TO CONTROL INFLAMMATION & EXCESS CLOTTING

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 soon after a patient meets criteria for oxygen supplementation, the need for mechanical ventilators and ICU beds will decrease dramatically.

**MATH+ PROTOCOL**

[Only for use in hospitals in the treatment of COVID-19]

1. **Methylprednisolone** [Intravenous]
   - Mild Hypoxia (< 4L): 40 mg daily until off oxygen
   - Moderate–Severe Illness: 80 mg bolus then 20mg q6h IV push for 7 days*
   - Alternate: 80 mg daily for 7 days*
   - Day 8: Switch to oral prednisone, taper over 6 days
   (*Consider higher doses for patients with non-improving ARDS/oxygenation and/or with persistent, rising, or severely elevated inflammatory markers (cytokine storm), i.e. 60–125mg q6h–q8h, or 1,000 mg/day for 3 days)

2. **Ascorbic Acid** [High Dose Infusion]
   - 3 grams / 100 ml q6h
   - Continue for a total of 7 days or until discharged

3. **Thiamine**
   - 200 mg IV q12h until discharged

4. **Heparin** [Full Dose Low Molecular Weight]
   - Mild Illness: 60 mg daily (30,000 units)
   - Moderate–Severe Illness: 1 mg/kg (500 units/kg)* q12h
     (*dose adjust with CrCl < 30 ml/min, use heparin if CrCl < 15 ml/min; In COVID-19, factor Xa levels often sub-therapeutic despite “full treatment dose” above. Monitor Xa levels, adjust dose as needed)
   - Continue until discharged

5. **PLUS** optional co-interventions: Zinc, Vitamin D, Famotidine, Magnesium, and Melatonin

**TREATMENT OF LOW OXYGEN**

— If patient has low oxygen saturation on nasal cannula, initiate heated high flow nasal cannula.
— Do not hesitate to increase flow limits as needed.
— Avoid early intubation that is based solely on oxygen requirements. Allow “permissive hypoxemia” as tolerated.
— Intubate only if patient demonstrates excessive work of breathing.
— Utilize “prone positioning” to help improve oxygen saturation.

*CrCl = Creatinine Clearance (Ccr)
Our MATH+ protocol is designed *only for hospitalized patients*, to be initiated as soon as possible after admission to counter the body’s overwhelming inflammatory response to the SARS-CoV-2 virus. The protocol is based on numerous medical journal publications over decades. It is the hyper-inflammation, not the virus itself, that damages the lungs and other organs and ultimately causes death in COVID-19. We have found the MATH+ protocol to be a highly effective combination therapy in controlling this extreme inflammatory response. The steroid Methylprednisolone is a key component, increasing numbers of studies (see https://flccc.net/medical-evidence) show its profound effectiveness in COVID-19, which is made more potent when administered intravenously with high doses of the antioxidant Ascorbic acid given that the two medicines have multiple synergistic physiologic effects. Thiamine is given to optimize cellular oxygen utilization and energy consumption, protecting the heart, brain, and immune system. The anticoagulant Heparin is important for preventing and dissolving blood clots that appear with a very high frequency in patients not given blood thinners. The + sign indicates several important co-interventions that have strong physiologic rationale and an excellent safety profile. It also indicates that we plan to adapt the protocol as our insights and the published medical evidence evolve.

Timing is a critical factor in the successful treatment of COVID-19. Patients must go to the hospital as soon as they experience difficulty breathing or have a low oxygen level. The MATH+ protocol then should be administered soon after a patient meets criteria for oxygen supplementation (within the first hours after arrival in the hospital), in order to achieve maximal efficacy as delayed therapy has led to complications such as the need for mechanical ventilation. If administered early, this formula of FDA-approved, safe, inexpensive, and readily available drugs can eliminate the need for ICU beds and mechanical ventilators and return patients to health.