

Review of: "A Potential Therapy for SARS-Cov-2 Virus Deactivation: Carbon Dioxide Management"

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This is a timely topic as the healthcare system scrambles to find novel therapies for a novel virus. The proposed therapy of warmed, humidified carbon dioxide carries evidence through its biological, physical, and medical properties, despite the lack of medical evidence specific to COVID-19 (such as randomized controlled trials using carbon dioxide). These include antioxidant, anti-inflammatory, as well as oxygen delivery enhancing-properties of carbon dioxide.

Not only is this proposed therapy safe (safer than other medical gases such as NO), it is also economic and abundant. We have recently gained a higher appreciation for this as the healthcare system struggled with conventional drug shortages (such as sedatives in the ICU) amidst the pandemic.

Among the other interesting aspects of this article is the focus on the antimicrobial and antiviral properties. This is a major struggle for patients admitted to the ICU, especially in severe cases requiring mechanical ventilation. These patients often end up with systemic infections, most commonly pneumonia which can spiral into other infections, especially as their immune system deteriorates due to various therapies that suppress the immune system. Another great point of mention in this article is the cytokine release that would be a great area to shed more light on. There are limited therapies that currently target that and they are undoubtedly, not without side effects. Great article!