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Clinical Omissions in COVID-19



Dr. McCullough and colleagues propose a flexible treatment algorithm that can evolve to meet our emerging clinical understanding of different coronaviral strains appearing in different places around the globe.¹ It may even defeat some annual varieties of influenza A and B that seem to have "disappeared" as a seasonal cause of death in some countries. However, there are still many outstanding questions in this pandemic.

Recurrent involuntary coughing and high ventilatory pressures may both stretch injured pulmonary nerves, releasing large volumes of cytokines (IL-1 beta, IL-6, and IL-10 are well-known "neural" cytokines^{2,3}), with a variety of pathophysiological consequences. Denervation of pulmonary arteriolar endothelia may also activate clotting cascades similar to the coagulopathy that appears in some obstetric syndromes, including preeclampsia. Yet, to my knowledge, there are no published studies of the pulmonary arteriolar nerves in COVID lung.³

Erecting the misplaced barrier of a placebo-controlled, randomized controlled trial as a prerequisite for the use of cheap, safe, and effective oral prophylaxis, including hydroxychloroquine and ivermectin, and, declaring that unproven vaccines "are the *only* way out of a pandemic" betrays a misunderstanding of medical "evidence" that may derive from political or corporate, rather than clinical, judgment.^{4,5} An adaptive algorithm seems a better approach.

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