed on early intervention utilizing powerful, evidence-based therapies to counteract:

the overwhelming and damaging inflammatory response

the systemic and severe hyper-coagulable state causing organ damage

By initiating the protocol within 6 hours of presentation in the emergency room, the need for mechanical ventilators and ICU beds will decrease dramatically.

THERAPEUTIC PROTOCOL TO CONTROL INFLAMMATION AND EXCESS CLOTTING

1. **High Dose Intravenous Ascorbic Acid**
 - a. 3 grams every 6 hours
 - b. continue for a total of 7 days or until discharged
2. **Full Dose Low Molecular Weight Heparin**
 - a. 1 mg/kg subcutaneous injection every 12 hours
 - b. continue until discharged

3. Intravenous Methylprednisolone

- a. 60 mg once a day
- b. continue for 7 days, then
- c. switch to oral prednisone, taper over 6 days

4. Oral Hydroxychloroquine

- a. 400 mg every 12 hours for one day
- b. switch to 200 mg every 12 hours for a total of 4 days

TREATMENT OF LOW OXYGEN

- a. If patient has low oxygen saturation on nasal cannula, initiate heated high flow nasal cannula
 - Do not hesitate to increase flow limits as needed
- b. Avoid quick intubation that is based solely on oxygen requirements
 - Intubate only if patient's breathing continues to be labored
- c. Utilize "prone positioning" to help improve oxygen saturation

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Children's Hospital of Chicago — Vitamin C/ Vitamin B1/hydrocortisone, 43 patients – mortality decreased from 28 to 9 percent in 30 days. "American Journal of Respiratory and Critical Care Medicine," 2020.

CITRIS – ALI trial — showed a 30% absolute mortality reduction study found no difference in primary outcomes among patients with sepsis treated with vitamin C versus placebo. But there was a difference in a secondary outcome - overall mortality.

East Virginia Medical Center – Dr. Marik - Vitamin C/Vitamin B1/hydrocortisone, 47 patients – decrease in mortality from 40.4 to 8.5 percent. "Chest," American College of Chest Physicians, 2017

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